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Social Psychology Section Annual Conference

*Social Psychology Section Annual Conference,
Liverpool University, 1-3 September 2004.*

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SYMPOSIA

Symposium: Organisational Issues: The contributions of a social identity approach

Co-ordinator: A. O'BRIEN, University of Exeter.
Discussant: A. HASLAM, University of Exeter.

This symposium brings together recent experimental and survey research that uses the social identity framework to examine a variety of important organisational topics. The topics covered include negotiation, intergroup relations and bullying, intergroup co-operation and collaboration, and organisational trust and respect. The first paper, by Esther van Leeuwen, uses experimental studies to investigate factors affecting intra- and inter-group helping behaviour. Her findings show that helping behaviour is both a function of group membership and strategic intergroup motives. Louise Humphrey's research, examining bullying in the workplace, suggests that there is both a qualitative and a quantitative difference between the experience of bullying as a function of whether it is reported as primarily targeted at the interpersonal or intergroup level. In Martin Taniss paper, two experiments are presented which examine the role of personal versus shared identity on perceptions of group variables (collaboration and unity) and work variables (satisfaction and subjective performance). These questions are examined in the context of online dyadic interactions. Investigating small-group negotiations, Roderick Swaab work shows that negotiations processes have different effects on perceptions of intergroup similarities and differences as a function of whether negotiations

take place within groups or between groups. Furthermore, his work suggests the importance of both intra- and inter-group negotiation processes in facilitating more positive outcomes. In a related vein, Anne O'Brien's research examines the utility of the ASPIRe model in fostering strong positive relations between subgroups and the organisational group to which they belong. Her work identifies the importance of developing and maintaining mutual intergroup respect in order to harness latent social capital within an organisation. Finally, the role of identification and trust is highlighted in Lucy O'Sullivan's investigation of employees' perceptions of an organisational goal-setting programme. Her findings suggest that, irrespective of the perceived demand associated with the programme, employees are more likely to respond positively to organisational review tools to the extent that they identify strongly with the organisation and trust that it is committed to its employees.

From devalued to valued: ASPIRing to establish intergroup respect

A. O'BRIEN, A. HASLAM, J. JETTEN,
L. O'SULLIVAN & L. HUMPHREY, University of
Exeter.

A growing body of research points to the contribution of the social identity perspective in conceptualising organisational social capital. The basic premise is that an understanding of human behaviour needs to consider both the personal and the social selves. Membership of groups that are psychologically meaningful provides individuals with social identities that have important implications for their attitudes and behaviours. Organisations provide a context for important group memberships to develop. Accordingly, the ASPIRe model (Actualising Social and Personality Identity Resources; Haslam, Eggins & Reynolds, 2003) proposes that sustainable organisational outcomes are most likely to be delivered when employees feel that organisational structures

reflect, and allow expression of, group memberships that are psychologically relevant and self-defining. Research on devalued groups suggests that employees of such groups are more likely to disengage, and react against organisational activities. We propose that the ASPIRe process enables the building of levels of identity, within which, group identities are positively aligned, both vertically and horizontally. Furthermore, such a process facilitates the development of mutual respect, both at the intragroup and intergroup levels. Within a hospital setting, we examine the utility of the ASPIRe process in developing a sense of positive subgroup and superordinate relations arising from the processes of reciprocal respect, and the contribution of this to harnessing the latent social capital within the organisation.

Employees' evaluations of goal-setting programmes: The importance of organisational identity and perceptions of trust

L. O'SULLIVAN, A. O'BRIEN & A. HASLAM,
University of Exeter.

There is substantial empirical support for the positive relationship between goal-setting strategies and individuals' productivity. However, comparatively little attention has been given to factors assessing employees' responses to goal-setting practices in organisational contexts. Despite this, the implementation of programmes to facilitate regular goal-setting and performance review activities has become a common feature of organisational life. Research on organisational trust suggests that beliefs about the trustworthiness of institutional procedures predict positive responses to organisational change projects. Recent research from a social identity perspective indicates that goal-setting will be effective to the extent that it utilises identities that are meaningful for employees' organisational membership. To investigate the role of identification and trust in

employees' evaluations of a goal-setting programme, a questionnaire study was conducted with university employees ($N=200$) who had just completed a newly implemented goal-setting and performance review. Measures included organisational identification and trust, job satisfaction, the degree of stress associated with the programme, and the perceived utility of the programme for employees' work. Multiple regression analysis revealed that to the extent that participants experienced the programme as stressful, it was not perceived as useful, either functionally or in helping employees to cope with job demands. In contrast, over and above this relationship, organisational identification predicted more positive views of the programme's utility on both measures. In line with social identity premises, this relationship was mediated by perceptions of organisational trust. To the extent that employees' feelings of belonging to the organisation were associated with the belief that the organisation acted on its employees' behalf, this trust provided the basis for more positive views of the goal-setting programme. These findings suggest that – despite their growing popularity – goal-setting programmes are likely to be problematic unless they are informed by social identity-based factors that predict employees' perceptions of their utility.

Intra-group and inter-group communication: The influence of subgroup- and superordinate-group caucusing on multi-party negotiations

R. SWAAB, R. EGGINS & T. POSTMES, University of Amsterdam.

The inter-group relations literature provides evidence suggesting that members of different groups are most likely to relate to each other positively when they experience a balanced expression of intergroup differences and similarities (Hornsey & Hogg, 2000abc). Recently, it was found that such processes apply to real negotiating groups in the sense that an emphasis on subgroup difference had social benefits following a subsequent negotiation process with no loss in agreement quality (Eggins, Haslam & Reynolds, 2002). The current paper builds on this work to examine the consequences of structuring pre-negotiation caucusing around relevant intergroup similarities and differences. A study with 40 interacting groups comprised of three two-person teams of negotiators was conducted. Participants were assigned to a 2 (subgroup-caucusing: present vs. not present) X 2 (superordinate-group caucusing: present vs. not present) design. Results show that sub-group caucusing led to higher subgroup identification, more shared cognitions about dissimilarities between groups and higher joint outcomes. Superordinate-group caucusing on the other hand, led to higher superordinate identification, more shared cognitions about similarities and more equal outcomes. Our findings illustrate that acknowledging differences is important if subgroup interests are to be represented, a good understanding of diversity is to be gained and high outcomes are the focus. However, the results also showed that similarly good material (high) outcomes could be achieved where subgroup caucusing was followed by superordinate caucusing. Moreover, such dual caucusing produced social (equal) outcomes too. A combination of subgroup and superordinate caucusing thus hold the key to the most successful negotiations.

Effects of personal and social identity in online collaboration

M. TANIS & T. POSTMES, University of Amsterdam.

This paper presents two experimental studies investigating the effects of two types of identity cues on perceptions of online dyadic interaction. The cues that were provided could be employed to accentuate the individuality of the person (i.e. cues to personal identity that were either present or not), whereas other cues related to relevant social group membership (i.e. cues to social identity depicting the partner as an ingroup or outgroup member). Results showed that even though cues to personal identity lead to less ambiguous impressions, their effect on perceptions related to the collaboration was less straightforward. Findings

show that in conditions without cues to personal identity, participants highly identifying with the shared overarching social group perceived more shared identity compared to low identifiers. This is in line with SIDE-expectations, which suggest that under circumstances when social identity is salient and relevant, the absence of cues to personal identity accentuates the perceptual unity of the group and enhances group members' feelings that a social identity is shared. A reverse effect, which could have been predicted from the SIDE-model, in which cues to personal identity disrupt the unity of the social group and decrease feelings of shared identity, was not confirmed. Shared identity, as well as work satisfaction and subjective performance were only affected by cues to personal identity when identification with the overarching group was low. Suggestions are made that two processes might be taking place at the same time both leading to better perceptions about the collaboration: on the one hand, positive perceptions are fostered on the basis of identification with a shared social identity, but in conditions where cues to personal identity might weaken the influence of such a common group, interpersonal attraction might compensate for the loss of rapport which ensues. These results provide us with new insights regarding the effects of de-individualisation in small groups. Implications for online collaboration practices in the workplace are discussed.

Helping members of other groups: Can we separate strategy from morality?

E. VAN LEEUWEN, Free University Amsterdam.

Most research conducted in the area of intergroup relations has focused on the negative side of social categorisation: Prejudice, stereotyping, discrimination, hostility and a variety of biases have all been studied as the unwanted side-effects of existing group boundaries. The present research focuses on determinants of positive behaviour between groups, in particular intergroup helping. Since most groups share a superordinate identity with other groups (e.g. EU countries, departments within an organisation), it seems important to develop a thorough understanding of factors affecting (and ultimately promoting) intergroup helping. A small number of studies have previously confirmed the common assumption that people are less likely to help outgroup members than ingroup members. However, strategic concerns may stimulate the motive to help outgroup members, particularly when this kind of behaviour can serve to demonstrate the ingroup's knowledge, ability or morality vis-a-vis the outgroup. In the present research, several experimental studies are reported investigating determinants of intergroup helping. Results show that the phenomenon in which ingroup members are helped more than outgroup members is not universal, but depends on the motive for helping. Different motives and their implications are discussed.

Symposium: Reducing intergroup bias: Contact and categorisation

Co-ordinators: L. CAMERON & A. RUTLAND, University of Kent.

Discussant: R. CRISP, University of Birmingham.

The purpose of this symposium is to bring together research concerned with intergroup bias reduction with the aim of developing more sophisticated and refined methods of intervention. Specifically, the symposium will examine reduction in intergroup bias through contact between groups and changes in social categorisation. The research presented in this symposium examines intergroup bias reduction amongst both children and adults in many contexts, from the laboratory to field studies, across several countries, Northern Ireland, England, Mexico and Germany, and examines intergroup bias in the areas of religion, disability and nationality and ethnicity. Typically, many interventions devised by policy makers in applied settings (e.g. schools, work organisations) have lacked any coherent theoretical basis. Social psychological theory and research, which focuses on contact and categorisation, could be used to inform and improve these prejudice reduction programmes. The papers in this symposium will consider the potential value of both contact and categorisation.

First, research is presented which shows that under optimal conditions contact can lead to a reduction in intergroup bias (Allport, 1954; Pettigrew, 2001). Research is also presented that demonstrates that a more recent version of the contact hypothesis – the notion of extended contact – can effectively reduce intergroup bias (Wright, Aron, McLaughlin-Volpe & Ropp, 1997; Liebkind & McAlister 1999). Second, research is presented which suggests the potential value of encouraging both children and adults to consider multiple categorisations and so reduce intergroup bias. Previous research has focussed on the optimal conditions for contact and has examined the mediators of intergroup bias reduction as a consequence of intergroup contact (Pettigrew & Tropp, 2000). However, the majority of contact research has focussed on negative mediators. In addition, the literatures on extended contact and categorisation training are very limited. The findings presented in this symposium will extend the previous literature by redressing the balance of previous research. The two approaches to intergroup bias reduction, contact and categorisation, central to this symposium are brought together by Cameron and Rutland. They examined the effectiveness of interventions based on extended contact and multiple categorisation skills training at reducing intergroup bias in children. Next Hall and Crisp present their research examining the effectiveness of multiple categorisations in reducing intergroup bias. The paper by Tam and Hewstone focuses on the importance of empathy and positive emotions in mediating the effect of intergroup contact. The penultimate two papers by Turner and Hewstone and Eller and Abrams present work that adds to the literature by examining factors that mediate the effect of actual and extended contact on intergroup attitudes. The overall the symposium should bring together research in the area of prejudice reduction, considering different intervention techniques and examining how and why they are effective at reducing intergroup bias. Finally, to generate discussion John Dixon will provide a sympathetic but critical account of research on the contact hypothesis.

Putting theory into practice: Reducing children's intergroup bias towards minority groups

L. CAMERON, A. RUTLAND & R. BROWN, University of Kent, Canterbury.

We will present a series of studies that evaluated interventions to reduce children's intergroup bias towards minority groups. Typically, interventions to reduce children's bias have lacked any coherent theoretical basis. In contrast, our studies were based on two theories well established within social and developmental psychology, namely intergroup contact theory (Allport, 1954; Hewstone & Brown, 1986) and social-cognitive theory (Aboud & Amato, 2001; Bigler, 1995) respectively. Using these theories we developed interventions to reduce children's intergroup bias towards two minority groups. Extended contact (Wright, Aron, McLaughlin-Volpe & Ropp, 1997; Liebkind & McAlister, 1999) was used. Study 1 examined 72 six- to nine-year-old children's attitudes towards the disabled. An extended contact intervention based upon story reading was compared with an intervention involving multiple classification skills training (Bigler & Liben, 1992). We used a mixed design – 3 (type of intervention: extended contact, socio-cognitive skills training, control) x 3 (target disability: physically disabled, learning difficulty, non-disabled). Results showed that extended contact was the most effective intervention. In Study 2 ($N=181$) we replicated study 1 using a larger sample across a wider age range (five to 11 years). Refugees were used as the minority group, we used a more refined socio-cognitive skills training intervention and examined the combined effect of our interventions. The findings of our studies will be discussed in terms of the relative value of extended contact and multiple classification skills training interventions.

The prejudice-reducing potential of extended contact: Evidence from a variety of Intergroup contexts

A. ELLER & D. ABRAMS, University of Kent. The extended contact hypothesis (Wright *et al.*,

1997) proposes that knowledge of an ingroup member's friendship with an outgroup member can improve intergroup attitudes. Three of the effect's underlying mediating mechanisms are thought to be reduction of: (1) ignorance; (2) anxiety (through positive ingroup exemplars), and (3) inclusion of other in self (the 'other' being the outgroup member that is integrated into the self via the ingroup member). Extended contact is promising in that: (a) group membership is more likely to be salient to an observer than to the friends themselves, aiding generalisation of effects; and (b) vicarious contact should not provoke anxiety or other negative emotions. Five field studies ($N=90, 100, 206, 708, 107$, respectively) are presented, in which extended and direct quantity of contact are predictors, extended inclusion of other in self, intergroup anxiety, and knowledge about outgroup are mediators, and social distance is criterion variable. Data were collected in Mexico, Germany, and the UK; at university, secondary schools, language schools, and businesses; and intergroup contact was between different nationalities/ethnicities and school classes, respectively. Mediation analyses (Baron & Kenny, 1986) showed that, overall, reducing ignorance and anxiety mediate more effectively between contact and social distance than inclusion of other in self. Moreover, extended contact had virtually the same bias-reducing impact as direct contact. Theoretically, these findings add to the scarce literature on extended contact, and practically, they underline the potential of extended contact to effect widespread reductions in intergroup bias without the need for direct outgroup contact.

Considering multiple criteria for social categorisation can reduce intergroup bias

N.R. HALL & R.J. CRISP, University of Birmingham.

Two experiments tested the notion that considering multiple criteria for social categorisation can reduce intergroup bias. The aim of this work was to produce a bias reduction intervention that was easier to implement, merely requiring perceivers to generate categories unrelated to the intergroup context, in contrast to previous work where multiple ingroups or multiple outgroups were generated. We propose that such an intervention will undermine the usefulness of categorisation; consequently perceivers may find it easier to consider the situation at an interpersonal rather than intergroup level. In both experiments, compared to a control condition, participants were required to consider alternative ways in which people could be classified, other than an initially salient intergroup dichotomy. In Experiment 1 we found that generating alternative social classifications that were unrelated to an initial target dichotomy reduced intergroup bias. In Experiment 2 we replicated this effect and found that unrelated categorisations, but not related categorizations, were necessary to reduce bias. Additional preliminary work examines the implications of the perceiver's ingroup identification on the generation of related versus unrelated categorisations. This suggests that the current intervention may be immune to the effects of ingroup identification, whereas the generation of related categorisations may actually increase intergroup bias for high identifiers. We discuss these findings in the context of a developing model of multiple categorisation effects.

Affective mediators of the effect of contact on intergroup bias

T. TAM & M. HEWSTONE, University of Oxford.

Researchers have recently refocused their attention on affective processes as a theoretical base for understanding prejudice. However, intergroup research has focused almost exclusively on negative mediators of the effect of contact on outgroup evaluations (e.g. intergroup anxiety, threat). In our study, we investigate the role of empathy and positive as well as negative types of emotions felt toward members of the other community in mediating the effect of contact on outgroup attitudes in Northern Ireland. Study 1 assessed participants' cross-group friendships, positive and negative intergroup emotions, empathy for members of the other community, and behavioral

tendencies in Northern Ireland. Study 2 replicated and extended Study 1 in an exploration of opportunity for contact, friendship, perceived importance of contact, different types of emotions (empathetic, distressed, negative, positive), threat, and behavioral tendencies in Northern Ireland. In Study 1, path analyses confirmed that: (1) empathy mediated the influence of contact on outgroup evaluations, positive action tendencies, and negative action tendencies; (2) negative emotions mediated the impact of contact on outgroup evaluations and negative action tendencies; and (3) positive emotions mediated the influence of contact on outgroup evaluations and positive action tendencies. Study 2 confirmed and extended Study 1 with latent variables and depicts a fuller model of contact and intergroup relations. These results show the importance of measuring more specific emotions in intergroup research.

Combating prejudice in children: The role of direct and extended contact

R. TURNER, M. HEWSTONE & A. VOCI, University of Oxford.

There is already considerable evidence (Pettigrew & Tropp, 2000) that under optimal conditions, intergroup contact (Allport, 1954) reduces prejudice towards other groups. Extending this research, in the context of White-Asian relations among British school children, we considered three key issues. First, we tested the recent proposition that certain types of contact might be particularly effective at reducing prejudice. In particular, we considered the role of cross-group friendship (Pettigrew, 1997) and extended cross-group friendship (Wright *et al.*, 1997). Second, we examined the role of various factors – including lowered intergroup anxiety (Stephan & Stephan, 1985) and self-disclosure to the out-group (Ensari & Miller, 2002) – in explaining how intergroup contact reduces prejudice. Third, we considered several potential consequences of intergroup contact, including explicit attitudes towards the out-group, implicit attitudes towards the out-group (using the Implicit Association Task; Greenwald, McGee & Schwartz, 1998) and perceived out-group variability. Our findings reveal that different processes may underlie different types of contact; for example, self-disclosure mediated the impact of direct cross-group friendship on out-group attitudes while anxiety mediated the impact of extended cross-group friendship on out-group attitudes and perceived variability. Measures of contact, for the first time, were also associated with more positive implicit out-group attitudes, consistent with a mere exposure effect.

Beyond the optimal strategy: Critical reflections on the contact hypothesis

J. DIXON, Lancaster University.

This paper presents a sympathetic but critical account of research on the contact hypothesis. Though acknowledging its contribution to understanding and promoting desegregation, I question its tendency: (1) to describe interaction using analytic categories that are remote from ordinary peoples' understandings of their encounters with others; (2) to focus on ideal forms of interaction to the neglect of its mundane, less-than-optimal forms; and (3) to take shifts in personal prejudice as the primary measure of the outcome of desegregation. These points are explored in the context of research programme that is investigating racial transformation in South Africa. This work suggests that contact researchers should pay closer attention to participants' lay theories of contact and adopt indices of change/stasis beyond the rehabilitation of the prejudiced individual.

Symposium: Interviews and the excluded: How interviews provide a context for constructions of the 'other'

Co-ordinator: A. MCKINLAY, University of Edinburgh.

Discussant: S. WIDDICOMBE, Edinburgh University.

This symposium brings together a set of studies that employ discourse analytic techniques. All of the papers in the symposium focus on the issue of

social exclusion. Although each paper reports on findings from studies about different social groups, the papers reflect a common interest in a specific research issue. This is the question of how a sense of the 'other' is constructed in talk relevant to the issue of social exclusion. For example, where exclusion is claimed to arise, there must be not only excluded people but also people who are performing the exclusion. In such instances, this raises the question of how the 'other' is constructed in discourse relevant to social exclusion. Moreover, a further question to be addressed is whether excluders are the only relevant 'other' when this form of talk is performed. However, in other cases individuals negotiate identities that avoid the ascription of social exclusion. The question then arises of how the 'other' can be managed so as to accomplish a distancing from the problematic excluded identity. It is questions of this sort which all of the papers in the symposium address from the perspective of different social groups. A further area of commonality across the different research papers reflects an important topic of discussion in contemporary discourse analysis. In recent times, the use of interview as a research tool has been criticised from the discursive psychology perspective. For example, attention has been drawn to the way that interviewers may position interviewees as belonging to some social group or categorisation. This is clearly highly relevant to studies which aim to examine socially significant phenomena such as social exclusion. Another potentially problematic issue raised is whether discursive practices drawn upon by an interviewee are no more than artefacts of the interview context itself. Each of the research papers within the symposium offers critical reflection on the interview methodology which has been employed within it. One of the aims of the final discussion session within the symposium will be to draw a synoptic overview on these critical reflections, in order to address the question of whether, in 21st century discursive psychology, there is a methodological place for the interview. The symposium comprises five sessions: four research presentations and a fifth discussion session. The first paper presents a theoretical overview of the social exclusion as a research area. The second paper examines how individuals deploy, resist and rework the notion of 'other' in avoiding the ascription of 'having learning disabilities' and thus do normality. The third paper presents a discourse analysis of internet and focus group interviews held with people who have ME and people who have suffered a stroke at a young age. The fourth paper explores constructions of male nurse identity. The final discussion session will explore similarities and differences across this set of research findings. This final session will take the form of a round table discussion, moderated by the discussant, in which paper presenters and the audience will be invited to take part. The first research paper will present a theoretical background to the issue of social exclusion. It will present data on social exclusion within the UK and abroad, and will outline some of the theoretical difficulties which researchers from a number of disciplines have addressed in writing about this topic. The paper will then go on to discuss theoretical issues from this area of study which are specific to social psychology. In particular, the focus will be on discursive constructions of exclusion, identity and the identities of potentially excluded people. This will include a review of whether discursive constructions associated with identity concerns are unique to particular social groups or are common across such groups. Another theme explored will be the theoretical importance of addressing the 'other', such as the potential excluder, in discursive analyses of socially excluded identities. This final session will take the form of a round table discussion, moderated by the discussant, in which paper presenters and the audience will be invited to take part to discuss the research findings presented in the four research presentations. This will provide a forum to address the question of whether there are commonalities across discourses relevant to widely differing excluded groups. Another function of the roundtable discussion will be to provide a forum for opening up the methodological debate about the role of interview techniques in discursive studies.

Men, nursing and gendered talk

S. COWAN, R. ION & A. MCKINLAY, University of Abertay Dundee.

The study reported in this paper aimed to explore constructions of male nurse identity. Nursing is a predominantly female profession. Thus, men are either excluded, or exclude themselves, from this occupational role. Part of the reason for this may lie in the forms of identity construction associated with being a nurse. As a traditionally female gendered profession, there are a number of female gender specific culturally available discursive constructions of the 'typical nurse'. Being a nurse, therefore, represents a problematic identity for men: there is often a mismatch between constructions of the 'typical nurse' and traditional masculine identities. To examine this phenomenon, focus groups were conducted with third year nursing students at a higher educational institution. Discussions were recorded and transcribed verbatim, and these transcripts were analysed using discourse analysis techniques. The results showed that discussants routinely relied upon three types of construction. In the first two, specific masculine identities are used to make relevant either differences or similarities between men and women. For example, accounts of male nursing may draw upon masculinity talk such as male strength or on discourses of the feminine gay male. In the third, speakers deploy a discourse of individualism to the effect that in the last resort, gender is not important in nursing but rather the specific attributes of an individual. In conclusion, some of the consequences of this study for our understanding of identity constructions of the potentially excluded are discussed.

Social exclusion, ME and stroke

J. GUISE, Affiliation???????????

The aim of this paper is to examine issues of social exclusion from the point of view of people with ME, and people who have suffered stroke at a young age. Participants were therefore potentially socially excluded by virtue of their identity as sufferers of chronic illness. The focus here is on the ways in which respondents constructed some 'other' person or group of people when talking or writing about either themselves or their illness. There is also some discussion of the methods of data collection used in this research. A discourse analytic approach was used to examine data that was gathered using email via one-to-one internet and chatline interviews, and using face-to-face focus groups. The findings show that the 'other' may be an excluder, or someone who in some relevant way is not excluded. I will show how an examination of the ways in which the 'other' is constructed can shed some light on exclusion itself. It is argued that the internet is a valuable means of collecting interview data from people who may be housebound and/or have speech difficulties, and whose voices might otherwise not be heard. Therefore, these are individuals for whom 'social exclusion' might also mean that they are denied the opportunity to participate in research. The usefulness of focus group data is also explored. The paper ends with a brief discussion of implications for research into the experiences of people with chronic illness and with potentially excluded identities.

Using 'others' to do normality: How individuals avoid the ascription of having 'learning disabilities'

C. McVITTIE, A. MCKINLAY, M. BUSBY & L. BOSTOCK, Affiliation???????????

In this paper we examine constructions and deployments of 'others' in relation to one particular area of potential social exclusion, namely the ascription of having 'learning disabilities'. The aim of the study was to consider the interactional negotiations of individuals in dealing with this possible ascription of identity. Semi-structured interviews were conducted with eight individuals who attended a centre run for people classed as having learning disabilities. Interviews lasted for approximately one hour and were conducted at the centre. Following recording and transcription, data were analysed using discourse analytic techniques. The findings show that participants orient to a sense of the 'other' in three ways. Firstly, they deploy the notion of 'others' in warding off

negative inferences that might lead to the ascription of the excluded identity. Secondly, they resist comparisons between the excluded group and a proposed 'other' contrast group. Lastly, they rework the excluded group as the 'other' in negotiating 'normal' identities for themselves. These three uses of the 'other' allow participants to distance themselves from the potentially excluded identity. Such deployments of the notion of the 'other' can be regarded as linguistic resources available to the participants in their negotiations of identity. The extent to which these uses of the 'other' within interview contexts can be regarded as reflecting everyday disorienting practices will be discussed.

Symposium: Reconstructing Tajfel: An integrative approach to discursive and social identity perspectives

Co-ordinator: C. STEVENSON, Lancaster University.

Discussant: M. LEVINE, Lancaster University.

Over the past decade a variety of reappraisals of the legacy of Henri Tajfel in the arena of intergroup psychology have emerged. These have generally taken the form of either a narrative of the development of Social Identity and Self Categorisation perspectives (e.g. Turner, 1996; Hogg, 1996; Brown, 2000) or a more critical re-evaluation (Brown & Lunt, 2002; Billig, 1996; Reicher, 1996; Wetherell, 1996). The resulting competing and conflicting interpretations of 'what Tajfel really meant' reflect the divergent understandings of identity and intergroup relations within the subdiscipline. Notably, the developmental narratives focus on Tajfel's early experiments and later formalised theory, while more 'discursive' and 'ideologically' based histories tend to emphasise Tajfel's political project and meta-theoretical perspective. The participants in this symposium present a different view, arguing that Tajfel's legacy provides an interpretative resource rather than any single definitive position. Examining less celebrated aspects of Tajfel's work, it is apparent that the founding father of the Social Identity perspective was influenced by social constructionism as well as cognitivism and was more methodologically eclectic than his famous minimal group experimental paradigm would indicate. Thus recent methodological advances in qualitative research as well as research transcending constructionist/cognitivist opposition (e.g. Reicher & Hopkins, 2001; Condor, 1996; Cinnerella, 1997. Lyons, 1996) would seem to suggest another reappraisal of Tajfel's legacy, this time in an integrative rather than divisive fashion. We suggest that, on the one hand, discursive perspectives can benefit from and contribute to the extensive empirical research in the Social Identity tradition. On the other, Social Identity perspectives can profit from discursive approaches which examine participants' own understandings of the group and intergroup behaviour. Each of our four papers takes an aspect of Tajfel's writing and, in the context of current discursive and Social Identity perspectives, applies it to an empirical project. Sapountzis discusses Tajfel's work on majority and minority status, examining the ways in which understandings of minorities and majorities are used by Greek political representatives to negotiate the ideological dilemma of nationalism and patriotism. Lowe elucidates the temporal dimensions implicit in Tajfel's work showing how conceptions of Mayday protest groups as manifest on an Internet Bulletin Board System vary systematically with the temporal frame of analysis employed. Gibson takes Tajfel's writing on nations and nationalism and illustrates how young Anglo-British respondents' talk of the possibility of a European Army raises the question of whether a generic Social Identity model is adequate to explain the specificities of national categories. Stevenson re-examines Tajfel's concept of stereotyping as justificatory 'social myths' of intergroup relations, examining Anglo-Scottish stereotypes in the context of their articulation, illustrating the divergent lay theories of intergroup relations underlying apparent consensus as to the stereotypical depictions of each nationality.

The particularity of 'national' categories: Representations of military service as 'serving the country'.

S. GIBSON, Lancaster University.

From Tajfel's earliest formulations of the Social Identity approach to intergroup relations, national categories have frequently been invoked to provide exemplars par excellence of universal laws of intergroup behaviour. In this paper I will argue that, following Tajfel's early writings in which he suggests that national categories cannot be explained solely with recourse to general theories of intergroup behaviour, the assumptions associated with particular categories are worthy of attention beyond the extent to which they represent an exemplification of general theory. Furthermore, as Billig (1996) argues, such a focus on specificity necessitates attention to the ideological and historical shaping of particular categories. Specifically, the paper will analyse the way in which the commonsense association between the state and military institutions undergirds the arguments of a sample of Anglo-British 18- to 26-year-olds, in an interview context, concerning the European Army. The analysis will focus on the way in which notions of acting 'for the country' are deployed in arguments that people would rather join extant armed forces than a possible future European military force. It will be suggested that in order to understand the respondents' arguments it is necessary to combine Social Identity insights concerning the potential opposition between 'national' and European categories, with an exploration of the banal assumption (cf. Billig, 1995) that military service is an activity legitimately undertaken only in the name of 'the country'.

The impact of Time within social psychological analysis

R. LOWE, Lancaster University.

Tajfel's discussion of sociopsychology (Tajfel, 1971, 1972) outlined a social psychological exploration of time: the investigation of the processes of social change and social continuity. For example, Tajfel discussed sociopsychology in terms of his own personal biography as well as that of shifting groups and societies (e.g. 1981), intertwining temporal narratives of individuals and collectives through the tumult of European history. In current psychologies of social processes these temporal framings are no less apparent, but tend to remain implicit and untheorised. For example, as Condor (1996) points out, the continuous flexibility of Self-Categorisation Theory (Turner *et al.*, 1987) demonstrates a focus on the possibilities of immediate change in social actors' identities, with less reflection upon long-term continuity. A parallel can be seen in the post-structural playfulness of some discursive approaches. The current paper will argue for a more explicit analysis of the role of time within social psychological studies (cf. Levine, 2004). It considers what occurs when the researcher examines the same data from different temporal perspectives. The data is drawn from an Internet debate occurring around a series of demonstration events. As the time focus of the analyst shifts, so does the social psychological analysis. The paper argues that a social psychology without reference to time leaves us in a situation comparable with Alice's incomplete view of the Cheshire feline: 'the grin without the cat' (Tajfel, 1972, p.105).

Redefining minorities and majorities: Formal members of Greek political parties manage the dilemma of patriotism vs. nationalism

A. SAPOUNTZIS, Lancaster University.

This presentation will explore the ways in which people represent themselves and their national group as a minority so as to disavow any possible accusations of nationalism. Within Social Identity and Self Categorisation research minority and majority groups are often redefined in experimental designs or are considered to reflect social reality. In contrast this paper focuses on how people orient to their national group as a minority so as to achieve certain rhetorical tasks. It is assumed that when people talk about national categories they face a rhetorical dilemma. On the

one hand they have to show their loyalty to their own nation-state but on the other hand excessive praise of their own country vis a vis other countries or negative comments about other countries could leave people open to charges of irrational xenophobic sentiments (Billig, 1995). This dilemma has been summarised in a distinction drawn in many political arenas and in the social sciences between two different ideal types of national sentiment: patriotism and nationalism (Bar-Tal; 1993; Connor, 1993; Kosterman & Feshbach, 1989; Violi, 1995). It is suggested that constructing the national in-group as a minority is occasionally done in order to manage this dilemma. More specifically it was found that Greek participants, formal members of political parties would often mobilise conspiracy theories so as to represent the national in-group as a minority and the state of FYROM (Former Yugoslav Republic of Macedonia) as a majority backed by backstage powerful allies when talking about the Macedonian issue. As a result they disavowed any possible accusations of nationalism that would have emerged had they presented themselves as being against a small and powerless country.

'As others see us': Asymmetries in lay theories of intergroup relations in Anglo-Scottish stereotypes

C. STEVENSON, S. CONDOR & J. ABELL, Lancaster University.

Tajfel's writing often highlighted the role of stereotypes as 'social myths' or ideologised understandings of the legitimacy of intergroup relations. In contrast, most experimental research tends to treat status and legitimacy as independent variables, and consequently neglects to consider the ways in which group members may actively construct accounts of the nature of the relationship between ingroup and outgroup. Conversely, discursive approaches which do deal with people's own understanding of issues of identity and legitimacy (e.g. Wetherell & Potter, 1992; Wodak *et al.*, 1999; Antaki & Wooffitt, 1999) have generally neglected the group and intergroup dimensions of these resources. The present paper uses the example of Anglo-Scots stereotypes to revisit the concept of stereotype-as-social myth', by considering how stereotypes of ingroup and outgroup are used in national accounting. An examination of spontaneous use of national ingroup and outgroup stereotypes in 50 interviews with people from England and Scotland revealed a high degree of consensus concerning the content and evaluation of group characteristics, including the minority status of Scotland. However, an examination of these stereotypes in the context of their production revealed a radically divergent understandings of intergroup dynamics. On the one hand, Scottish respondents generally characterised their nation as disempowered and illegitimately oppressed by the English. On the other, English respondents depicted Scotland as historically disadvantaged, but as fairly entitled to redress. Thus these divergent 'lay Social Identity theories' of status and legitimacy are themselves a site of intergroup difference as well as a matter of active construction and argumentation.

Symposium: Trust in high risk work settings

Co-ordinator: S. CONCHIE, University of Liverpool.

Discussant: I. DONALD, University of Liverpool.

In recent years, a considerable amount of attention has been paid to understanding how trust develops and affects workers and work-groups in organisations. This is of concern to organisations because trust is often used as a vehicle for implementing organisational changes and obtaining desirable outcomes. While a decline in trust can potentially affect the performance of any organisation, its effects are perhaps most profound in high-risk organisations where safety of the individual is a major concern. In these settings, trust among workers and between workers and management can have direct and significant consequences on both worker safety and organisational performance. However, while trust has been asserted as theoretically important to high-risk settings, it has received very little

attention in terms of empirical validation and analysis. This symposium presents some of the first empirical findings on the topic of trust in high-risk work settings, with a particular focus on those where safety is a major concern. On a global level, the symposium will provide insights into the ways in which trust climates are structured in high-risk settings. Not only will this raise the question of whether the study of trust climates should incorporate measures of 'distrust', but also whether the current measures of explicit trust attitudes are sufficient for high-risk settings. For example, the ways in which implicit trust attitudes can be measured and how they differ to explicit forms will be the main focus of one of the papers. On a more local (individual) level, the symposium will discuss conditions that are necessary for the promotion of trust, both on an interpersonal (between individuals and groups) and organisational level. As well as looking at trust in employing companies, the determinants of trust in distal organisational bodies, such as those responsible for the overall regulation of risk, will also be addressed. Collectively the papers offer a triangulation approach to the study of trust in high-risk settings, adopting both qualitative and quantitative methods and various means of conceptual analysis. It is hoped that this approach will show how researchers have taken initial steps to uncover empirically the multiple dimensions and roles of trust in high-risk work settings.

Dual attitudes about trust: A new measure of safety culture

C. BURNS, K. MEARNS & P. McGEORGE, University of Aberdeen.

There is considerable debate in the literature on the definition, measurement and utility of the concept of safety culture (Cox & Fun, 1998). Many researchers have used questionnaires to measure the workforce's attitudes and perceptions about the state of safety on offshore installations (Fun, Mearns, Fleming & Gordon, 1996; Mearns, Fun, Fleming & Gordon, 1997; Mearns, Fun, Gordon & Fleming, 1998). However, these types of questionnaires measure 'safety climate' which is the term used to describe the indicators of an organisation's underlying safety culture (Mearns *et al.*, 1997; Reichers & Schneider, 1990). Schein (1990) argued that climate is only a surface manifestation of culture and that culture manifests itself at deeper levels of unconscious assumptions. These unconscious aspects of culture are less easy to measure simply because they are unconscious and not directly accessible to individuals. The literature on dual attitudes has provided a solution to the problem of being able to distinguish between the surface features of safety culture and the unconscious assumptions that characterise its core. Wilson, Lindsey and Schooler (2000) argued that one is able to hold different evaluations of the same object: a controlled, explicit attitude and an automatic, implicit attitude. Explicit attitudes are those attitudes and perceptions that are constrained by conscious processing. Questionnaires like safety climate surveys measure explicit attitudes. Implicit attitudes on the other hand can become active relatively automatically and are more likely to guide behaviour under conditions of time pressure or heavy mental workload. An individual's explicit and automatic attitudes to something do not necessarily have to be the same (Wilson *et al.*, 2000). This paper describes a study about the explicit and implicit attitudes held by the workforce at UK gas plants about trust for their workmates, supervisors and the plant leadership. Explicit attitudes about trust were measured by a questionnaire while implicit attitudes were measured using a computerised task. Attitudes about trust were investigated because trust has been proposed to be the foundation of an effective safety culture (Reason, 1997). The main finding of the paper was that a different pattern of results emerged for explicit and implicit attitudes about trust. The paper concludes by discussing the implications of broadening measures of safety culture to include measures of implicit attitudes.

Character-based determinants of trust in managers

M.C. CLARK & R.L. PAYNE, Sheffield Hallam University.

Trust is a prominent determinant of effective interpersonal relationships, group process and organisational development, however, for managers trust building is often problematic. The particular aim of this paper is to contribute to a growing understanding of the way in which individual managers can develop trust in a work situation. The paper presents a theoretical and empirical analysis of the nature of trust at work. Building on the results of an earlier study, use is made of the facet-theoretical approach to generate a definitional framework of trust which focuses on the characteristics of the trusted person that contribute to the development of trust by a trustor. Using items developed on the basis of a mapping sentence, hypotheses regarding the relations between the definitional framework and empirical observations were tested by applying Smallest Space Analysis (SSA) on data collected from a sample of 398 hospital and bank employees. The results demonstrate strong support for the definitional system and show a clear association with results of prior research. The empirical structure clearly reflects the attitudinal nature of interpersonal trust at work and the items empirically distinguish distinct character-based components of trust.

Trust climates in the offshore industry: The co-existence of trust and 'distrust'

S.M. CONCHIE & I. DONALD, University of Liverpool.

Although trust is often implicated as a central element in positive safety cultures and as a necessary prerequisite for successful safety initiatives, few studies have explicitly examined trust as it relates to safety. This paper aims to contribute to this limited body of knowledge by providing a framework for understanding trust climates in the offshore industry. An exploratory factor analysis of survey data collected from an offshore gas installation ($N=203$) showed trust climates to be comprised of distinct trust and distrust components. As this finding runs contrary to research supporting a single component approach, structural equation modelling was used to test a series of nested models representing both possible structures. Models in which trust and distrust were conceptualised as distinct were found to offer a better fit to the data compared to single factor models. Replication of these results was found using a larger data set collected from an industry-wide sample ($N=499$). Further analysis of the industry wide data suggests that as well as distinguishing between trust and distrust, workers also differentiate between a safety-specific and a general domain. Findings, therefore, suggest that trust and distrust should be measured as distinct constructs if psychologists want to ascertain the balance needed to create a healthy organisational safety culture.

Exploring critical trust in the Health and Safety Executive

A. WEYMAN, N. PIDGEON, J. WALLS & T. HORLICK-JONES, Health & Safety Laboratory, Sheffield.

Social trust in risk management institutions and information sources has been widely identified as a defining influence on how the public perceive and react to societal risks. While contemporary research findings highlight low trust in government, there has been little exploration of the persona of individual risk regulatory institutions and agencies. The study reported on here used a combined methods approach to explore variables impacting upon social trust in the Health and Safety Commission/Executive (HSC/E), the regulator for workplace health and safety in the UK. Focus group ($N=202$ respondents) and survey ($N=304$) findings highlight the potential fragility of a, currently positive, trust profile founded upon fundamentally vague and impressionistic notions of the organisation's role and remit. The paper concludes with a discussion of the implications of the results in relation to contemporary theories of trust.

Symposium: Social identity, differentiation and intragroup Processes

Co-ordinators: P. HUTCHISON & T. MORTON, University of Exeter.

Discussant: J. JETTEN, University of Exeter.

Recent years have seen a return of interest to intragroup processes within social psychology. The aim of this symposium is to examine these processes as they relate to social identities, and vice versa how social identities can shape intragroup processes. Contributors examine this theme as it relates to both small interactive groups and large social categories. The first three presentations focus on how people perceive and react to deviance within groups. The first (Ouwkerk) uses a social dilemma paradigm to examine the conditions under which two different responses to deviance emerge – one where deviants are rejected (i.e. the 'black sheep' effect) and the other where deviants are followed (the 'bad apple' effect). The second (Frings) tests competing explanations for group members' tendency to derogate 'black sheep' based on norm-versus expectancy-violations. The third (Morton) explores two motivations that affect group members' judgments of deviants – the identity maintenance motive to preserve group norms versus a strategic motive to further group goals. The next three papers examine the issue of intragroup differentiation more broadly. Hutchison examines how group norms, group identification, and identity threat affect perceptions of intragroup variability. Guinote then considers factors that might account for the finding that members of high power groups tend to be objectively more variable than members of low power groups. Oldmeadow integrates status generalisation processes, derived from status characteristics theory, with inter- and intra-group processes governed by social identity. The final presenter in this symposium (Postmes) presents an integrative model of social identity formation which incorporates both group-level factors and individual-level interactive processes.

Not looking like that: Testing two models of the black sheep effect when appearance norms are violated

D.J. FRINGS & D. ABRAMS, University of Kent.

The black sheep effect is the tendency to evaluate norm violating ingroup members more negatively than norm violating outgroup members. The present study tests competing hypotheses for the expectancy violation explanation (Biernat, Vescio & Billings, 1999) and the social identity theory explanation (Marques, Yzerbyt & Leyens, 1988) of this effect. A sample of 95 people was recruited from non-student male rugby players drawn from amateur clubs and non-psychology students. Participants were presented with either a modal or deviant ingroup/outgroup author of a sports article. Evaluations of the author and the quality of the article revealed that only rugby players derogated norm violating ingroup members relative to identical outgroup targets. As both groups had the same expectancies for each group, the cognitive effects should not have differed for in/outgroups according to expectancy violation theory, suggesting this framework is insufficient to explain the phenomena. Although the SIT-based hypotheses were generally supported, certain findings, namely the preference for outgroup modal members over ingroup deviants despite the fact that they reduce contrast and the simultaneous emergence of inter- and intra-group effects challenged this account. These findings are discussed in terms of new theoretical work into subjective group dynamics.

Power and objective group variability: Information processing and behaviour change across situations

A. GUINOTE, University of Kent.

Previous research reveals that group size, status and power affect perceived group variability, such that majority, high status, and powerful groups are perceived in more variable ways than minority, low status and powerless groups. Recent findings point out that differences in perceived group variability

of dominant and subordinated groups derive in part from differences in their objective group variability (Guinote, Judd & Brauer, 2002). In these studies objective group variability was measured in terms of inter-individual differences in behavior in a given situation. In the current paper we extend these findings by focusing on intra-personal variability in behavior across situations (Guinote & Trope, 2004). In four studies participants were assigned to a dominant or a subordinated group and were exposed to situations that call for different behaviors. We measured the extent to which participants respond to what the situation affords. Consistently across studies, members of dominant groups responded more to the primary aspect of the situation and less to secondary aspects, changing therefore behavior more across situations, compared to members of subordinated groups. Four additional studies (Guinote & Mondria, 2004) indicate that these differences in responsiveness to situational affordances are related to information processing mechanisms, with powerful individuals attending more to primary cues in the environment, and less to secondary cues compared to powerless individuals.

Social categorisation and threat of ostracism as determinants of reactions to deviant behaviour: A story about bad apples and black sheep

J.W. OUWERKERK, Free University, Amsterdam.

Within a public good dilemma people have a tendency to follow the behaviour of a single non-cooperative individual (i.e. a 'bad apple') rather than the behaviour of a single co-operative individual. The present research shows that this 'bad apple'-effect is stronger when the deviant individual is categorised as an ingroup member (i.e. when the 'bad apple' is a 'black sheep') rather than an outgroup member. Furthermore, inconsistent with research on the 'black-sheep-effect', the deviant individual was evaluated more extreme when he or she was categorised as an ingroup member rather than an outgroup member. In addition, the present research demonstrates that the 'bad apple'-effect can be attenuated when there is a threat to be ostracised. That is, consistent with a functional perspective on ostracism, the possibility to be excluded from the group reduced the tendency to follow the behaviour of a non-cooperative individual. The findings are discussed in relation to social identity theory, self-categorisation theory, and work on ostracism.

Perceived intragroup variability as a function of group norms, identity threat and group identification

P. HUTCHISON & J. JETTEN, University of Exeter.

Previous research has shown that perceptions of ingroup variability may vary as a function of identity threat and the level of identification with the group. Specifically, when the image of the ingroup is threatened, high identifiers tend to emphasize ingroup homogeneity whereas low identifiers emphasise ingroup heterogeneity (e.g. Doosje, Ellemers & Spears, 1995). It has been suggested that high identifiers stick with the group and emphasise group cohesion when its identity is threatened while low identifiers bail out: emphasising ingroup heterogeneity may allow low identifiers to detach or psychologically withdraw from the group. The current programme of research examines how group norms might moderate high and low identifiers' responses to identity threat. Replicating the Doosje *et al.* findings, a series of studies showed that high identifiers in groups with norms of consensus perceived more homogeneity in group threatening conditions than in non-threatening conditions, whereas low identifiers showed the reverse pattern and perceived more heterogeneity in threatening conditions than in non-threatening conditions. In contrast, high identifiers in a group with norms of diversity perceived more heterogeneity in group threatening conditions than in non-threatening conditions, whereas this difference was absent for low identifiers. These findings suggest that in some groups intragroup differentiation is accepted and even normatively prescribed, and that perceptions of ingroup heterogeneity can be the result of increased

conformity to the norms and values of the group, rather than their rejection.

Deviance for the greater good: Evidence for the strategic acceptance of ingroup deviants

T. MORTON, University of Exeter.

Research on the black sheep effect, and subjective group dynamics, suggests that positivity toward fellow ingroup members is not automatic. Rather individuals may reject ingroup members who deviate from group norms in order to maintain the positive distinctiveness of the group – particularly if group membership is valued or the group is under threat. Past research has, however, ignored contexts in which anti-normative deviance might be advantageous and contribute to important group goals. For example, in political contests candidates must balance appealing to ingroup values with appealing to the concerns of the broader public. When public opinion is against the group, re-emphasising group norms by purging those who deviate is one strategy for dealing with such a threat. However, it is a losing strategy in terms of achieving electoral success. We examined evaluations of normative and deviant political candidates in the context of public opinion that was either supportive or hostile towards the ingroup position. Normative ingroup candidates were preferred to deviants. However, when public opinion was hostile, high identifiers displayed elevated confidence in, and satisfaction with, an ingroup candidate who deviated away from the group and towards public opinion. Respondents also recognized the strategic value of this behaviour. These results suggest that responses to deviance depend on the contextual meaning of deviance, and the implications of deviance for achieving group goals. High identifiers might be particularly permissive of deviance to the extent that it is strategic and beneficial to the group.

Social identity processes in task-focused interactions

J. OLDMEADOW, University of Exeter.

A long tradition of research within the expectation states approach demonstrates that individuals with high status in society are more likely to occupy positions of high status and influence within newly formed task-groups than are individuals with low social status. Theoretically, this is because social status outside the group generates expectations of competence at the group's task, and these expectations are the basis of influence within the group. This process, called status generalisation, is an important process through which interactive groups develop a local structure and through which opportunities to contribute and to be influential are distributed amongst group members. The current programme of research attempts to integrate status generalisation processes in task groups with social identity process at the intergroup level by arguing that status generalisation is mediated by the self-evaluative consequences of social comparison. Empirical evidence is presented which shows that individuals with positive social identity accept less influence from outgroup others than those with negative social identity, regardless of status differences between the groups. It is hypothesised that status generalisation will be moderated by the legitimacy and stability of the status difference: evaluations and influence within task groups will be most related to status when status differences are legitimate and stable, and least related to status when they are illegitimate and unstable. The implications of this integration for the development of a legitimate status order of interaction and for the possibility of changing status relations between groups are discussed.

An interactive model of social identity formation

T. POSTMES, R. SWAAB & A. HASLAM, University of Exeter.

In order to overcome the dualism of group-level vs. individualistic analysis of (small) group processes, we develop a model of social identity formation which incorporates factors at both levels of analysis as well as their interaction. On the basis of prior theorising in the social identity tradition and

a program of research spanning several interactive group research paradigms, we suggest that within small groups a social identity can operate as a contextual given which shapes the behavior of individuals within the group, as much as the behavior of individuals within the group can shape social identity. This proposal is supported by a programme of research into social influence within small interactive groups. This research explores deductive (top-down) processes through which existing identities influence group processes, but also shows a reciprocal influence through which intragroup discussion creates a sense of group identity in the apparent absence of any direct intergroup comparison (an inductive, or bottom-up, path). It is the interaction between these two forces that we believe is characteristic of the way in which small groups achieve a sense of social identity. Supporting this view, we describe research which suggests that processes of identity formation play a key role in decision making, productive collaboration, consensualisation, integrative negotiations, and the development of shared cognition.

Symposium: Ways of negotiating group status: Examinations of psychological experience and social action

Co-ordinators: C.W. LEACH, University of Sussex & R. SPEARS, Cardiff University.

Discussants: R. SPEARS, Cardiff University & C.W. LEACH, University of Sussex.

Whether based in money, prestige, or education, social status is a powerful force in peoples' lives (for reviews see Berger *et al.*, 1998; Bourdieu, 1991; Keltner *et al.*, 2003; Tajfel & Turner, 1979). Where one stands in relation to other members of one's group and where one's group stands in relation to other groups has important implications for psychological experience and social action. In this symposium we illustrate the variety of ways in which status operates psychologically and socially. Thus, presentations cover high and low status at the interpersonal, intragroup, and intergroup levels. The presentations engage a wide range of theory regarding social identity, emotion, self-concept, and social action. Although the presenters work on somewhat disparate topics, their mutual familiarity will enable them to address common themes. The coordinator's opening comments and the discussant's closing comments will also highlight the divergent approaches to common themes. At the intra-group level, Vliek *et al.* discusses two studies showing the conditions under which individuals' self-concepts are most affected by their status relative to fellow in-group, rather than out-group, members. This work integrates theory regarding comparisons of the personal and collective self by integrating the effects of personal self-esteem and group identification. In another study focused on intra-group responses to intergroup status, Van Zomeren *et al.* examine the ways in which the communicative context affects the role of social identification, emotion-focused coping, and problem-focused coping in the collective action in which members of a low status group are willing to engage. Van Zomeren *et al.* show that the presence of an in-group or out-group audience differentially affects group members' emotion-focused and problem-focused coping with their group's low status. At the intergroup level, Iyer and Zebel *et al.* focus on the emotional experience and action intentions of members of high status groups whereas Pennekamp and colleagues as well as Kessler and Mummendey focus on those of low status. In studies of non-Jewish Dutch guilt about the past mistreatment of Jews, Zebel *et al.* show that a high rather than low status position promotes perceived responsibility, guilt, and reparation intention. When the Jewish outgroup is portrayed as high status and the ingroup portrayed as low status, however, guilt and its corollaries are undermined. In her study of White Americans' perceptions of status inequality on the basis of 'race', Iyer contrasts group-based guilt to anger. She shows that guilt and anger are based in different ways of perceiving the in-group and different appraisals of responsibility for racial inequality. As such, group-based guilt and anger predict different political action intentions. In a study of East Germans' comparisons to West Germans, Kessler and Mummendey show that perceiving of status disadvantage as illegitimate,

etc., is important to the way in which East Germans evaluate and tend to act against their low status. Lastly, Pennekamp *et al.* examine the basis of Surinamese peoples' emotions and action tendencies regarding their past enslavement by the Dutch. They show how group identification and the intergroup context affects these evaluations of the past.

A call to action: The role of intergroup guilt and outraged anger in predicting political action intentions in support of social equality

A. LYER, University of Exeter.

We use intergroup emotions to consider how members of advantaged groups come to support political efforts to achieve intergroup equality. The present study examined the political implications of intergroup guilt and outraged anger about illegitimate inequality. Focus of attention was manipulated (self focus/system focus), to directly examine its relationship to the emotions (Leach *et al.*, 2002). Analyses indicated that guilt is a self-focused emotion, as it was generally associated with thinking about the ingroup and accepting collective responsibility for the inequality. When the ingroups role in the inequality was made salient (self focus), participants' thoughts about the ingroup were associated (directly) with a disavowal of collective responsibility and (indirectly) with less guilt. In this condition, participants seemed to avoid the experience of guilt by undermining the basis of the feeling. Guilt was associated with action intentions to support restitution to the disadvantaged, but only in the self focus condition. Thus, the condition where guilt had the strongest political implications was also the condition where participants appeared to be trying to avoid experiencing guilt. Outraged anger was relatively other-focused, as it was associated with focusing on, and blaming, systemic policies for the inequality. Anger also had a self-focused aspect, being associated with accepting collective responsibility for the inequality as well (see Leach *et al.*, 2002). As a more broadly-focused emotion, anger was associated with action intentions to support restitution and confrontation of the perpetrators of inequality. Thus, anger appears to be a more action-oriented political emotion than is guilt.

(Ir)relevant for us? Sources and targets of intergroup behavior

T. KESSLER & A. MUMMENDEY, Friedrich-Schiller University Jena, Germany.

Groups perceive their status on the basis of the comparisons they make to other groups on prototypical dimensions in a salient comparison frame. Thus, more prototypical groups are seen as having higher status. This means that higher status groups are more relevant comparison targets for lower status groups and that lower status groups are less relevant for higher status groups. As such, low status group's comparative status disadvantage leads them to direct their efforts to change their low status against high status groups. A study assessed an East German and a West German sample during German unification. Results showed that West Germans are consensually perceived as having a higher status than East Germans because they are seen as more prototypical for Germans. Thus, West Germans are the most attractive comparison group for East Germans compared to other comparison targets. In contrast, West Germans prefer comparisons with West European countries over comparisons with East Germans. Likely as a result of the fact that West Germans are a more relevant comparison for East Germans, East Germans' perceptions of their status disadvantage (i.e. legitimacy, stability, permeability) influences their group identification and perceived relative deprivation. East Germans' group identification and perceived relative deprivation in turn predicted their tendency to engage in social competition with the West Germans. Likely as a result of the fact that East Germans are a less relevant comparison for West Germans, West German's perceptions of their status advantage were unrelated to their group identification and perceived relative deprivation.

Past wrongs and current feelings: Emotions felt by Surinamese people in regard to their slavery past

S. PENNEKAMP, B. DOOSJE, S. ZEBEL & A. FISHER, University of Amsterdam.

The emotions that victims of immoral intergroup behavior feel toward their own group and the perpetrator are important to a good resolution of past wrongs and the relation between victim and perpetrator groups. Thus we investigated the basis of Surinamese peoples' emotions and action tendencies regarding their past enslavement by the Dutch. Those who identify highly with their victimized ingroup were expected to ascribe greater responsibility to the present-day Dutch and to experience more anger than low identifiers. Higher levels of anger should result in a greater demand for reparation. In a second study we focused on Surinamese peoples' reactions to information about their group's past victimization. In a 2 x 2 design we varied whether this information focused only on the suffering of the victims or also included the role of the perpetrators and whether the information came from the victims ingroup (Surinamese) or the perpetrator outgroup (Dutch) source. We expected that other-focused emotions such as anger would be highest when the information about the group's past victimization focused on the role of the perpetrators and came from an ingroup source. In contrast, we expected more self-focused emotions, such as sadness and shame, when the information focused only on the victim's suffering and came from the ingroup. In addition, we expected that anger against the perpetrator would be mitigated when the information came from this outgroup and focused on their role in the victimisation, as the victims should perceive this as displaying regret about the perpetrator group's role in the past.

Stop whispering, start shouting! A dual pathway model to collective action

M. VAN ZOMEREN, R. SPEARS, C.W. LEACH & A.H. FISCHER, University of Amsterdam.

We use appraisal theories of emotion (e.g. Lazarus, 1991) to integrate different approaches to collective action into a dual pathway model that identifies separate emotion-focused and problem-focused routes (Van Zomeren *et al.*, 2004). In a new study, we extend this research by examining how group members cope with collective disadvantage in different communication contexts. Specifically, in this experiment we manipulated procedural fairness (yes/no), group efficacy (high/low) and the communication context (intra-group vs. inter-group). Based in our dual pathway model, we expected that only the group-based anger pathway to collective action would be affected by the communication context. As anger is sensitive to emotion-focused social support from fellow in-group members, the presence of in-group members should moderate anger rather than more problem-focused group efficacy. Results were consistent with our expectations. We also examined the role of social identification in how people cope with collective disadvantage. Results of structural equation modeling showed that especially when procedures were unfair, social identification was more important to instrumental types of collective action in an inter-group context. In contrast, when there was an intra-group communication context, social identification was more important to expressive types of collective action. These results support our integrative perspective on collective action by showing the distinct roles of emotion-focused accounts like group-based anger and more problem-focused accounts like group efficacy even when differences in the communication context are considered.

The dynamic self: The interplay of inter-personal, intra-group, and inter-group social comparison

M.L.W. VLIK, C.W. LEACH & R. SPEARS, University of Amsterdam.

Given their importance to establishing social status, the social comparisons individuals make to other individuals are an important basis of their self concept (for a review see Suls & Wheeler, 2000). But, not all comparisons are equal. The comparisons

people make to relevant others appear to be the most affecting (Festinger, 1954; Hyman, 1942; Wheeler *et al.*, 1997). Our research examines the way that membership in an ingroup that is distinctive from an outgroup makes intra-group comparisons more relevant and affecting. In Study 1 we led members of quasi-minimal groups to see their ingroup as more or less distinctive from an outgroup. We then gave them false feedback about their own and an ingroup member's task performance. Consistent with the idea that distinctive ingroups provide more relevant social comparisons (see Turner, 1991), participants' self-concept was more affected by comparison with a fellow ingroup member when the ingroup was more distinctive. This was especially true for those higher in self-esteem, who tend to perceive themselves as more valued group members (see Leary, 1995). In Study 2 we enabled both intra- and inter-group social comparisons by providing information about the performance of both an ingroup and an outgroup member. We also used ingroup member's identification as an additional predictor of the relevance of intragroup comparison. Results again showed that intragroup comparisons were most affecting (i.e. self-judgement, affect, self-evaluation) when the ingroup was distinctive from the outgroup. Those higher in self-esteem and group identification were especially affected by intragroup comparison.

How intergroup status affects group-based guilt and reparation

S. ZEBEL, B. DOOSLE, R. SPEARS & S. VAN RANTWIJK, University of Amsterdam.

Feelings of group-based guilt and associated reparation intentions can arise when one perceives one's in-group to have wronged members of outgroups. We argue that perceived status differences between the in-group and the victimised outgroup will influence how group members appraise their ingroup's harmful behaviour, which subsequently affects group-based guilt and reparation. It was hypothesised that when in a high (compared to low) status position, ingroup members blame their in-group more strongly for harmful behavior. This should induce stronger feelings of guilt and reparation. In a study of quasi-minimal groups, we manipulated intergroup status and its legitimacy. Participants were told that their in-group or the outgroup was higher in status and whether or not this status was based on true achievement differences between the groups. Participants were then told that their ingroup had disadvantaged the outgroup in the past and the present. When in the high status position, ingroup members showed greater perceived responsibility, guilt, and reparation. Legitimacy did not qualify these results. In a follow-up field experiment non-Jewish Dutch participants were confronted with information about the theft of properties of deported Jewish people during World War II. A manipulation established the non-Jewish Dutch ingroup as either higher or lower status than the Jewish outgroup. As in Study 1, high ingroup status led to more guilt and reparation. As expected, perceived in-group responsibility mediated this effect such that high status predicted greater perceived responsibility which in turn predicted guilt and reparation. Implications for past and present intergroup relations will be discussed.

Symposium: Changing perspectives on bystander intervention research

Co-ordinator: R. MANNING, University College Winchester.

Discussant: N. HOPKINS, Affiliation???????

This symposium will address a research tradition with a considerable heritage in social psychology: the study of bystander intervention in violence. While traditional research in this area can be characterized by its diversity, it has largely been dominated by the investigation of the 'bystander effect': the suggestion that people are more likely to help when alone than when in the presence of others (Latané & Darley, 1970). This classic phenomenon is one of the best known and widely replicated in the field. However, while this tradition continues (e.g. Garcia, Weaver, Moskowitz & Darley, 2002), questions have been raised regarding its practical utility (cf. Latané & Nida, 1981). Moreover, it has become increasingly divorced from the event

that it originally sought to explain (Cherry, 1995) – the story of a murder that elicited no response from its 38 witnesses. As demonstrated by the work presented in this symposium, current research tests the limits of such traditional approaches and problematises some of its core assumptions. Reflecting the research tradition itself, this symposium will begin at the most obvious starting point for the study of bystander intervention: the murder of Kitty Genovese. Forty years on from this event, Manning and De May present evidence to challenge the traditional '38 witnesses' story. They argue that a more detailed interrogation of the events surrounding Genovese's murder suggests that an increased sensitivity to the social, spatial and historical contexts surrounding the reactions of witnesses to violence necessarily shifts the traditional focus of investigation. Turning to the research that followed Genovese's murder, Levine highlights its subsequent neglect of violence as the target of intervention, and question the reliance on the traditional 'bystander effect'. In making violence central to the study of bystander intervention, Levine demonstrates how the subsequent understanding of intervention changes. Moreover, in highlighting the differential effect of the presence of other bystanders depending upon the presence or absence of shared group memberships between bystanders, this work introduces the utility of the intergroup perspective. Continuing this theme, Cassidy, Levine and Reicher examine an alternative tradition of bystander intervention research in the guise of Weiner's attribution-emotion-action model. Once again examining violence as the target of intervention, rather than more general helping behaviour, Cassidy *et al.* provide further evidence of the additional issues raised by utilising an intergroup perspective on helping. While existing theories appear to provide accounts of particular intervention situations, the introduction of social category relations between victims and potential helpers once again problematises these accounts, and emphasises the gap between research in the field and the way in which intervention situations can commonly present themselves. In presenting these challenges to the bystander intervention paradigm, these papers aim to illustrate the potential benefits of an intergroup perspective to the field of bystander intervention research, but also to point towards potential new directions of research that might add to the practical utility of research in this area.

Violence and group helping: A test of Weiner's attribution model

C. CASSIDY, M. LEVINE & S. REICHER, University of St. Andrews.

Weiner's attribution-emotion-action model of helping behaviour was described recently as 'virtually unassailable' (MacGeorge, 2003). Numerous studies have shown that victims who are perceived as more responsible for their problems evoke more anger and less sympathy from others; these emotions, in turn, reduce likelihood to help. This study sought to test Weiner's model in the context of helping a victim of violence where social category relations between helper and victim were manipulated. Consistent with our previous work, help was more likely to be offered to an in-group victim than to an out-group victim. Weiner's model was tested across three victim conditions (in-group, out-group and control) using structural equation modelling. The model provided an adequate fit to the data in the control and out-group victim conditions. However, in the in-group victim condition, analysis suggested that attributions of responsibility directly affected likelihood to help; their effect on helping was not mediated by the emotions of anger or sympathy. We discuss the implications of these findings for Weiner's model and, more generally, for an intergroup approach to helping.

Violence, identity and bystander Intervention: Enriching the numbers game

M. LEVINE, Lancaster University.

In their review of the bystander intervention literature, Latané and Nida (1982) argue that the bystander effect is one of the most established and replicated findings in social psychology. A series of

innovative experiments in social psychology appear to demonstrate that the greater the number of bystanders who witness an emergency, the less likely any one of them is to help. However, as Cherry (1995) points out, although much of this work was designed to be an experimental analogue of the brutal rape and murder of Kitty Genovese, traditional work on bystander behaviour does not examine intervention in violent emergencies. This paper will argue that, in exploring the dilemmas faced by bystanders who witness acts of violence, two interrelated limitations of the traditional bystander paradigm are revealed. The first is the absence of a focus on the relationship between bystanders and perpetrators of violent acts. The second is the focus on the presence or absence of others, rather than on the social category relations between all those present in a violent emergency. The paper will describe a series of experiments in which the numbers of bystanders to a violent event is interwoven with different constructions of the social category relations between bystanders, and between bystander and perpetrator. The paper will argue that, in violent emergencies, increasing the number of bystander can have either a facilitating or an inhibiting effect on intervention depending on the relevant social category relations. The paper will conclude with some observations about the relevance of this work for the traditional bystander paradigm

Thirty-Eight Witnesses and the 'Tenacity of Historical Misinformation'

R. MANNING & J. DE MAY Jr, University College Winchester.

Reports of bystander intervention research invariably utilise the story of Kitty Genovese. They relate how 38 witnesses watched a brutal rape and murder for over half-an-hour, doing nothing – not even calling the police – until Kitty Genovese was dead. This event is generally regarded, and reported, as providing impetus for research in this area (e.g. Evans, 1980). One of the most prolific of such approaches, which has consistently drawn from the '38 witnesses' story, is that of Latané and Darley and their colleagues (e.g. Latané & Darley, 1970). However, given that these researchers have questioned the practical utility of their work (e.g. Latané & Nida, 1981), it is pertinent to examine more closely what it is that they seek to explain. Initially aiming to highlight alternative factors from the Genovese murder that may have contributed to the inaction of witnesses, this paper goes further, to question the veracity of the story as commonly recounted. Through the analysis of newspaper reports and the court testimonies of witnesses, we question the accuracy of the story of the 38 witnesses, and its translation into social psychological research. Mirroring Burton's (2001) examination of the tenacity of historical misinformation, we will also reflect on these aspects of the history of bystander intervention research and possible avenues for future investigation.

Leadership: Divergent methods, convergent messages

Co-ordinator: M. RYAN, University of Exeter. Discussant: To be confirmed.

The study of leadership is a central issue in a wide range of disciplines and the findings from such research have important implications in a variety of applied contexts. As such, approaches to leadership research are extremely varied with numerous theoretical perspectives and research methodologies being employed. The diversity of contexts, approaches, and applications within leadership research are well represented in the five papers included in this symposium. Michelle Ryan looks beyond the glass ceiling, presenting evidence from archival and experimental studies for the phenomenon of the glass cliff whereby women are more likely than men to be placed in risky or precarious leadership positions. Alex Halsam presents work from a large-scale experimental study, the BBC's *The Experiment*, in support of a social identity approach to leadership, demonstrating that leadership is made possible by the rhetorical and political processes through which leaders control the definition of relevant social identities. Inmaculada Adarves-Yorno's paper presents a series of experimental studies that

illustrate the way in which the evaluation of leaders and the perception of leadership creativity are grounded in the normative content of group membership and self-categorisation processes. Using a qualitative analysis of semi-structured interviews with managers and management specialists Richard Bolden provides an evaluation of the competency/standards approach to leadership and its implications for the way in which leadership is conceptualised. Finally, Martin Wood provides a critique of conventional individualistic approaches to leadership with a post-structural, metaphysical analysis and discusses the methodological implications for future research. Despite their divergent perspectives and methodologies the five papers presented here offer a convergent message: that in order to understand leadership processes we must move beyond an individual, personality-based approaches and recognise the importance of a contextual, group-level analysis of leadership.

New understanding of leadership creativity: A social identity approach

I. ADARVES-YORNO, T. POSTMES, & S.A. HASLAM, University of Exeter.

This paper argues that the evaluation of leaders and the perception of leadership creativity are grounded in the normative content of group membership and self-categorisation processes. Many researchers argue that creativity is a key component of leadership (e.g. Steinberg, 2003). A creative leader is usually conceptualised as being a leader who has creative ideas. However, ultimately, something is creative when it is perceived to be creative by others (Csikszentmihalyi, 1998). Creativity is not an objective property of the creation but it is rather context dependent. Therefore, whether a leader is or is not creative depends not just on the content of his or her ideas, but crucially also on the contextual factors that impact on the perception of creativity among followers. Based on the social identity approach (Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher & Wetherell, 1987), we argue that an essential factor in determining whether a leader is perceived as creative or not is whether his or her ideas adheres to the normative criteria of followers' social identity. This paper presents empirical data supporting this analysis. Results showed that participants whose social identity was salient considered a leader to be better and more creative leader when his ideas complied with group norms. Results reveal that to fully understand creative leadership we need to explore followership perception and also suggest that creativity and compliance are not mutually exclusive.

Leadership and management competencies: Lessons from the National Occupational Standards

R. BOLDEN & J. GOSLING, University of Exeter.

The pros and cons of a competency/standards approach to leadership and management development have been under debate for some time. Whilst many people now question the validity of this approach, organisations in all sectors continue developing their own frameworks and the government encourages and promotes occupational standards. In the current paper, the authors draw upon their experiences of working alongside consultants developing the new National Occupational Standards in Management and Leadership to present some theoretical and practical reflections on this approach. Our experiences have led us to conclude that the development of frameworks and standards can be a valuable way of encouraging individuals and organisations to consider their approach to management and leadership development, but that it is in the application of these standards and frameworks that difficulties can occur. When working with frameworks and standards there is frequently a temptation to apply them deductively to assess, select and measure leaders rather than inductively to describe effective leadership practice and stimulate debate. With an increasing awareness of the emergent and relational nature of leadership it is our opinion that the standards approach should not be used to define a comprehensive set of attributes of effective leaders, but rather to offer a 'lexicon' with which

individuals, organisations, consultants and other agents can debate the nature of leadership and the associated values and relationships within their organisations.

Without social identity there can be no leadership: Evidence from 'The Experiment'

S.A. HASLAM & S. REICHER, University of Exeter.

There is currently an upsurge of interest in research which examines the link between social identity and leadership. Following Turner (1991), researchers have seen leadership as a process of social influence that flows from a social identity that followers perceive themselves to share with leader (e.g. Haslam, 2001; van Knippenberg & Hogg, in press). Such perceptions are enhanced to the extent that the leader is perceived to be prototypical of that social identity. This varies with social context (Platow *et al.*, 1998) and, moreover, as 'entrepreneurs of identity' leaders attempt to demonstrate their own prototypicality through their construction of relevant identities in public discourse (Reicher & Hopkins, 2001). One strong implication of this analysis is that leadership is itself only made possible by rhetorical and political processes through which leaders co-ordinate and control the definition of relevant social identities. In support of this argument, the present paper presents qualitative and quantitative analysis of events in *The Experiment* (Koppel & Mirsky, 2001), which shows: (a) how would-be leaders seek to control debate about 'who we are' in order to affirm their own leadership credentials; and (b) how leadership becomes impossible once a sense of shared identity has broken down.

The Glass Cliff: The precariousness of women's leadership positions

M.K. RYAN & S.A. HASLAM, University of Exeter.

Women continue to be underrepresented in leadership positions with evidence suggesting that women typically confront the invisible barrier of a 'glass ceiling' while men are more likely to benefit from a 'glass escalator'. This paper introduces an additional, largely invisible, hurdle that women need to overcome in the workplace. Extending the metaphor of the glass ceiling and the glass elevator, we argue that women are more likely than men to find themselves on a 'glass cliff', such that their position of leadership is risky or precarious. A programme of archival and experimental studies will be presented demonstrating the glass cliff phenomenon in a number of settings: (a) corporate settings, where women are more likely to be appointed to the boards of companies with consistently bad performance; (b) political settings, where women are more likely to be chosen to stand for hard-to-win seats; and (c) legal settings, where female lawyers are more likely to be allocated risky court cases. Positions on glass cliffs can be seen as being exceeding dangerous for the women who hold them as they are more likely to lead to poor outcomes and attract attention. In this way, compared to men, women who assume leadership offices may be differentially exposed to criticism and in greater danger of being held responsible for negative outcomes that were set in train well before they assumed their new roles. Theoretical explanations of the glass cliff will be considered in light of relevant empirical evidence, and the broader implications of the phenomenon will be examined.

The fallacy of misplaced leadership

M. WOOD, University of Exeter.

Conventional ideas of leadership tend to concentrate on the personal qualities and capabilities of a few key people occupying top positions in a hierarchy. This normative position attributes epistemological privilege to individual social actors. Contemporary management research has now begun to recognise the embedment of leadership practice in economic, technological, and social relations. However, the full ontological implications of this insight are seldom drawn out. The paper explores how a perspective of process metaphysics challenges the dominance of the field by both self-identical individualism and discrete

relatedness, which leaves the relation external to the related terms. The aim will be to show how both of these partial expressions are lacking and to articulate a sense of leadership as the subtle synthesis of internal forces that are always qualitatively relating through their difference. The paper will explore some methodological implications of this way of thinking for future leadership research.

Symposium: Social identity: Continuity and content

Co-ordinators: A. LIVINGSTONE & J. JETTEN, University of Exeter.

Discussant: T. POSTMES, University of Exeter.

This symposium brings together a range of research within the social identity tradition investigating the related issues of continuity and change in social identities over time, and the role of identity content in social behaviour. A key goal will be to argue that these relatively neglected issues are of central importance to an understanding of social identity processes in a range of settings. Much research in the social identity tradition has, often as a methodological artefact, tended to focus on social identity-based phenomena at particular points in time, ignoring the temporal dimension of social identity processes. By extension, researchers have often been guilty of reifying particular aspects of group life. Specifically, there has been a tendency for researchers to presume unitary definitions of the groups they study, when in fact what it means to be a member of a given group is often the subject of contestation by group members. As a counterpoint to these tendencies, this symposium presents data which demonstrate some of the important consequences of social identity content in intergroup relations, and also highlights the processes of change and continuity over time that are inherent in social identity-based behaviour. Change and identity content in intergroup relations One paper directly addresses the role of identity content in intergroup relations. Using survey data from Northern Irish participants, Andrew Livingstone and Alex Haslam's paper shows that the effect of ingroup identification on negative attitudes towards the outgroup is moderated by particular forms of identity content, such that higher identification is associated with more negative attitudes towards the outgroup only when the content of ingroup identity emphasises a negative relationship with the outgroup. Continuity, change and identity content in the self-concept Turning to issues of continuity in social identities, Mhairi Bowe and Fabio Sani's paper explores the crucial role of perceived historical continuity in national identities. Across three correlational studies using Italian (Study 1), French (Study 2) and Scottish (Study 3) participants, measures of perceived historical continuity are developed and validated. In turn, Study 3 explores the relationship between this construct and other theoretically related constructs such as 'social identification', 'collective self-esteem', and 'inclusion of the ingroup in the self. Other papers present data on how the content of and change in social identity impacts on our self-concept more generally. In a longitudinal study of new university students, Jolanda Jetten *et al.*'s paper argues that although instances of identity change (and particularly identity loss) can be stressful, the effects of this on individuals' long-term well-being can actually be buffered by the development of new identities and the associated sense of belonging. Gamze Baray and Tom Postmes's paper presents data on the inter-relationship between social and personal self-definition. It is argued that unlike other types of groups (e.g. a hobby group), membership of certain groups (in this case, a nationalist organisation) prescribes strong guidelines for self-definition at the personal level. Thus, the extent to which a social identity influences our individual self-definitions might be determined by the content of that social identity.

Negative outgroup attitudes in chronic social conflict: The moderating effect of identity content on ingroup identification

A. LIVINGSTONE & A. HASLAM, University of Exeter.

This paper argues against over-simplified interpretations of social identity theory by highlighting the importance of identity content in shaping intergroup relations. A common reading of social identity theory is that it predicts a straightforward relationship between identification with a social group and ingroup bias/discrimination. In direct contrast to this interpretation, this paper emphasises the vital role of identity content in giving direction and meaning to social identity-based behaviour. Specifically, it is predicted that the effect of ingroup identification on negative attitudes towards an outgroup will depend on the specific meaning and content of that identity. This prediction was tested using a cross-sectional survey design which sampled participants in a setting of chronic social conflict (Northern Ireland). Results supported the prediction. Specifically, although ingroup identification did predict negative attitudes towards the outgroup, this was moderated by particular forms of identity content, such that identification only predicted negative attitudes towards the outgroup when ingroup identity emphasised a negative relationship with the outgroup, for example by proscribing participation in outgroup activities or by emphasising that the expression of outgroup identity is threatening to ingroup identity. These results warn against the dangers of reifying particular definitions of social groups, and of assuming that identification with a group has a unitary set of (negative) consequences for intergroup relations. Instead, understanding the effects of identification requires an appreciation of the particular content and meaning of that identity for group members.

Perceived group historical continuity: Its dimensions and correlates

M. BOWE & F. SANI, University of Dundee.

In our contemporary world, as in the past, virtually all human communities, particularly national, ethnic and regional groups, understand themselves as characterised by persistence and endurance (Anderson, 1983), as entities that move through time (Holy, 1996) and display 'historical continuity'. There has however been little psychological investigation into subjective perceptions of this characteristic and their possible psychological consequences. In this paper we present the results of three correlational studies aimed at generating a comprehensive understanding of the notion of Perceived Group Historical Continuity (PGHC) and developing a multi-item scale for its measurement in relation to national, ethnic and regional groups. Study 1, conducted in Italy, uses a structural equation modelling approach to construe a measure of the PGHC construct. It was found that items formed two distinct but related subscales, concerning the causal interconnectedness between events in group history and the trans-historical transmission of group norms, respectively. Study 2, conducted in France, provides a test of cross-national validity for the PGHC scale, and demonstrates the convergent and discriminant validity of the scale with the related construct of perceived group entitativity. Study 3, uses a sample of Scottish nationals to investigate the relationship between PGHC and several theoretically related constructs such as 'social identification', 'collective self-esteem', and 'relative deprivation'. The implications of PGHC and its possible functions will also be discussed in relation to current and future studies.

Group identification as a strategy to cope with identity change

J. JETTEN, D. TSIVIKOS, L. HUMPHREY, A. HASLAM & T. POSTMES, University of Exeter.

It is suggested that because the self is in important ways defined by membership in social groups, losing an identity or a permanent change to the meaning of the identity is likely to affect the individual self in important ways. Despite the recognition that identity change can be highly

stressful, limited consideration has been given to the way group identification can buffer against the negative consequences of change. We predict that the negative consequences of identity change will be limited when individuals readily take on a new identity. This is because the new sense of belonging and identification should have a positive effect on long-term well-being. A longitudinal study was conducted to test this prediction among first year psychology students starting university. We asked respondents to complete a questionnaire a month before starting university (Time 1) and again after a few months at university (Time 2). We found that well-being at Time 2 was negatively affected by: (1) perceived incompatibility of the old and new identity; and (2) when participants initially possess only a limited number of identities (Time 1 measures). Identification as a university student mediated this relation – perceived incompatibility of the old and new identity increased resistance to identify with other university students and having initially multiple identities made facilitated new identification, which accounted for the negative impact on long term well-being. The research thus shows that, paradoxically, social identification is not only a source of resistant to change but that social identities also, and at the same time, help to adjust to change.

The unification of social and personal selves: The case of Turkish nationalist organisation members

G. BARAY & T. POSTMES, University of Exeter.

In this research we examine the ways in which an affiliation with a self-defining social group influences the self-concept. The aim of the study was to examine how the self-concept is influenced by affiliation with a social group that has clear-cut, rigid norms and values. This issue is approached within the framework of social identity (Tajfel & Turner, 1979) and self-categorisation theories (Turner *et al.*, 1987). Consequences of group membership for the self-concept were investigated by recruiting Turkish nationalist organisation members and Turkish university students who did not have any affiliation with the organisation. Counter-intuitively, it was predicted that organisation membership would lead to a stronger perceived personal identity. In other words, organisation members would be more certain about 'who they are' and about their personal futures. Moreover, the content of the given social group membership was expected to determine the way in which participants define themselves in terms of their individual characteristics. More specifically, it was expected that the nationalist organisation membership would provide its members with a more clear set of guidelines for the self-definition when compared to a different social group membership such as a membership to a hobby group. Consequently, a high level of identification with a self-defining social group was expected to blur the distinction between social and personal identities. In such circumstances, enhancing the salience of personal aspects of group members' identity would prompt attitudes and behaviours that are congruent with the particular social group membership, rather than incongruent as traditionally predicted on the basis of Self-Categorisation Theory (Turner *et al.*, 1987). High level of identification with a social group, which provides clear guidelines for the members, thereby provides a curious case of 'vanishing personality' wherein boundaries between personal and social identities are blurred. This raises some interesting questions for the concept of personal identity and how it is constructed.

Symposium: Social psychology and consumer culture: Origins and consequences of materialistic value endorsement

Co-ordinator: H. DITTMAR, University of Sussex.

Discussant: To be confirmed.

The internalisation and endorsement of materialistic values is a significant part of current consumer culture, deserving of more research attention in social psychology than it has been given to date. A recent APA book contends that 'consumerism is one of the most important issues

for psychologists to address at this point in time' (Kasser & Kanner, 2004, p.7), given the increasingly stronger link between consumer society and our sense of identity (Dittmar, 2004). The endorsement of materialistic values can be seen as a commitment to identity-seeking through material goods, given that they are characterised by three key beliefs: material goods are seen as a central life goal; the main route to identity, success, and happiness; and the yardstick for evaluating self and others. Although material goods can give people the means of enhancing their well-being, there is convergent evidence that a strong endorsement of materialistic values has negative psychological and behavioral correlates in adolescence and adulthood (e.g. Kasser & Ryan, 1993; Richins & Dawson, 1992). This literature on the links between materialistic values and well-being underscores the topicality and importance of this research topic, but has several research gaps which are only just beginning to be addressed. The main aim of this symposium is to present a series of inter-related research projects, which offer new empirical research intended to address three questions relevant to these gaps. When and why are materialistic values 'bad for you'? Previous research has demonstrated mainly negative associations between materialistic values and subjective well-being, but the first two papers in the symposium demonstrate that the relationship between materialistic values and well-being may differ depending on additional social psychological factors such as the congruity or value fit between different aspects of consumers' value systems (Jankovic) or individuals' motives for wanting material wealth (Gardarsdottir). How does advertising impact on consumers with materialistic values and identity-deficits? Continuing the focus on consequences of materialistic value endorsement, a different area of interest concerns individuals' responses to advertising. There is some previous work that suggests materialistic individuals are more strongly affected by advertising, but this can be refined through the third paper's exploration of the effectiveness of advertising that offers symbolic solutions to particular identity deficits (Anderson). How do children internalize materialistic values? There has been very little research on children's endorsement of materialistic values and their perceptions of peer pressure to display certain behavioral, attitudinal, and material characteristics. To our knowledge, the fourth paper reports the first attempt to understand how individual differences in children's endorsement of materialistic values relate to specific aspects of peer group processes and self-perception (Dittmar & Baneinjee). Although not arranged as yet, we are in the process of inviting a discussant to offer a discussion of materialistic values, and particularly of the issues that relate and distinguish these contributions.

Symbols for sale: An exploration of contemporary advertising as a symbolic 'solution' for materialistic individuals' self-discrepancies

N. ANDERSON, University of Sussex.

Advertising has been recognised as one of the most powerful sources of valorised symbolic meanings and advertising is viewed as a guideline to map out all aspects of consumers' existence, particularly consumers who endorse materialistic values (e.g. Kasser & Kanner, 2004). The presence of idealised images leads to self-comparison, dissatisfaction and, for some, an increased striving to reach the ideal state (Richins, 1995). A experimental study was run to explore consumers' self-discrepancies (how far they feel they are from their ideal) on two specific dimensions: 'differentiation' and 'intimacy' and how these discrepancies affect brand preference and choice. Women viewed four television adverts for shampoo that told four different stories. Using a central character to display a 'typical user image' inferences were made that one shampoo would provide differentiation, another, a heightened level of intimacy with others; two control ads were purely functional or abstract. Results explore the degree to which materialistic consumers who feel particularly discrepant with regard to these particular constructs are affected by advertising that offers a symbolic solution to them for closing their actual-ideal self-discrepancies.

Materialism and perceived peer pressures in children: Associations with sociometric status and self-discrepancy

H. DITTMAR & R. BANERJEE, University of Sussex.

Associations between materialism and perceptions of peer group pressure are likely to exist among today's elementary school children (7–11 years), but have not been studied previously. In an initial study, a new Perceived Peer Group Pressures (PPGP) scale was developed ($N=240$), measuring perceived pressure regarding Peer Culture (behavioral norms and material characteristics) and Positive Behaviors (likely to merit adult approval). In the main study, 171 children completed the PPGP scale, along with measures of materialism, self-discrepancy, and sociometric status. Children rejected by their peers were more materialistic, perceived higher Peer Culture pressure, and reported greater self-discrepancy. Structural equation modelling supported a model whereby negative peer relations, co-varying with self-discrepancy, predicted perceptions of Peer Culture pressure, which in turn predicted materialism. Results are discussed in the light of evidence regarding negative correlates of materialism in later life.

Is it the money or is it the motives? Financial goals and money-motives as negative predictors of subjective well-being

R. GARÖARSÓTTIR, University of Brighton.

There is substantial empirical evidence to support the claim that attaching more importance to money or financial goals than other goals is negatively associated with indicators of Subjective Well-Being (SWB) (e.g. Kasser & Ryan; 1993, 1996). This claim has been criticised by researchers who maintain that positive and negative motives underlying financial goals are more predictive of SWB than the actual content of the goals (e.g. Sinivastava *et al.*, 2001). The most recent paper to address this issue claims 'It's both what you pursue and why you pursue it'. In other words, that both the content of goals and the motives behind the goals affect SWB individually (Sheldon, Ryan, Deci & Kasser, 2004). However, these studies are not using the same methods to measure concepts they claim to be comparable. The present study combines measurements from the previous studies, using motives measurements from one and a financial aspirations measure from another, with the aim of clarifying central questions of the content or motive debate. Two student samples were used ($N=290$); one from Iceland, the other from the UK. Results indicate that both positive ($B=34$, $p<0.001$) and negative motives ($B=-0.25$, $p<0.001$) significantly predict SWB, while relative emphasis on financial goals is only a marginally significant predictor ($B=-0.11$, $p<0.07$). However, negative money motives and financial aspirations are significantly correlated ($r=40$, $p<0.001$) and that raises questions on the conceptual clarity of materialism measures: What, conceptually, is the difference between being high in materialism and having bad money making motives?

Value fit and materialistic orientation as predictors of subjective well-being

J. JANKOVK, University of Sussex.

Early theories on social norms emphasized the importance of value fit, conceptualized as congruence between individual values and values of others sharing the same environment (Sagiv & Schwartz, 2000). Recently, the concept of value fit has been revived by cross-cultural research on subjective well-being (e.g. Oishi, Diener, Suh & Lucas, 1999). A study by Sagiv and Schwartz assessed value fit indirectly in terms of individual value orientations and career orientations. However, in this study, value fit is assessed directly and by assessing personal goals from several life domains, rather than overall value orientations: participants are asked about their own goals and the goals of a typical student in their department. The extent of match between the two sets of responses was then assessed by creating difference scores (own versus typical student goals). These value fit indices were entered in regression analyses to assess whether value fit significantly contributes to explaining subjective well-being and whether its

predictive power goes beyond the materialistic orientation predictor. A materialistic orientation is characterised by high materialistic values and high financial, image and popularity aspirations. The main aim of this study was two-fold: first, corroborating previous research findings regarding materialistic values and subjective well-being (e.g. Richins & Dawson, 1992; Kasser & Ryan, 1993; 1996) and second, assessing the contribution of value fit in explaining subjective well-being. A questionnaire assessing goals, materialistic values and subjective well-being was administered to 272 students from Croatia, New Zealand and the UK.

Symposium: The social psychology of gambling and gaming

Co-ordinator: M. GRIFFITHS, Nottingham Trent University.

Discussant: M. GRIFFITHS, Nottingham Trent University.

Recent research has highlighted that around three-quarters of the population (72 per cent) have gambled within the last year and that just under one per cent of the UK population are problem gamblers (National Centre for Social Research, 2000). It is evident problem gambling is a serious disorder and can have many negative consequences. There are also many similarities between gambling and computer game playing including the potential for addiction (Griffiths, 2004). Research into the causes of problem gambling and gaming are still at a relatively early stage and it is clear that such behaviour results from an interaction between many different variables (environmental, social, psychological and biological). Given the high popularity of both gambling and computer gaming, there has been relatively little empirical work in the area. This symposium presents a number of empirical studies in the social psychology of gaming. All four studies approach the psychology of gaming from a different perspective but all four identify factors and causes for these potentially problematic behaviour. The first study (Parke & Griffiths) examines the cultural variations in slot machine gambling based on observational studies. The findings show that there are distinct variations between the British and North American slot gambling cultures. The second study (Parke & Griffiths) examines one of the consequences of slot machine gambling behaviour (namely aggression). Using PA on interviews with slot machine gamblers, three superordinate themes regarding slot machine gambling-induced aggression were identified (Competition, Self-Esteem Reduction, and Cognitive Regret). The third study (Wood *et al.*) examines the structural characteristics of video gaming by building on the work of slot machine structural characteristics. The study outlines gender differences and the importance of a high degree of realism in the gaming experience (i.e. realistic sound, graphics and setting). Other important characteristics included a rapid absorption rate, character development, the ability to customise the game, and multiplayer features. The final study (Griffiths *et al.*) examines the differences in online gaming between adolescents and adults. The results showed that adolescent gainers were significantly more likely to be male, significantly less likely to gender swap their characters, and significantly more likely to sacrifice their education or work. Once the papers have been presented, Mark Griffiths will pull together these four studies and put them into the larger context of the psychology of gaming and look very specifically at the commonalities and idiosyncrasies of these two types of behaviour (i.e. gambling and gaming). He will also examine some of the major challenges in the area and examine some of the major methodological and conceptual problems that researchers face in this area. The four papers are outlined in more detail below. The speakers are the emboldened names.

Online computer gaming: A comparison of adolescent and adult gainers

M.D. GRIFFITHS, M.N.O. DAVIES & D. CHAPPELL, Nottingham Trent University.

Despite the growing popularity of online game playing, there have been no surveys comparing adolescent and adult players. Therefore, an online questionnaire survey was used to examine various

factors of online computer game players ($N=540$) who played the most popular online game Everquest. The survey examined basic demographic information, playing frequency (i.e. amount of time spent playing the game a week), playing history (i.e. how long they had been playing the game, who they played the game with, whether they had ever gender swapped their game character, the favourite and least favourite aspects of playing the game, and what they sacrifice (if anything) to play the game. Results showed that adolescent gainers were significantly more likely to be male, significantly less likely to gender swap their characters, and significantly more likely to sacrifice their education or work. In relation to favourite aspects of game play, the biggest difference between the groups was that significantly more adolescents than adults claimed their favourite aspect of playing was violence. Results also showed that in general, the younger the player, the longer they spent each week playing.

Cultural variations in slot machine play: Implications for understanding gaming addiction

J. PARKE & M. GRIFFITHS, Nottingham Trent University.

One of the interesting aspects of slot machine gambling behaviour is its culture specificity. Slot culture in the UK are uniquely different from those in North America where some of the major differences include player demographics, payout limits and randomness of play outcomes. Such disparities have serious implications for player behaviour, problem gambling and treatment. Seven-hundred hours of observational analysis and 350 semi-structured interviews were conducted across Northern Ireland, England, Ontario and the US in order to compare and contrast the structural differences in slot machines, the divergence of player attributes and distinctions among situational variables between these cultures. Findings indicate that distinct variations do exist between the British and North American slot gambling cultures. The importance of such findings for researchers and clinicians in the face of growth in Internet gambling, tourism and international research collaborations are discussed. Implications for future research in this area are examined.

Causes of aggressive behaviour in slot machine gambling: An interpretative phenomenological analysis

A. PARKE & M. GRIFFITHS, Nottingham Trent University.

A growing number of studies have reported a link between gambling and aggressive behaviour. The aim of this study was to build on research findings of previous observational research by the authors (Parke & Griffiths, 2003) by analysing two case studies of aggressive gamblers in detail. Analysis of interview and case study data was performed using the Interpretative Phenomenological Analysis method. The data revealed three superordinate themes regarding slot machine gambling-induced aggression (i.e. Competition, Self-Esteem Reduction, and Cognitive Regret). Within these superordinate themes, a number of subordinate themes also emerged including Perceived Injustice, and Chasing Losses (Competition); Losing Competition, Deceit, and Social Disapproval (Self-Esteem Reduction); Fear of Consequences, Opportunity Cost, and Blame Conflict (Cognitive Regret). Implications arising from these themes are discussed.

The structural characteristics of video games: A psycho-structural analysis

R.T.A. WOOD, M.D. GRIFFITHS, D. CHAPPELL & M.N.O. DAVIES, Nottingham Trent University.

There is little doubt that video game playing is a psychological and social phenomenon. This paper outlines the main structural characteristics of video game playing (i.e. those characteristics that either induce gaming in the first place or are inducements to continue gaming irrespective of the individual's psychological, physiological or socio-economic status). This online study is the first ever to assess what structural characteristics (if any) are important to a group of self-selected video game players ($N=382$). The main variables

examined were sound, graphics, background and setting, duration of game, rate of play, advancement rate, use of humour, control options, game dynamics, winning and losing features, character development, brand assurance and multi-player features. Although there were many major gender differences, one of the main overall findings was the importance of a high degree of realism (i.e. realistic sound, graphics and setting). Other important characteristics included a rapid absorption rate, character development, the ability to customise the game, and multiplayer features. Suggestions for future research are outlined.

PLENARY SESSIONS

Plenary session 1: Social Section Committee outstanding PhD thesis 2004

Getting things done: Self-regulatory processes in goal pursuit

T.L. WEBB, University of Sheffield.

Research into self-regulation investigates how people direct their actions in order to achieve their goals. For example, how does a person regulate their behaviour in order to complete a report by a given deadline, attend a health screening appointment, or remember to feed the cat? A starting point is the concept of intention, which is assumed to capture the motivational factors that influence behaviour. However, previous research has been correlational and the impact of intention change on behaviour change has yet to be examined. Our first study used meta-analysis to quantify 40 experimental tests of intention-behavior relations. Findings showed that a 'medium'-sized change in intention subsequently led to a small change in behaviour. Considerable evidence now attests to the idea that intentions are more likely to be translated into behaviour if they are supplemented with specific plans about when, where, and how to perform behaviour (known as implementation intentions', Gollwitzer, 1999). The remainder of this talk will consider: (a) whether implementation intentions can overcome volitional difficulties; (b) the mechanisms responsible for the beneficial effects of planning on goal attainment; and (c) the possibility of costs associated with implementation intentions.

Plenary session 2: Social Section Conference International Keynote 2004

Societal theories in social psychology: From Piaget's and Tajfel's guiding ideas to social representation studies

W. DOISE, University of Geneva.

In the initial, briefer portion of my talk, I will refer to general hypotheses about societal functioning that oriented the research interests of Jean Piaget before World War II and of Henri Tajfel thereafter. In the second part, I will report on studies that aimed to expand research initiated by these predecessors. At the outset, the research carried out by my colleagues and myself was straightforward experimental in testing hypotheses on the social development of the intellect and on different aspects of interdependency in intergroup relations. This research did not explicitly address general ideas about societal functioning developed by Piaget or Tajfel. Subsequently, studies on social representations of human rights and of collective rights dealt more directly with such societal ideas. Specifically, findings of research by the late Monica Herrera in Quebec on the entanglements of representations of fundamental individual and collective rights will be reported in some detail in the second part of the talk.

Plenary session 3: The social brain and its implications for human social behaviour and the origin of language

R.L.M. DUNBAR, University of Liverpool.

It is now well established that primate (and human) brain evolution has been driven by the cognitive demands of social complexity (the 'social brain hypothesis'). The social brain hypothesis turns out

to have a number of surprising implications for human social and cultural behaviour. Among these seem to be cognitive constraints on the size and structure of human social networks. I will review the recent findings in this area, try to relate them to new developments in the area of social cognition and argue that it is in these social implications that we can find an explanation for the origins of language (the so-called 'gossip theory' of language evolution).

Plenary session 4: Social Section Conference British Keynote 2004

Intergroup schadenfreude: Back to Nietzsche

R. SPEARS, Cardiff University & C.W. LEACH, University of Sussex.

Schadenfreude, the pleasure at another's loss caused by a third party, has hitherto been largely studied in interpersonal contexts (e.g. Smith *et al.*, 1996). We focus here on the phenomenon of schadenfreude experienced in intergroup contexts. Insights into intergroup schadenfreude can be traced back to the writings of Nietzsche and these are used to frame our theoretical analysis. Although malicious, schadenfreude is a 'delicate' emotion, because of social desirability and legitimacy concerns. We present evidence for intergroup schadenfreude as distinct from, and also stronger than interpersonal forms of the emotion, and examine factors that facilitate it (e.g. investment in this domain, the pain of group inferiority), and factors that can constrain it (e.g. social desirability, the legitimacy of rival superiority). We present studies from the (football) field as well as the laboratory, employing techniques (e.g. the 'bogus pipeline') designed to cut through the defence and pretence that can sometime hide this dubious pleasure from others, and even from ourselves. In the process we further develop analyses of prejudice and discrimination grounded in the relational and context-specific nature of emotional responses to out-groups.

Plenary session 5: The social psychology of crime

D. CANTER, The University of Liverpool.

Explanations of criminal activity tend to focus either on characteristics of the person, typically their upbringing and/or psychophysiology, or of their context, notably socio-economic inequalities or opportunities for deviance. All these explanations locate criminality outside of the person as an intentional agent. Forces within the individual or in society are seen as forcing or motivating an otherwise inactive organism to commit crime. This determinist perspective contrasts remarkably with the legal approach to criminality in which the active intention to commit a crime is the central issue to be explored. The law takes as paramount individuals' ability to understand their actions and to decide whether to do right or wrong. A person who is pushed and pulled by forces beyond control cannot stand trial. These two conflicting viewpoints manage to co-exist because it is rare for them to come into direct contact. But the increasing involvement of psychologists in police investigations and the spill-over from this into the courts is forcing some degree of professional humility on for all involved. This leads to the requirement that models are developed by psychologists that do recognise human agency as central to criminal acts. One fruitful direction for the development of such models is to focus on the interface between the individuals and their social milieu; in other words to look on crime as fundamentally social psychological. From this perspective criminals are seen as forming views of their identities and roles within the social context of which they are aware. A fruitful way of conceptualising this is as the personal narratives they live out through committing their crimes. A number of general principles derive from this, for which evidence is growing:

1. All crime is interpersonal, even if there is no direct contact between offender and victim, or if the victim is the offender. As a consequence issues of person perception and group identification are always relevant.
2. Crime is an extreme example of social

psychological processes that occur within non-criminal relationships. Variations in forms of crime therefore reflect differentiation apparent in everyday settings.

3. Criminal transactions are consistent for any person with the their non-criminal activity.
4. Role differentiation within criminal groups reflect the personal narratives and histories of the individuals who make up the group.
5. The justification of criminal acts draws directly on the same rhetorical repertoire of justifications that are used to defend non-criminal, but potentially controversial actions.
6. Those crimes that require the manipulation of others exhibit highly developed social skills and embed them effectively in recognisable, culturally prevalent narratives.
7. Most crime takes place within social networks. The structure of these networks reflects the interpersonal processes that maintain the criminality.
8. Criminal organisations are inherently unstable because the social processes essential to organisations are in conflict with the demands of maintaining illegal activities, unless the whole social context can be modified to embrace illegality.

The model of criminal activity that is emerging from this perspective draws attention to the sorts of processes that social psychologists have been studying for decades. It, therefore, paves the way for an 'anti-social psychology' that will enrich the study of non-deviant activity.

Plenary session 6: When 'hooligans' lose their bottle: Crowd dynamics, public order policing and hooliganism' at Euro 2004

C. STOTT, O. ADANG, M. SCHREIBER, University of Liverpool & A. LIVINGSTONE, University of Exeter.

This paper will report upon the role of a partnership between researchers and educators at Liverpool University, the Netherlands Police Academy and the Instituto superior de ciencias policiales e segurança interna in the security planning for Euro 2004. It will discuss how this partnership affected security policy and culminated in an ESRC-funded research a study of 'public order' at Championships. The paper will report upon outline findings from this study and discuss the implications of these preliminary results for understanding the role of intergroup relations, power and perceived legitimacy in the dynamics of 'hooliganism'. More specifically the paper will discuss the process, both social and psychological, that the data suggests have culminated in the maintenance of non-violent norms during the tournament. The paper will develop upon existing work in this area by detailing the processes through which a change in the dominant social norms of 'England fans' have taken place. It will be argued that the study supports the central claims of the Elaborated Social Identity Model of crowd behaviour and therefore a 'dynamic reading' of Self Categorisation Theory. The paper will discuss a variety of theoretical issues that highlight the need to understand the intimate relationship between specific types of category content, intergroup relationships, power and legitimacy when theorising social change and conflict reduction strategies.

INDIVIDUAL PAPERS

Working to live or living to work?

K. ARFANIS & C. LEWIS, Lancaster University.

Popular and social psychological accounts of the work-home balance invariably connect it to employees' commitment to, and identification with, their organisations. This study broadens the framework to explore men's accounts of work-home relationships. Eighteen men were interviewed on three different occasions, two to three months apart. So diverse are men's descriptions of work and home life that this diversity questions these traditional explanations of the link between these two aspects of their life. I examine why some men enjoy spending long hours at their workplace, despite receiving no monetary benefits or time off in lieu, along with what makes some men dedicate

more time to their organisation at the expense of their home life. To understand such commitment we need to examine organisational commitment in terms of theories of masculinity, male emotionality and the idea of the 'addictive organisation'.

The effect of victim's social support on attributions of blame in female and male rape

I. ANDERSON & A. LYONS, University of East London.

The effects of perceived social support of the victim, victim gender and participant gender on attributions of blame in rape were examined. The impact of Attitudes Toward Gender Roles were also investigated for their mediational role between participant gender and blame. One-hundred-and-twenty-one participants read a report of an incident of rape and evaluated the victim and the perpetrator. Two ANOVAs showed that social support and participant gender influenced blame attributed to the victim, while victim gender influenced blame attributed to the perpetrator. Socially supported victims were blamed less than unsupported victims. Men were more blaming of rape victims than women, but further analyses showed this was mediated by attitudes towards gender roles. Men held significantly more traditional attitudes toward gender roles than women, and this accounted for the effect of participant gender on victim perceptions. The perpetrator of male rape was blamed less than the perpetrator of female rape. Findings are discussed in terms of the differential attributional mechanisms that may underpin men's and women's reasoning about different types of rape.

Specifying levels of social contexts and types of identities in self construction processes

A. ASTRINAKIS, University of Crete.

This paper explores links among the socio-cognitive social identity (SIT), and social categorization theory (SCT), on the one hand, and the symbolic interactionist role identity (RIT), and role theory (RT), on the other hand. On this basis, its main concern is the exploration of possibilities of differential application and articulation, in naturally occurring social situations and upon ethnographic data, of analytical concepts derived from SIT and SCT, and from RIT and RT. This will be done in analysing aspects of the differential (albeit interrelated) production of the multi-layered, three-fold type identity construction of the members of a Rockabilly youth subcultural group (the L.A. Teds), found in Peristeri, Athens' traditional working class district. We shall analyse the L.A. Teds along the dimensions of the *large*, *intermediate*, and *intermediate-scale* contexts of production of their three-fold social self. We shall argue that their *working class social and self-categorisation* derives from large-scale social structures and contexts, whereas both their *subcultural group identity* and their *role-based* (or self-) *identity* is shaped within intermediate social structures and contexts, as well as within proximal, immediate social settings. In other words, we clearly differentiate among: (1) social or self-category, group identity and role-identity constructs; (2) corresponding levels of social contexts that determine the construction of each of these three levels of the social self; and (3) diachronic-developmental phases in the construction of each type of identity.

Understanding uncertainty in risk communication: The Atkins Diet

J. BARNETT, University of Surrey.

Increasingly communication of uncertainty is part of communicating about risk. Little is known about what determines reactions to uncertainty or indeed about how uncertainty affects perceptions of the source of the information, and perceptions of the risk itself (Breakwell & Barnett, 2003). Still less work has explored the way in which identification with an issue might affect the way in which uncertainty affects these perceptions. This paper reports an experimental study that explored these issues in relation to the Atkins diet. This diet received extensive media attention over 2003 which saw experts being largely divided as to the

extent to which the diet was associated with both short and long term health risks. An online questionnaire was linked to the Horizon website following a programme about the diet. Two-hundred-and-fifty-four Atkins dieters completed the questionnaire which explored the effects of claimed certainty, acknowledged uncertainty and conflicting certainty upon risk perceptions, concern, beliefs about the source and the content of the risk communication. The results showed that where experts hold certain but conflicting views (conflicting certainty) this has similar effects upon risk appreciation as when a single expert acknowledges uncertainty. There was a consistent pattern of results in relation to perceptions of the source and of the information that the source provided. Claimed certainty led to less negative perceptions of the risk than did any of the uncertainty conditions. These results challenge the literature in this area which rather suggests that acknowledging uncertainty enhances perceptions of the source.

Cross-sectional and longitudinal relations among young children's trust beliefs in peers and adjustment to school

L.R. BETTS & K.J. ROTENBERG, Keele University.

Interpersonal trust has been widely regarded as a central and critical component of interpersonal relationships in adults and children. Trust beliefs have been found to be associated with psychosocial functioning in children. However, there is a scarcity of research into whether trust beliefs are associated with, and longitudinally predict, young children's adjustment to school. In the study, 269 (131 female and 138 male) children enrolled in years 1 and 2 of school in the UK (mean age = 5 years 9 months) were administered measures of trust beliefs in peers (promise keeping and secret keeping), and school adjustment (school liking and loneliness) across a one-year period. Teachers also rated the children's on-task classroom involvement, positive orientation, and social competence as part of the Teacher Rating Scale of School Adjustment. Children's performance on the Standardised Achievement Tests (SATs) in year 2 was obtained. It was found that the children's trust beliefs in same-sex peers positively predicted changes in adjustment to school across time for child-rated (school liking and low loneliness) and teacher rated (on task classroom involvement) measures. Children's trust beliefs in same-sex peers were not found to be associated with their performance on the SATs. The results supported the conclusion that young children's peer trust beliefs in same-sex peers contributes to their social adjustment to school.

The microanalysis of interpersonal compatibility

P. BULL, University of York.

Compatibility is an eight-part series on interpersonal relationships, to be televised on BBC3 later this year. Each programme focuses on one couple, and seeks to assess their mutual compatibility. The couples were filmed talking about their relationship, both on their own and with their partner. They were also asked to perform a task together. Each task was devised to address particular issues in each couple's relationship. The author was asked to analyse communication between the eight couples. This paper will review the techniques used to assess interpersonal compatibility, which were based on a microanalytic approach (Bull, 2002). In conducting these analyses, attention was focussed on both speech and nonverbal behaviour, and in particular, on speechbody movement congruency and incongruency. Attention was also focussed on how couples may respond to each other's responses, by either matching, downgrading or upgrading. These processes may lessen or heighten interpersonal intimacy and interpersonal conflict, dependent both on what is said and how it is said. The paper will seek to show how microanalysis can be used to study conflicts between couples: in terms of how they occur, how they may escalate, and how they may be diffused. It will also seek to show how microanalysis can address fundamental issues in interpersonal relationships, such as intimacy, control, and commitment. It is intended to illustrate these

points with videorecorded extracts from the series.

Social psychology and the spectacular society

G. BUNN, Liverpool Hope University College.

In this paper I outline a framework for applying the work of the French situationist Guy Debord (1931–1994) to social psychology. Debord's work spans two polarities: the critique of the mass media and the critique of the environment. Although much discussed in social theory and sociology, Debord's analysis of the spectacular society has yet to influence our discipline. Yet his claim that we now inhabit a society in which human interactions are mediated by images could provide a stimulating point of departure for critical social psychology. His celebrated concept of psychogeography – 'the study of the effects of geographical settings, consciously managed or not, acting directly on the mood and behaviour of the individual' – provides much inspiration for environmental psychology. Two related strategies of resistance are also important. While the *dérive* records the flow of acts and encounters through the urban environment thereby contributing to the psychology of place, *détournement* – rerouting events and images – suggests a way forward in the analysis of psychological discourse in the contemporary mass media.

Determining the path of resistance: Critical moments in the lives of paramilitary and peaceful protestors

M. BURGESS, N. FERGUSON & I. HOLLYWOOD, Liverpool Hope University.

Individual acts of defiance may prove futile in alleviating unacceptable conditions unless accompanied by meaningful social change. Perhaps, then, it should not be surprising that social protest has become an increasingly popular tool for registering individual and collective discontent with authority. There are a variety of potential modes of protest, ranging from isolated, peaceful, demonstrations to sustained participation in armed campaigns. Those who engage in the latter, armed, collective action are typically perceived more negatively than those who engage in the former, peaceful, collective action. What accounts for people with similar beliefs and similar backgrounds making such different decisions regarding their specific mode of collective protest? We conducted a series of in-depth, semi-structured, interviews with individuals who had engaged in collective action with the specific intent of altering existing institutional structures in Northern Ireland. Interviewees represented all sections of the ethnopolitical landscape and some had previously been enlisted in paramilitary organisations. We describe the decision processes involved in initiating defiant activities, chart identity shifts during the transformation from individual discontent to collective action, and highlight the self-perceived similarities and differences between those who 'cross the rubicon' (in one participant's words) to violent activity and those who maintain nonviolent participation. As such, our study adds to recent efforts to determine the even COPY MISSING????

Contact and isolation in a post-apartheid South African school

B. CLACK, University of Lancaster.

Intergroup contact is positive to the extent that it plays a role in reducing prejudice and in creating cordial intergroup relations. Conversely, segregation is generally viewed as a negative phenomenon – organising the distribution of wealth and mortality and having a detrimental effect on intergroup relations. Apartheid South Africa, where separation was legally enforced, is a stark illustration of this. Now, 10 years after the formal abolition of apartheid, as the country has shifted from being a 'non-contact' (Foster & Finchilescu, 1986) to a contact society, it is particularly interesting to explore how contact has influenced the extent and quality of intergroup interaction. Although this could be examined in many contexts, the consequences of this desegregation have tended to be focused on at a macro level (e.g. trends from census data, comparing schools or workplaces). However, the school setting is especially valid because, since 1994 when the apartheid era ended,

children have either spent most or all of their schooling in integrated classrooms. We therefore observed the classroom interactions and seating patterns of a structurally integrated school in Gauteng, South Africa. Analysis revealed that the everyday experience of learning has become segregated and that this segregation took a number of forms. Two implications of these results are addressed. First, we suggest that experimental research on contact needs to be augmented by observational work. Second, we argue that research at the level of institution needs to be complemented by research on the microecology of division.

Implicit and explicit attitude measures and behaviour in an intergroup context

S. COEN & A. MAASS, University of Sussex.

Eighty-five undergraduate students of the University of Padova took part in this study, attempting to assess the moderating role of Ingroup Identification, Intergroup Anxiety and Social Norm within a dual process model based on the one proposed by Dovidio, Kawakami and Gaertner (2002). The model hypothesises the presence of two parallel paths linking attitude and behaviour: the first starting from the exposure to an outgroup member arrives to 'uncontrolled' behaviour passing through implicit attitude (which we call IMPLICIT PATH), the other starting from the exposure to an outgroup member and arrive to 'controlled' behavior passing through explicit attitude (our EXPLICIT PATH). Participants were asked to complete implicit (LIB and AT) as well as explicit attitude measures towards a target outgroup (Jews or Muslims, according to the condition), along with a series of scales measuring our moderator variables. It was hypothesised that there would be stronger normative proscriptions against expressing prejudice towards Jews as compared to Muslims. An 'uncontrolled' and a 'controlled' behavioral measure were also included in the design. Results support our dual process model, confirming also the fundamental role played by social norms in determining whether or not Implicit and Explicit measures of attitude will converge: Implicit (LIB) and Explicit measures were correlated in the Muslim but not in the Jewish (norm protected) outgroup condition. Once again, Intergroup Anxiety was found to be a good predictor of explicit attitudes and overt behaviour but, unexpectedly, was not a good predictor of implicit measures of attitude or of spontaneous behaviour.

Indirect impression formation: Reactions to praise and criticism

J.M. COLE, Keele University.

As demonstrated by Cialdini and Richardson (1980), people are keen to declare links with esteemed individuals and groups (*basking*), and to deny links with disliked others (*blasting*). These are examples of *indirect impression management*, whereby people try to manipulate impressions of themselves by communicating in certain ways about others. This strategy depends on *indirect impression formation* – audiences making inferences about speakers from what they say about others. Several social psychological theories imply that indirect impression formation takes place, including balance theory (Heider, 1958), trait transference (Skowronski, Carlston, Mae & Crawford, 1998), and correspondence bias (Gilbert & Malone 1995). However, research on the phenomenon is scant. More could be known about the psychological processes that underlie it, and about variables that moderate the effectiveness of indirect impression management as a self-presentational strategy. The present research aims to address this by examining indirect impression formation consequent on praising and criticising others. Results from three experiments ($N=631$) show that whereas liking for a target is reduced when he or she criticises others, liking is not increased by praising others. This pattern holds even when the praise is unexpected but is reversed where the target has a damaged reputation and is only observed where the target is associated with the person described and is also the speaker. This rules out disliking-by-association as a possible explanation. Overall, the findings suggest that praising others may not be an effective method of indirect impression

management, whereas speakers ought to be cautious about criticising others.

Control and legacy as functions of perceived criticality in major incidents

J. CREGO & L. ALISON, University of Liverpool.

This paper outlines a model that captures the experience of 28 Senior Officers who have managed some of the most significant police incidents in the UK in the past five years. The process for capturing the model rests on 'pragmatic psychology' (Fishman, 1999; Alison, West & Goodwill, 2003), a paradigm that recognises practitioners' experiences as a central component of research and policy development. We utilised a set of connected electronic notebooks to enable each critical incident manager to log their experiences and views of the case that they managed. As each individual logs this information, it is simultaneously distributed to all participants. Thus, information is rapidly shared, stimulating further thought and discussion. Following the initial knowledge-sharing phase, participants reorder the material into themed categories that can be scored against specific criteria (in this case 'impact' and 'ease'). This session revealed that senior officers consider a combination of two co-occurring issues as most significant in defining the 'criticality' of an incident: (i) how direct an impact the facet has on the enquiry at hand; and (ii) whether that issue will influence how the service will be judged (by the community, the victims and the media). These issues were perceived as the most complex and difficult to deal with. We argue that this perception is a joint function of perceived lack of control alongside the belief that judgment and blame regarding the incident will ultimately reside with them as managers.

Measuring attitudes and opinions in theatres of conflict

S. CUMNER, Ministry of Defence.

The effectiveness of communications in affecting the attitudes and perceptions of a target audience is predicated on a good understanding of that audience and is rarely consistently measurable, with virtually all approaches subject to methodological flaws. Whilst quantitative polling can provide snapshots of preferences, behaviours and media consumption across a population or group, it does not go far enough in exploring issues such as why certain practices or behaviours are invested with cultural importance, what importance certain perceptions have for people's everyday lives, and how these practices and beliefs are associated with identity. In addition, the impact of framing effects on transitional societies' understanding of complex issues at a time of great instability is insufficiently understood. This paper discusses work aimed at using grounded theory and qualitative research methods to provide the building blocks for the development of a scientifically rigorous methodology for understanding and measuring attitude shifts in target audiences in 'societies in transition' such as Iraq, Afghanistan and Sierra Leone. The methodology and its practical application will be discussed, together with the challenges of attitude and opinion research in communities in crisis.

The 'missing link: On the activation of values and attitude change

E. DREEZENS & C. MARTLJN, Maastricht University.

A series of studies will be discussed that all focus on the relation between attitudes, attitude change and the values that people consider as important. First, information was gathered amongst a student and non-student population to find out whether specific values are related to their attitudes towards specific food-related issues (e.g. organic food genetically modified food). Results showed that the value of *universalism* was associated with a positive attitude towards organic food whereas the value of *power* was positively associated with genetically modified food. This finding served as input for our further studies in which we investigated whether the conscious or unconscious activation of such values may result in attitude change. In the second and third study, people were subtly primed with either power or universalism and subsequently

asked for their attitudes towards organic or genetically modified food. Our results strongly suggest that merely activating a specific value is not sufficient to instigate attitude change, although existing attitudes tend to become stronger and less ambivalent. However, values do seem to affect attitudes if: (a) the relevant value is activated; and (b) the *link* between the activated value and attitude issue at hand is activated as well.

Gender differences in social representations of aggression amongst adolescents: The role of sex differences in thresholds of inhibition

H.P. DRISCOLL & A.C. CAMPBELL, Durham University.

On average, males exceed females in use of physical aggression and hold different social representations of aggression. Males view aggression instrumentally, as a means of control, whereas females view aggression expressively, as a loss of self-control. These sex differences may be explained in terms of differences in inherited thresholds of inhibition. Female aggression is likely to endanger the wellbeing of offspring, leading to a selection pressure inhibiting it. This model may also explain gender differences in social representations of aggression. Increased inhibitory control in females may result in less frequent expression of anger, but at a higher level of emotional arousal, so females experience infrequent expressive outbursts that are difficult to control (expressivity). Conversely, poor inhibitory control in males leads to more frequent expressions of anger at a lower level of arousal, so males experience more frequent episodes of aggression which are more controlled (instrumentality). We propose a clear biological link between gender and representations of aggression. This is in contrast to traditional models from social learning theory, which state that gender differences in representations of aggression are socially acquired. The present study employs an adolescent sample to examine the relationship between experience and expression of anger (measured by STAXI-2), personality traits (measured by MPQ-BF), social representations (measured by EXPAGG) and frequency of aggression, as well as sex differences on these measures. Sex differences will be examined using ANOVA and multiple regression analysis will be performed to determine which variables best predict aggression.

Communities in transition: Exploring the psychological operations challenge in post-conflict Iraq

S.C. DRISCOLL, Ministry of Defence.

Rarely does modern military intervention occur without some reference to the battle for '*hearts and minds*'. It is a phrase that is used to encapsulate the psychological component of war fighting and peacekeeping. Success on the battlefield is no longer judged by attritional achievements but by the overall effect on those involved. Winning '*hearts and minds*' is not achieved by the direct application of military force, yet it remains an urgent military requirement. During times of conflict and peacekeeping military, Psychological Operations (PSYOPs) teams set out to attempt to communicate with those involved in the conflict. Often, however, those involved are the 'uncommitted'; those who are implicated in the conflict against their will, who neither overtly support nor seek to undermine the deployed military force. Attempting to conceptualise the nature of this audience and how to best garner their trust and co-operation is fraught with difficulties. This research aims to address some of the challenges faced by the military in post-conflict situations. By carrying out qualitative, in depth one-to-one and group interviews with representatives of the local community in southern Iraq three days after the end of formal combat operations, this paper seeks to explore the nature of the relationship between PSYOPs teams and their audience. Furthermore, it aims to evaluate how new concepts and methods may be used in order to better facilitate PSYOPs practice in future post-conflict scenarios. In particular it looks at the application of social representation theory (Moscovici, 1998), concepts of community narrative (Rappaport, 2000, Howarth, 2001, Jackson, 2002)

and public life (Ardent, 1958) as a means to help define the role of PSYOPs. Findings from the thematic analysis show that qualitative interviewing can elicit complex, shifting and dialogically opposed representations that are key to understanding the subjective realities of the PSYOPs audience. Further, evaluation of the PSYOPs process illustrates the critical role such activities serve within the social world of the transitional community. This paper suggests that the way to win 'hearts and minds' is to assist in the translation of meaning, the unfolding of stories and the fostering of public life.

Clearing the air, or airing dirty laundry? Effects of communicative context on reactions to criticisms of the ingroup

T.J. ELDER, Keele University.

Criticism is an important aspect of communication within and between groups, but reactions to criticism of groups have been little studied. Three experiments were conducted to examine how reactions to group criticism are affected by the context (private, public) of the criticism. Experiment 1 presented criticisms of the ingroup (University students) made in an ambiguous context and replicated earlier findings that this criticism elicits greater sensitivity when made by an outgroup member, compared to an ingroup member (Hornsey, Oppes, & Svensson, 2002). Experiments 2 and 3 showed that this *intergroup sensitivity effect* emerges in the private context (conversation), but disappears when it is clear that the criticism is made in public (national newspaper). Nonetheless, even when criticism is made publicly, participants perceived ingroup critics to be more knowledgeable and to have purer motives than outgroup critics. Results demonstrate the importance of context when evaluating the effects of intra- and intergroup criticism. Specifically, ingroup critics who 'go on the record' and criticise their group in public are not seen to be morally entitled to make their criticism, unlike ingroup members who criticise the group in private. Public criticism from ingroup members also elicits greater sensitivity than criticism made by an ingroup member in private. The results highlight strategic considerations and implicit protocols governing the criticism of groups.

Race traitors, self-haters: In-group loyalty and out-group hatred

W.M. FINLAY, University of Surrey.

This paper discusses the ways in which extremist organisations and writers link association with out-group members with betrayal of one's own identity and people. Examples are given from documents and speeches of famous racist or separatist individuals/groups (e.g. George Lincoln Rockwell, Meir Kahane) to illustrate how intergroup conflict is maintained or worked up through condemnation of members who choose to ally themselves with, or speak up for, those in other groups. Similar tactics can be seen in situations of international or inter-ethnic conflict in which 'hawks' attacks 'doves', and have been identified in recent writings on patriotism. This condemnation works on two levels: it asserts that the person is betraying and bringing danger to their own community, and it asserts that on an individual level they are suffering from pathological identity crises in which they are rejecting or denying their true self. This is discussed with reference to the contact hypothesis, category essentialism, and Tajfel's writings on the social functions of stereotypes.

Attributions in a hypothetical child sexual abuse case: Roles of respondent gender, family response and level of abuse

L. GRAHAM & P. POGERS, University of Central Lancashire.

There has been comparatively little research examining attributions towards child sexual abuse victims and perpetrators. The aim of this study was to investigate the roles of respondent gender, family response and level of abuse on attributions towards the victim, their family and the perpetrator in a hypothetical abuse case using a

community sample. Three-hundred-and-ninety-three respondents were asked to read one of nine different 370 word scenarios describing the sexual assault of a 14-year-old girl by a 25-year-old man. Scenarios were manipulated according to both family response (denial vs. blaming vs. supporting the victim) and level of abuse (non-contact vs. genital fondling vs. penetration). Following this, respondents then completed a series of fourteen questions regarding their attributions towards the victim, the victim's family and the perpetrator. Overall, respondents were less positive towards victims of non-contact CSA but equally positive towards victims regardless of family response. Respondents were also more negative towards families who denied or who blamed their own child for the abuse. Finally, males were more negative towards the victim and their families and deemed the abuse as less serious, than did females. It is concluded that level of abuse, family response and respondent gender may be important factors when making attributions in cases of child sexual abuse. The need for further education regarding the effects of child sexual abuse and suggestions for future research are discussed.

How immigrants sustain a strong cultural identity in the face of cultural incompatibilities: The relationship between ingroup bias and strength of identification under threat

P.R. GRANT, University of Saskatchewan.

Immigrants often internalise a new national identity when they move to another country. Doing so means identifying with a culture that has values and traditions very different from those of their culture of origin. Four-hundred-and-thirty-first generation immigrants mostly from Asia (54.4 per cent) and Africa (34.9 per cent) and seventy-eight second generation immigrants whose parents had emigrated mostly from Asia (84.4 per cent) completed a questionnaire on their integration into Canadian society and the discriminatory barriers that they face. In support of social identity theory (SIT), the strength with which respondents identified with Canada was associated with less cultural group bias, while the strength with which they identified with their cultural group was associated with more cultural group bias (hypothesis 1). That is, a strong national identity moderated the tendency for immigrants to favour their cultural group over others. In addition, these opposing 'identity – differentiation' relationships were stronger for those respondents who believed that their heritage culture is incompatible with and threatened by Canadian culture (hypothesis 2). Unexpectedly, these relationships were much stronger for second generation immigrants whose identification with and participation in mainstream Canadian society were negatively related to perceived discrimination. These and other results suggest the value of using SIT to study the acculturation and integration of immigrants into a modern plural society.

Am I Gnasty or Gnice? The GNAT as an index of fragile self-esteem in Narcissists

A.P. GREGG & C. SEDIKIDES, University of Southampton.

Narcissists exhibit an inordinate propensity to self-enhance. Is this an expression of the unequivocal robustness of their self-regard or an attempt to mask its underlying brittleness? Implicit measures of self-esteem, which quantify automatic preferences for self-related stimuli, provide an empirical means of addressing the question. Assuming that the valence of self-related stimuli derives from well-crystallised attitudes towards self, positive correlations with narcissism would suggest that narcissistic esteem is robust, negative correlations that it is brittle. We conducted a five-session study ($N=160$) in which we assessed narcissism once (NPI; Raskin & Hall, 1979), explicit self-esteem twice (RSI; Rosenberg, 1965), and implicit self-esteem twice (GNAT; Nosek & Banaji, 2001). Narcissism consistently correlated positively with explicit self-esteem but negatively with implicit self-esteem. Implications and complications are discussed.

From fault lines to fission: Understand the dissolution of small task groups

C. HART & M. VAN VUGT, University of Southampton.

A key feature of human social organisation is its flexibility. Human groups form, transform, break-up and reform at a speed that has no parallels in the animal world. Group transformations can occur in many different forms, but arguably one of the most dramatic changes is group fission. Group fissions occur when two or more members, in conjunction, leave a parent group to either form a new group or join an existing group. Examples of group fissions have been documented in a wide variety of organisational settings, including profit and non-profit organisations, religious groups, political parties, nation states, traditional hunter-gatherer societies as well as in non-human societies of primates and social insects. This research investigates the impact of two important endogenous factors, intragroup conflict and the presence of subgroups, on group fission. We make hypotheses about the role that subgroup boundaries play in the fission process, i.e. how they may act as potential faultlines along which groups split after they experience conflict (the *weak* faultline hypothesis), or how subgroup boundaries may exacerbate the likelihood of a fission if conflict is present (*strong* faultline hypothesis). The results of four experiments, involving small social dilemma task groups, support the weak faultline hypothesis. We discuss the implications of these findings for theory and research on membership changes in small groups.

Attributions about stigmatised traits and attitudes towards the stigmatised: An uncertain link?

P. HEGARTY & A.M. GOLDEN, University of Surrey.

Attributions of controllability to stigmatised traits are understood to cause more negative and hostile reactions to stigmatised groups among the non-stigmatised (Weiner, Perry, & Magnusson, 198x). This claim is largely supported by correlational evidence linking negative attitudes to stigmatised groups with attributions of controllability. However, experimental support for the attitude-attribution link is generally lacking. In Study 1 ($N=66$) attitudes toward seven stigmatised groups were measured by a 100-point feeling thermometer and a personal stereotype measure, and were largely non correlated with beliefs in genetic, personal control and personal experiential attributions about the relevant stigmatised traits. In Study 2 ($N=200$) participants were randomly assigned to read a vignette emphasising either the controllable or uncontrollable nature of one of four stigmatised traits (obesity, depression, alcoholism and homosexuality) or to a control condition. Pre-test feeling thermometer scale measures and post-test feeling thermometer, PSM, and standardised measures were assessed. Although the vignettes dramatically affected participants' beliefs about the controllability of the relevant stigmatised trait, none of the measures registered a significant change in attitudes toward any of the stigmatised groups. These findings show that the link between controllability attributions and attitudes towards stigmatised groups is far more variable than attribution theory has specified to date. They also cast doubt on the use of biological explanations in stigma-reducing public information campaigns.

The significance of identities in a multicultural context

D. HELM, C. HOWE, C. CASSIDY, R. O'CONNOR, D. WARDEN & L. CUNNINGHAM, University of Strathclyde.

This paper outlines some findings from a longitudinal study concerned with the experiences and expectations of racism and discrimination in young people living in Glasgow from majority and minority cultures. Data were collected (utilising semi-structured interview schedules and quantitative measures) from 271 white and minority ethnic young people in three age groups (Cohorts). At the beginning of this research project participants in Cohort 1 were aged between 14 and 15 years, 17 to 18 years in cohort 2 and 20 to 21 years in Cohort 3. Results suggest that minority

ethnic young people in Glasgow are doing comparatively well (e.g. in terms of education and employment) without having rejected their ethnic background and culture, and that the strategy of retaining strong minority ethnic community links has benefited these young people. In addition, minority ethnic young people, despite having lived in Scotland all of their lives, appear to identify more strongly with their ethnic background than they do with Scotland. The findings highlight the significance of social identities and are discussed with reference to theoretical conceptualisations of social identity as well as the current debate concerning the need to redefine national identities in a UK context and examining what it means to be Scottish (or British, English, Welsh, etc.) in a multicultural society.

Measuring social influence of peers on decision making in maternity care: An experimental study

C. HOLLINS MARTIN, York University.

The aim was to observe whether midwives decisions are influenced by peers, against a background in which Changing Childbirth (DOH, 1993) requests provision of more choice, continuity and control for women during pregnancy and childbirth. A simple, valid and reliable scale; Social Influence Scale (SIS) was devised to measure and score midwives' private anonymous responses to 10 clinical decisions. After a nine-month time gap, a stratified sample of 60 (20 E, F, G grades) were invited for interview in which a midwife influenced SIS responses in a conformist direction. Overall ANOVA 3 x 2 of groups to conditions (E, F, G grades versus postal and interview condition) yielded a significant result. Midwives were in general more conformist when influenced by a peer, in comparison to private anonymous responses. $F(1,57)=249.62, p=0.001$, with no significant interaction between groups. This study has both theoretical and practical implications. Results reveal difference between what midwives say they will do in private and what actually happens when peer influence is present. Implications are that focus may be removed from women having choice and control over their birth experience, reverse of which is request of Changing Childbirth (DOH, 1993).

Racialised re-presentations and Resistance at school: Questions for a social psychology of racism

C. HOWARTH, London School of Economics and Political Science.

This paper explores the role of representations in maintaining the racialised patterns of school exclusion in Britain. I use social representations theory to investigate how racialising re-presentations pervade and create institutionalised practices, how these re-presentations invade young people's sense of self and ultimately how young people collaborate ways to resist and reject oppressive relations. The material presented here, from interviews with young people excluded from school, parents, teachers and others involved in school exclusion, illustrates how young people problematise and critique racialising re-presentations while participating in the conditions of oppression and resistance that pervade their experiences of school. The analysis is divided into three sections. The first examines the institutionalisation of racism, visible in social practices. The second section looks at the role of re-presentation in the social construction of 'black pupils'. The concluding section explores the possibilities of resistance and critical engagement in the everyday. As a whole this reveals how young people develop critical engagement with the re-presentations that filter into and so constitute their realities. This invites discussion as to what a critical social psychology of racism might look like – foregrounding questions of racialisation, resistance and participation.

From socio-technical systems to human activity networks; the relevance of social psychology for understanding work-organisations in the information age

H.M.J. HUHTALA, London School of Economics and Political Science.

This paper discusses the importance of social psychology for understanding organising in work organisations of the 21st century. The paper compares and contrasts the socio-technical conception of organisation to the contemporary way of organising in the pioneering organisations of the information age. It also questions the entitative understanding of an organisation, in which it is assumed that persons and organisations are independent of one another. The paper draws on recent empirical research on the current organisational structures and practices in the mobile content providing industry. This industry is the pioneering industry of the world's leading information society, Finland. Theoretically, the paper draws on organisational social psychology. The empirical results indicate that contemporary organisation in practice translates as organising, whereby organisation is not the core but the process of organising. Furthermore, the contemporary way of organising primarily consists of four different activities, namely: negotiation, co-operation, group work and communication. Altogether, a contemporary organisation lives; it produces, reproduces and transforms itself on an everyday basis through reciprocal relational processes. This is not to say that organisations were not previously made up of people and their relational processes. Indeed, they were. However, there was also bureaucracy and structures and, thus, fewer spaces for freedom and creative transformation. There were systems and people. However, in the pioneer organisations of the information age this split is gone. However, theoretically, there have not been too many attempts to go beyond this split. It is suggested that one way of attempting to do this is to concentrate on explicating organising from a viewpoint of social psychology.

Selective attention and information processing of normative and deviant group members

R. HUTTER & R.J. CRISP, University of Birmingham.

The *black sheep effect* (Marques, Yzerbyt, & Leyens, 1988) describes the circumstances under which a deviant ingroup member is disliked more than a deviant outgroup member. Previous work has centred around the evaluative judgements of such deviants. We examined the attentional processes that accompany perception of deviants. In Experiment 1 participants viewed information about deviant and normative ingroup and outgroup members. We hypothesised that deviant ingroup members would be ignored as a way of protecting the subjective definition of the ingroup, but that outgroup deviants would in contrast be particularly attention consuming. Supporting this prediction, participants were better at recognising ingroup normative and outgroup deviant information compared to ingroup deviant and outgroup normative information. In Experiment 2 viewing time latencies followed this same pattern. In Experiment 3 we held viewing time constant and this eliminated the effects on subsequent recognition. In Experiment 4 the effect was observed for high, but not low, ingroup identifiers. We discuss these motivational influences on attentional processes in person perception.

Repairing historical rifts: Is collective guilt the answer?

A. ISPAS, University of Edinburgh.

In recent years, representatives of countries such as Germany, the UK and Switzerland have publicly acknowledged the harm their countries have committed against particular victim groups in the past and have offered the victims various forms of compensation. Social psychologists have attributed this recent trend to an emotion called 'collective guilt'. In investigating this emotion, research has mostly focused on its positive consequences.

However, the present paper suggests that collective guilt may also have negative consequences for interactions between perpetrating and victim groups. By posing a threat to social identity, it can make high identifiers rationalize past behaviour and derogate members of the victim group. This paper proposes moral outrage as an alternative to collective guilt. In departing from the system-focused type of moral outrage originally researched by Montada and Schneider (1989), this paper proposes 'victim-focused moral outrage' as a more viable alternative. This emotion involves anger at the injustice committed against the victim group and feelings of empathy towards the victims. In contrast to collective guilt, victim-focused moral outrage does not represent a threat to social identity and can, therefore, be more effective at motivating both low and high identifiers to engage in political actions that would improve the lives of victim groups. The paper will conclude by discussing how social psychological research on group-based emotions can contribute to a better understanding of contemporary social phenomena.

Development of a measure of risk culture

S. JOHNSON & I. DONALD, University of Liverpool.

Despite the growing interest and psychological importance of understanding how risk culture impacts on financial loss, no attempt has been made to operationalise and measure the risk culture of a financial organisation. There are four main aims of the research. To develop a Risk Culture questionnaire; to assess whether the risk culture questionnaire identifies specific and separate psychological elements of an organization's risk culture; to assess the predictive ability of the questionnaire and determine whether an organization's risk culture is predictive of their experience of errors leading to financial loss; to assess the questionnaires discriminant validity. This paper presents results from data collected in five UK financial organisations ($N=626$). Principal components analysis of the questionnaire revealed a 12-factor structure (accounting for 62 per cent of the variance) each pertaining to a different aspect of the risk environment. Logistic regression analysis revealed that a number of factors discriminated between employees reporting involvement or non-involvement in an error in the last six months. The results were in the expected direction with employees reporting involvement in an error obtaining lower, that is more negative, risk culture scores than employees reporting non-involvement in an error. Significant differences between the organisations were found suggesting that the questionnaire possesses discriminant ability and supporting the hypothesis that organisations will exhibit homogenous risk cultures. The findings from this research suggest that organisational risk culture can be measured and that financial organisations can be profiled on a number of risk culture factors.

Attitudes towards Islam and schizotypal personalities

J. JOHNSTONE & N. TILIOPOULOS, Queen Margaret University College, Edinburgh.

Studies on attitudes towards religion and mental health have concentrated on Christians. More specifically, findings across these studies tend to suggest that positive religious attitudes are associated with lower schizotypal symptomatology, and that this relationship may be mediated by social desirability and moderated by gender (Roth & Baribeau 1996). The current study attempts to access this relationship with a Muslim sample. A total of 71 Muslim adults took part in this study, (age range 17 to 45 years, 37 females and 34 males). Each participant answered a questionnaire battery consisting of the Sahin-Francis scale (2003) of Attitudes towards Islam, the short version of the Schizotypal Personality Questionnaire (SPQ-B; Raine & Benishay, 1991), the Eysenck and Eysenck (1995) Lie Scale (short version), and a number of demographic questions. Pearson's correlations and Principal Components analysis suggested a low relationship between religious attitudes and schizotypy, which in the current sample was not mediated by social desirability and moderated by gender. These findings are in agreement with those

from Christian samples, suggesting that certain characteristics of the relationship between attitudinal elements of faith and mental health may not only be specific to Christians. Furthermore, it appears that, within a Muslim context religious attitudes may not be useful indicators of, at least, certain aspects of mental health.

'All I can say is what I am.' Trauma and social identity amongst Kosovo Albanians

B. KELLEZI, University of St. Andrews.

Recent literature on post-traumatic stress disorder (PTSD) now recognises that the psychological impact of traumatic events is in part determined by the way in which individuals perceive and interpret those events. The impact of trauma is also affected by the social support networks individuals have within their family and their community. Adopting a social identity approach, we argue that cultural norms and values play an important role not only in shaping our appraisal of events but also in influencing availability of social support. To explore the relationship between cultural norms and experience of extreme events, we conducted an interview study with Kosovo Albanians ($N=29$) in the context of the 1998–1999 armed conflict. Our data suggest differences between experiences of the war that affirm and those that violate cultural norms and values. The war experiences that participants were able to talk about were those that affirmed norms. Second hand accounts suggested that others who experienced events which violated norms were expected not to talk about these events. These differences are discussed in terms of their implications for choice of coping strategy and availability of social support.

Case closed? The role of cognitive closure in evaluating evidence for conspiracy theories

P.J. LEMAN, R. DOHERTY & M. CINNIRELLA, Royal Holloway University of London.

Although beliefs in conspiracy theories are widespread they have been surprisingly neglected as a topic of psychological research. However, there would appear to be much that psychology can contribute to our understanding of this contemporary social phenomenon (Leman & Cinnirella, 2004). For instance, beliefs in conspiracy theories might be sustained and even created by the media, may be viewed as consequent upon particular social identities (Crocker, Luhtanen, Broadnax & Blame, 1999) or as associated with certain personality factors (Goertzel, 1994). In the current paper we explore the ways in which Need for Cognitive Closure (NFCC, Kruglanski, 1989) affects the evaluation of evidence that may, in turn, relate to beliefs in conspiracy theories. NFCC is both situational and dispositional and broadly refers to the ways in which individuals are open to new or alternative interpretations of evidence. A first study ($N=30$) found no relationship between the scores on measures of NFCC and beliefs in conspiracy theories. However, there was a strong positive relationship between scores on a measure of alienation and beliefs in conspiracy theories. In a second study ($N=100$) we asked participants to rate the likelihood that a hypothetical scenario involving a plane crash was the result of a conspiracy. We lowered NFCC in one group by increasing participants' accountability for their judgments and then asked all participants to read further evidence relating to the scenario. Compared with a control group, participants with lowered NFCC indicated that they changed their ratings to judge a conspiracy theory as a less likely explanation after reading the evidence.

UK children go online: National survey findings on the opportunities and risks of internet use

S. LIVINGSTONE, London School of Economics.

This paper presents research findings from a nation-wide survey of internet-related attitudes and practices among 1500 nine- to 19-year-olds across the UK, together with their parents, as part of an ESRC e-society-funded project (see www.children-go-online.net). The project has used qualitative methods to explore children and young people's own experiences of the internet, this

raising a series of issues subsequently explored in the survey questionnaire. Conducted during winter 2004, the survey pursues the social, psychological and cultural patterning of patterning of interests, beliefs and practices across diverse children and young people, with particular attention paid to the analysis of variations in the frequency, nature and quality of internet access and use across the sample. This paper will present an overview of the emerging findings from this major new survey, addressing the four central project themes of literacy/education, communication/participation, dangers of use and exclusion/inequalities. By linking children's various uses of the internet to the nature of their online access and experience and, in turn, to their socioeconomic and family circumstances, their attitudes and expertise, values and rules for internet use, it is hoped to produce a complex picture of young people's online practices. The findings are intended to contribute to the developing policy framework regulating children and young people's internet use: the project seeks to balance an account of opportunities and dangers precisely because society must strike a balance between the failure to minimise the risk of harm and the failure to maximise the benefits of new opportunities.

Constructing an attitude towards an object from its salient features: A connectionist exploration

R. LOWE & P. BENNETT, University of Wales Swansea.

Attitude towards an object may arise from contextually salient features. Additionally, attitude accessibility is dependent on feature-evaluation associations stored in memory. The cognitive 'mechanics' underpinning activation of feature evaluations within a biologically centered system are poorly understood. Accordingly, low-level self-organizing processes of attitude construction were explored using a simulated neural network. Simulation data representing various object features were generated. Objects could be assembled from four feature types: object class (e.g. vehicle, hat), type of object within a class (e.g. car, top hat), characteristic (e.g. smoky exhaust, frayed brim), and evaluation (positive, negative). A network, implementing *competitive (unsupervised) learning*, was trained to associate each feature with an evaluation. The amount of training for specific feature-evaluation pairings was varied (i.e. the system was more familiar with some feature-evaluations than with others). After training, the network was tasked with classifying a separate set of 1600 whole objects as positive or negative. Each object comprised sets of several features (e.g. vehicle-car-smoky exhaust). Results showed that the network classified objects as positive or negative according to the most salient feature(s). Salience was itself a function of the degree of prior training (familiarity) with specific features. The simulation showed how an unsupervised cognitive system could automatically identify, store and retrieve attitude-relevant information. It developed representations capturing the co-occurrence of positive features with positive evaluations, and negative features with negative evaluations. Object classification as positive or negative was not derived from all of its features. Rather, classification was dominated by the most familiar (salient) feature.

Considering local responses to asylum seekers: New Apartheid in visual and textual discourse

N. LYNN & S. LEA, University of Plymouth.

A succession of well-publicised incidents in Britain has highlighted the dilemma of refugees and seekers of asylum (Lynn & Lea, 2003). Public opinion on the issue of asylum seekers is voiced in a number of ways. Our research, to date, has focussed on letters to the editors of various national newspapers concerning asylum seekers, and graffiti on the walls of estates where asylum seekers are housed. These local responses, to what is perceived as a national crisis, draw upon commonplace ideologies to construct asylum seekers as 'other'. In this paper, we explore the way in which ideas of citizenship, identity, and nationhood are employed within a variety of discursive and rhetorical strategies to form part of a

discourse which, while it may not appear to be overtly racist, suggests that a 'new Apartheid' (Van Dijk, 1996) is in operation. Although there are differences between the work of the letter writers and the graffiti writers, both are informed by and respond to current institutional practices around the expression of racist or xenophobic views. We argue that applied discursive work is necessary to make transparent the disturbing social, ideological and institutional implications and in order to bolster resistance to the oppression of the 'new apartheid'.

Modelling political protest using post-materialism

K. MCKENZIE, Trinity College, Dublin.

Political protest has usually been understood by political scientists in terms of institutional explanations and country-specific factors. Social psychology, on the other hand, puts more emphasis on group dynamics and the socialisation history of protesters themselves. In trying to analyse protest, political science falls down by being too removed from the individual level, while social psychology is often neglectful of incorporating political circumstances and institutional rules into its models. Inglehart's theory of postmaterialism (PM) is an attempt by to conjoin elements of both approaches in order to explain unconventional political activity. His theory of PM argues that a Maslovian process has been operating for the past 30-odd years at both the societal and individual level that has led to new forms of political protest. PM extrapolates from this to claim that the long-established class basis to politics is not useful for understanding political behaviour among citizens of the affluent west. In proposing that a clash of values now underlies much of current politics, PM links putative value shift with political-behavioural correlates. This paper assesses how Inglehart's argument makes contestable assumptions about how values may be measured and what we may plausibly derive from them. His hypothesis is tested by means of a political science method, the small-n comparative case study, and the results demonstrate that PM does not remedy the inadequacies of either political science or social psychology in graphing political protest.

Children's accounts and experiences of Identity living in border areas of Northern Ireland

K. McLAUGHLIN, O. MULDOON & K. TREW, Queen's University Belfast.

Background: A broad understanding of children's identity in Northern Ireland has yet to be reached. Moreover whilst there has been an abundance of research conducted with children up to 11 years old and students aged 18 years and over, little attention has been paid to children between this age bracket. This paper focuses on 14- to 16-year-olds living in the border area of Northern Ireland where identity may be viewed as highly salient or regarded as problematic.

Aims: To explore children's experiences and perspectives on identity. Also to examine the way in which geographical proximity to the border might influence experiences and perceptions of identity.

Method: Essay questions were administered to schoolchildren aged between 14- to 16-years-old. Data was analysed using NVivo.

Results: The data suggest that children place much importance on their sense of national and religious identity. Moreover, they attribute this importance largely to the influence of their parents, and to a lesser extent the media, their school and the community in which they live.

Conclusions: Findings will be discussed in relation to previous research.

Regional, National and European identity: A social identity perspective

F. MOLS, University of Exeter.

The introduction of EU Citizenship (Art.8a-d) in the 1992 Treaty on European Union (TEU) and the EU's ambitions towards European political integration more generally triggered renewed interest in the feasibility of a European political identity from the mid-1990s onwards. The discourse that emerged, which became known as the normative discourse

on European polity formation, attracted attention from scholars from a variety of social sciences, such as for example constitutional law, political philosophy, post-modern sociology, and constructivist international relations. Central in this discourse is the discussion on EU legitimacy, whereby assessments are made of the extent to which the EU actually and potentially meets the requirement of legitimacy of authority as formulated in classic and contemporary political and sociological thought. At present the discourse seems dominated by the influence of critical theorists, such as for example the sociologist Jürgen Habermas of the Frankfurt critical school. Habermas and his followers advance new concepts, such as constitutional patriotism and deliberative democracy as a means to overcome cultural diversity and to achieve a European political identity based on the acceptance of fundamental civil and human rights. However, increasingly scholars are starting to acknowledge the limited ability of the normative discourse to explain fluctuations in actual levels of identification with the European Union (as for example measured in Euro barometer surveys) and to point at the complexity of collective identification. As Thomas Risse points out, 'there is general agreement that identities entail cognitive, affective and evaluative aspects, but what are the causal mechanisms by which the EU impacts on collective identities?' (Risse, forthcoming 2004). Faced with increasing criticism for being overly descriptive and for overstating the importance of the role of sub-state regions in EU decision-making, scholars of regionalism and EU Multi-Level governance started to turn their attention to the issue of European identity, thereby focussing on the multiple territorial identities individuals hold. However, attempts to analyse, for example, the inter-relationship between regional, national and European identity that emerged from within the regionalism and MLG discourse were soon abandoned as it became clear that the necessary analytical tools to do so were lacking (cf. Hooghe & Marks, 2001). The present research into European identity amongst political representatives in peripheral regions was undertaken as an attempt to address the afore-mentioned caveats in the discourse on European identity, by demonstrating how the use of social identity theory (SIT, Tajfel & Turner, 1979) can enhance our understanding of actual identification with the EU. Starting from the SIT premise that identification with groups is driven by the individual's pursuit of belonging to positively distinct groups as a means to enhance one's self esteem, this study investigated how perceptions of the relationships between the sub-state region, nation-state and EU influenced the motivation to identify with the EU. The study was conducted amongst political representatives in four regions (Cornwall, Wales, Limburg and Friesland).

Ethnophaulisms and ethnonyms: Outgroup names, ingroup names, and intergroup hostility

B. MULLEN, Syracuse University.

Ethnophaulisms (Roback, 1944) are the words used as ethnic slurs to refer to outgroups in hate speech. Ethnonyms (Levin & Potapov, 1964) are the names an ingroup uses to distinguish itself from outgroups. These group names can be distributed across several different semantic categories, indicating high complexity in cognitive representation, or these names can be clustered into a few semantic categories, indicating low complexity in cognitive representation. Recent research on ethnophaulisms has shown that ethnic outgroups referred to with ethnophaulisms of low complexity were more likely to be the targets of intergroup hostility. New research on ethnonyms shows that ethnic ingroups that refer to themselves with ethnonyms of low complexity are more likely to engage in intergroup hostility. Interestingly, in each case, it is the complexity, and not the negativity or aggressiveness, of these group names that predicts intergroup conflict. This presentation reviews some of the recent research on ethnophaulism complexity, presents some of the new research on ethnonym complexity, and explores the heretofore unconsidered juxtaposition of ethnophaulism complexity and ethnonym complexity.

The effect of group identification, norms and outgroup threat on children's ethnic prejudice

D. NESDALE, K. DURKIN, J. GRIFFITHS & A. MAASS, Griffith University, Queensland, Australia.

Two experiments tested predictions from social identity development theory (SIDT, Nesdale, 1999), that children's ethnic prejudice depends on their in-group identification and/or the in-group's norms of inclusion versus exclusion, and/or out-group threat. In Study 1, Anglo-Australian children ($N=480$) aged six, seven or nine years of age, were assigned to a high status team in a minimal group paradigm and their identification with the in-group (high vs. low) was manipulated together with threat from the out-group (present vs. absent). The members of the out-group were of the same (Anglo-Australian) or different (Pacific Islander) ethnicity to the in-group. In Study 2, seven- and nine-year-old Anglo-Australian children ($N=197$) were assigned to a high status team that had a norm of inclusion or exclusion, and the team was or was not threatened by an out-group comprised of members of the same or different ethnicity. Consistent with SIDT, ethnic prejudice was greater when the children were strongly identified with their group, threat was perceived from the out-group, and the in-group had a norm of exclusion. In addition, out-group threat qualified the impact of ingroup norms, and the effect was greater for seven-year-old versus nine-year-old children. Ethnic composition of the out-group did not impact differentially on prejudice but children were more willing to change into a same- than into a different-ethnicity out-group. The extent to which the findings provide support for SIDT is discussed.

Reproductive decisions and contact with kin. Does evolutionary theory provide a useful insight into human behaviour?

L. NEWSON, University of Exeter.

Modern reproductive behaviour seems to contradict the idea that evolutionary theory might provide useful insight into human behaviour. If, as evolutionary theorists claim, behaviours are selected that maximise the successful reproduction of offspring, why do we postpone parenthood and urge our children to do the same? Why do we choose to have far fewer children than we can provide for? Most of us our ancestors had large families. Why haven't we inherited this tendency? Social norms appear to have a much greater influence than biology on reproductive behaviour and over the last 200 years there have been profound changes in reproductive norms. But why have these changes occurred? None of the many explanations that have been offered have been found to consistently predict the timing of the changes. Ironically, evolutionary theory may provide part of the explanation, but only if some well-established principles of social influence are also taken into account. Demographic studies have shown that, as societies modernise, social networks widen. Wider social networks allow relatively less contact with kin, those who have a genetic interest in supporting each other's reproduction. We will report evidence that a decline in input from kin might cause changes in the content of social influence so that the production of children is less encouraged. If this is the case, theories of social influence suggest that this change will result in the development of norms that do not actively facilitate reproduction. What's more, the effect is likely to be cumulative.

Emergence from ethno-political violence into rebuilding relations with the outgroup: Social psychological predictors of intergroup forgiveness in Northern Ireland

M. NOOR & R. BROWN, University of Sussex.

The overall aim of this study was to provide a foundation for a model of intergroup forgiveness in contexts marked by a history of severe conflict. We examined how well social psychological variables such as ingroup identity (Protestant vs. Catholic), common ingroup identity (Northern

Irish), perceived level of victimisation, 'competitive victimhood', trust and a number of other variables predict intergroup forgiveness in Northern Ireland. A sample of 309 undergraduate students from Northern Ireland participated in a survey study. Preliminary analysis revealed that participants with a Protestant identity ($N=164$) showed a very different pattern of predictors of forgiveness than participants with a Catholic identity ($N=145$). Therefore, the two groups were analysed separately. Multiple regression analyses indicated that for the Protestant group 'Competitive Victimhood' – here defined as perceiving one's own ingroup as having suffered more than the outgroup in the course of the violent conflict – and *Trust* – defined as whether one perceives outgroup members as, e.g. fair or taking advantage – were significant predictors ($\beta=-0.27$, $p<0.01$ and $\beta=0.2$, $p<0.05$, respectively) accounting uniquely for the largest amount of variance in intergroup forgiveness (overall $R^2=0.45$, $p<0.001$), after controlling for all the other variables. In contrast, for the Catholic group Common group identity was the single significant predictor ($\beta=0.25$, $p<0.01$) accounting uniquely for the largest amount of variance in intergroup forgiveness (overall $R^2=0.34$, $p<0.001$), after controlling for all the other variables. A context-specific model of intergroup forgiveness derived from the above results will be discussed that takes account of recent social psychological theorising about re-building trust in post-conflict situations.

Predictive validity of implicit attitude measures: An application to sweets consumption

R. O'GORMAN, M. PERUGINI & M. CONNER, University of Essex.

Explicit attitudes have long been assumed as key predictors of behaviour. More recently, a stream of studies has shown that implicit attitudes, typically measured with the Implicit Association Test (IAT), can also predict a significant range of behaviours. Alternative methods to measure implicit attitudes have been recently proposed, specifically the Extrinsic Affective Simon Task (EAST) and the Masked Affective Priming Task (MAPT). To date, no research has investigated the relations between these different methods and their incremental validity in predicting relevant behaviours. These issues have been investigated in a study of sweets consumption, with a sample of 120 participants. The study had two experimental sessions, consisting of a first session in which participants completed the AT, EAST and MAPT as well as an explicit attitude measure and were instructed in use of the sweet consumption diary, and a second session, at a distance of a week, in which participants completed some questionnaires, returned the diary and made the behavioural choice. We used three measures of the target behaviour, a self-report of an average week's consumption of sweets, a diary that participants kept for a week, and a behavioural choice at the end of the second session between a sweet or a healthy bar. The results show that the implicit measures are weakly related with each other. However, they all significantly predict different aspects of sweets consumption. Moreover, their predictive power is not reduced when considering also explicit attitudes. The results are discussed in terms of the usefulness to consider both explicit and implicit attitudes and of the importance to use different methods to measure implicit attitudes.

An Implicit Association Test for assessing morality

M. PERUGINI, L. LEONE & D. D'AURIA, University of Essex.

The measurement of morality using traditional self-report questionnaires and techniques is a problematic issue, because the answers are likely to be influenced by social desirability and self-presentation biases. The use of an indirect assessment method that minimises the impact of these biases would therefore represent an important addition. The Implicit Association Test (IAT) is the most widely used indirect assessment method and it appears ideally suited to measure implicit morality. Three studies will be presented where both the AT (implicit) and a traditional self-report questionnaire (explicit) have been used to

measure morality. The first experiment ($N=46$) shows that the implicit morality measure, but not the explicit, predicts cheating. The second experiment ($N=90$) shows that scores in explicit morality can be faked much more easily than in implicit morality when there is an incentive to present oneself in a tactically convenient way. The third experiment ($N=12$) shows a double dissociation pattern, with the implicit morality measure significantly predicting on-the-spot immoral behaviour (i.e. keeping an undue lottery ticket) and the explicit morality scale predicting deliberative moral decisions (i.e. choices in moral dilemmas). Taken together, the results strongly support the validity of the AT measure of morality and its capability to uniquely predict some expressions of immoral behaviours. It is argued that these results underscore the importance of using routinely indirect assessment procedures, especially for those issues, like morality, where social desirability and self-presentation are a concern.

Behavioural coherence in group robbery: A circumplex model of offender and victim interactions

L. PORTER & L. ALISON, University of Liverpool.

The behaviour of offenders and victims in 116 cases of group robbery (61 commercial, 55 personal) were examined. Four interpersonal themes were evident: dominance, submission, co-operation and hostility. These themes are governed by the principles of complementarity such that offender dominance elicits victim submission (reciprocity) and vice versa, while co-operative offenders tend to elicit victim co-operation (correspondence). Hostile offences were hypothesised as eliciting hostility in victims, but few victims in the sample demonstrated active resistance. The existence of behavioural themes suggests that offenders within the same group behave in a homogeneous fashion, which is explained by reference to group norms and process modelling. Further, differences in interpersonal themes were evident between commercial and personal robberies. Commercial robberies tend to involve greater levels of co-operation than personal robberies, while personal robberies involve more hostility than commercial robberies. This is discussed in terms of situational and motivational elements of the robberies.

Exploring the relationship between entitativity and collective responsibility

G. RANDSLEY DE MOURA, E. CASTANO & D. ABRAMS, University of Kent.

In lines with previous research into entitativity and attributions of responsibility, we predicted that members of groups which are perceived as high in entitativity are more likely to be perceived as collectively responsible for behaviours carried out by one or a few members of the group, when compared with groups which are perceived as low in entitativity. An experiment will be presented in which a fictional national group was used as the target of evaluations. National groups are a useful target for investigating collective responsibility, as the findings are pertinent for national and international relations. First, the nature of the group was described as being either high or low in entitativity. The leader of the fictitious nation was then introduced and the leader declares the intention of the nation to go to war against another nation. Following the information participants ($N=81$) responded to dependent measure items. The dependent measures included a manipulation check of entitativity, general evaluation of the nation, and individual and collective responsibility for the act. Results are consistent with the hypotheses concerning collective responsibility, but they also indicate that a carry over effect may occur on attribution of individual responsibility. Results and implications will be discussed with a particular emphasis on the measurement of individual and collective level variables. Furthermore, the implications of these findings for political psychology will be discussed, along with their applied value.

Texting in context: The conversational use of mobile phone text messaging

D. REID & F. REID, University of Plymouth.

Despite growing interest in the social psychology of mobile phone text messaging, little is known about the conversational use of this medium over an extended time period. To date, most studies (e.g. Thurlow, 2003; Ling, 2003) have examined 'snapshots' of text messages collected at particular moments in time, but these studies lack information about the context in which texts were sent and received, and because turn-by-turn information is lacking, the conversational patterning of text-based interactions is lost. The purpose of the present study was to examine these features in a corpus of 3923 text messages sent and received over a 10-week period by a volunteer panel of twelve undergraduate mobile phone owners, of whom several (referred to here as 'texters') reported a clear preference for using their mobiles to text rather than talk—others (referred to as 'talkers') showed the opposite preference. Preliminary analysis of this corpus of messages indicates that 'text conversations' with one or more 'text mates' extending over many hours – sometimes days – are commonplace, and that clusters of text mates forming well-defined 'text circles' are a prominent feature of these exchanges. Comparisons between the text conversations of texters and talkers reveals distinctive differences in conversational content and patterning, and these differences are interpreted in terms of Walther's (1996) theory of hyperpersonal communication. In particular, this study reveals how the unique affordances of mobile phone text messaging are appropriated by texters for managing the identity they project in their text messages.

Cross-cultural differences in the evaluation of group member behaviour when it is consistent and inconsistent with individualist and collectivist group norms

P. RENTZELAS & M. HAGGER, University of Essex.

Recent studies indicate that evaluations of group members displaying collectivist behaviour are generally more positive than those displaying individualist behaviours. This is because collectivist behaviour is often deemed more virtuous and beneficial to the group. McAuliffe, Jetten, Hornsey, and Hogg (2003) found that this effect was attenuated if the group norm endorsed individualism. However, their results were found against a pervading individualist cultural background. The present study aimed to extend these results cross-culturally examining the evaluation of group member behaviour under conditions of individualist and collectivist group norms in participants from both individualist and collectivist cultural backgrounds. Participants of English ($N=74$) and Chinese ($N=80$) nationalities were asked to evaluate the description of an individual displaying either individualist or collectivist behaviour after the manipulation of a group norm endorsing either individualism or collectivism. Chinese participants tended to evaluate collectivist behaviour more positively than individualist behaviour as predicted, while there was no main effect of group member behaviour for the English participants. English participants evaluated group members' behaviour marginally more positively if the group norm was individualist, regardless of the type of behaviour displayed. These differences were attenuated by an individualist group norm commensurate with the results of McAuliffe *et al.*, but only for the Chinese participants. English participants reported a more uniform evaluation of the group member regardless of group norm and behaviour displayed. These results provide evidence that cultural background moderates the interaction between individualist-collectivist group norms and behaviour displayed in group member evaluations.

The role of availability and implied context as a factor in the maintenance of paranormal belief

P. ROGERS & S. MURRAY, University of Central Lancashire.

This study examined whether manipulating the vividness and implied context of an everyday coincidence would lead to that event being perceived as more paranormal. Participants read either a vivid or pallid vignette depicting a fictional character accurately predicts a plane crash. Implied context was manipulated by depicting the character as belonging to either a paranormal or aviation club. As expected, paranormal believers rated the crash prediction to be more reflective of precognition and intuition, and less reflective of coincidence and rational thinking, than did sceptics. Second, more vivid scenarios were seen to be less reflective of coincidence and rational thinking than pallid scenario. Moreover, believers given the vivid scenario judged it to be: (a) less reflective of coincidence and more reflective of intuition than did sceptics given the vivid scenario; and (b) less reflective of coincidence than did believers given the pallid scenario. Finally, believers given the pallid non-paranormal scenario deemed it to be less reflective of rational thinking than did sceptics given the pallid non-paranormal equivalent. Participants memories for scenarios were also tested after two days. Whilst believers had just as accurate memories for scenes as sceptics, participants generally made fewer recall errors for vivid, paranormal scenarios. The possible roles of vividness and context in the maintenance of paranormal belief are discussed.

Moderating the stereotype threat effect: The impact of crossing categories

H.E.S. ROSENTHAL & R.J. CRISP, University of Birmingham.

Stereotype threat explains the observation that women underperform on mathematics problems when they are informed that their scores will be compared to men. This research aims to establish if the crossed categorisation approach to reducing bias could be used as a way to reduce stereotype threat. This concept was examined through the use of a similarity measure, designed to break down the perceived difference between the two gender groups.

In Experiment 1 female participants either received a similarity task where they stated characteristics shared between men and women, or the control condition was the absence of such a task. The participants then received a survey, which consisted of both stereotypically male and female careers. A 2 (condition: control vs. similarity) x 2 (career type: male vs. female) mixed ANOVA with repeated measures on the second factor revealed a significant interaction. As was hypothesised, people in the similarity condition chose significantly less female stereotypical careers than participants in the control condition.

Experiment 2 expanded the scope of the previous experiment by including a third condition which asked for distinct characteristics. Also, participants received a short maths test, along with the same careers survey as study one. A one-way ANOVA found that participants in the similarity condition completed significantly more maths questions correctly, compared to participants in the distinct and control conditions. Also, this mediated their subsequent career choices. The research suggests that crossing categories, is a beneficial and important tool in the moderation of stereotype threat.

Reliability in social research

A.J. ROSS, University of Strathclyde.

Classifying events using taxonomies designed for the purpose is a common technique in the human sciences (e.g. psychology, sociology, psychiatry) and has been shown to be highly useful, dependent on certain important criteria. The most critical of these is usually termed inter-rater reliability (the related concept of 'intra-rater' reliability refers to a comparison between the judgments made by the same judge about the same data on different occasions). Tests of this criterion have usually been simply called reliability trials, and underpin findings

in many areas such as health and social policy, reliability being a pre-requisite for the validity of coded data. This paper reviews the current state of the discipline with respect to theory and practice in calculating reliability. Problems with commonly used measures of agreement such as correlations, indices of concordance and correction coefficients are discussed, and examples given. Alternative measures are suggested and demonstrated, including the use of conditional probabilities and Bayesian rotations and the plotting of reciprocal ROC curves for coder's agreements with each other.

Comparing explicit and implicit evaluations of GM foods

A. SPENCE & E. TOWNSEND, University of Nottingham.

Research examining attitudes towards GM foods has to date, solely concentrated on explicit attitudes, which may be subject to bias. Hence, implicit attitudes may be more reliable in determining potential behaviour towards GM foods, particularly in relation to purchase decisions. Here, attitude evaluations of GM foods were carried out both implicitly (using Go No-Go Tasks (GNATs; Nosek & Banaji, 2001) and explicitly (using semantic differential scales). Three GNATs (with a within subjects design) were used, a context free version and versions using contexts of non-GM food and organic food. Sixty student participants were presented with the implicit and explicit tasks (counterbalanced to avoid order effects). An initial study evaluating the reliability of the context free version of the GNAT as applied to GM foods indicates that implicit evaluations of GM food are actually marginally positive. This contrasts with results reported in recent national surveys (e.g. GM Nation) that have been criticised on methodological grounds (Campbell & Townsend, 2003). Discussion will centre on comparisons of results to previous surveys and of disparities between results of explicit and implicit tasks. Consideration will be given to influences that impact upon explicit tasks but not implicit tasks and for which behaviours these may be relevant.

Factor structure and construct validity of the Cyprus Fears and Hopes Scale (Cy-FHS)

P. STAVRINIDES & S.N. GEORGIO, University of Cyprus.

The purpose of this study is to validate the Cyprus Fears and Hopes Scale (Cy-FHS) that measures how people from the two communities of Cyprus (Greek-Cypriots and Turkish-Cypriots) deal with the possibility of coexistence in a common state after a solution to the political problem. The scale consists of two subscales with 20 items in each subscale: the first subscale measures fears and the second measures hopes, both in relation to a possibility of coexistence between the two communities. In this paper we present the results of the Greek-Cypriot sample ($N=228$), which suggest that the structure of the hypothesised factors for each subscale is confirmed. Confirmatory factor analysis yields a five-factor model for each subscale. For the fears subscale the factors are: Fear for Crime, Fear for Emotions/Communication, Fear for Economy, Fear for Conflict, and Fear for Identity. For the hopes subscale the factors are: Hope for Multi-culturalism, Hope for the State Functioning, Hope for Reconciliation, Hope for Economy, and Hope for Harmonious Coexistence. The factors from both subscales are negatively correlated as predicted by the proposed model. An alternative model was also tested which shows that second-order factors for each subscale are also confirmed. The second-order factors correlate negatively. The results suggest that the present scale is a valid measure for the examination of fears and hopes from a possible coexistence for the Greek-Cypriot community. A future study will aim to validate the scale with a Turkish-Cypriot sample. The Cy-FHS is intended to serve as a tool for understanding the dynamic elements of fears and hopes in other international bicultural conflicts as well.

Network imaging of a social representation: Pretty pictures or informative technique?

R. STOCK, London School of Economics.

This paper introduces the idea of mapping the correlations between the elements of a highly complex attitude structure as a network. Previous qualitative work had suggested that individual representations involve a large number of variables and a social representations approach encourages capturing the complexity of symbolic constructions. The results of a survey of attitudes to distributions of income ($N=229$) were analysed for the correlations between the variables. Since network analysis can be extremely sensitive to the addition or removal of just one connection, only correlations where $p < 0.001$ were accepted for the adjacency matrix. Forty-five variables had at least one correlation significant at this level resulting in 1012 comparisons. Symmetrical adjacency matrices were constructed for all, positive and negative correlations respectively. The resultant networks were visualised and showed coherent ideological organisations of attitudes, which also demonstrated construct validity (particularly in the negative correlations) although the actual structure was highly complex. Network analysis of the positive correlations network used measures of gatekeeper function, integration into the network, strategic location and number of connections. The profiles of network centres were used to test the predictions of the core-periphery model of social representations developed from modelling networks. The predictions were upheld. The meaning of such a structure is discussed with respect to a model of socially constructed argument based on the correlation as a conditional probability of attitude a given attitude b . Discussion of the usefulness of this technique as well as its assumptions and the problems of mediating variables is sought.

Judge not, lest ye shall be judged also: Bystanders' reactions to criticisms of others' groups

R. SUTTON, Keele University.

Hornsey, Oppes, and Svennson (2002) have recently shown that individuals react adversely to criticisms of their group made by outgroup members, but not by ingroup members (see also O'Dwyer, Berkowitz, & Alfeld-Johnson, 2002). In this paper, we present the results of an experiment in which participants evaluated criticisms of Australians, as in Hornsey *et al.* (Experiment 1A), with one crucial change: participants were British, and were, therefore, not members of the group being criticised. This experiment produced the same preference for intragroup, as opposed to intergroup criticism, showing that this preference does not depend directly on a defensive, ingroup-protective motivation. Non-Australian (intergroup) critics were rated to be less legitimate, less constructive, less attractive, and their comments more annoying than Australian (intragroup) critics. A second experiment showed that bystanders were sensitive not just to critics' level of experience of the group concerned, but also to their group membership *per se*. For example, if a critic of Australians had lived all her life in Canada but self-identified as Australian, she was regarded more favourably than a critic who had lived all her life in Canada and considered herself to be Canadian (cf. Hornsey & Imani, 2004). These effects were mediated by the perceived constructiveness of the critics' motives. Overall, these experiments distinguish the roles of social identity and social convention in reactions to criticism. Results are discussed in terms of 'rules of engagement' regulating intergroup relations.

Effects of normative status on responses to intragroup communication

M. TARRANT, Keele University.

Research into the black sheep effect (Marques, Yzerbyt & Leyens, 1988) has elaborated the various ways in which group members respond to individuals who violate group norms. The current paper presents two experiments which examined how normative status impacts on reactions to a target's subsequent behaviour. In Experiment 1, high and low identifying university students were exposed to criticism from a fellow ingroup member

who varied in their orientation to a group norm (normative vs. anti-normative). Compared to low identifiers, high identifiers were consistently more tolerant of criticism from normative than anti-normative targets: They were less sensitive to criticism from normative targets, rated their criticism as being more constructive, and evaluated those targets more positively. Normative targets were also perceived to be in a more legitimate position to criticise the group. In Experiment 2, fans of a youth music activity responded to criticism or praise from a normative or anti-normative member of the ingroup. Consistent with Experiment 1, comments from a normative target were perceived to be more constructive and legitimate and were received with less sensitivity than were comments from an anti-normative target; normative targets were also evaluated more positively. Criticism was received consistently less positively and with more sensitivity than praise, irrespective of the normative status of the target. The implications of these findings for research into group dynamics are discussed.

Power and identity in terrorist negotiations

P. TAYLOR & W.A. DONAHUE, University of Liverpool.

This paper examines terrorists' use of power and affiliative strategies in negotiation as a function of terrorist ideology, incident type, and the outcome that is achieved. Data were scores on eight behavioural scales designed to reflect the dynamics of 186 terrorist negotiations, as reported in detailed chronological accounts. Results support a hypothesised one-down effect with terrorists in a low power position using more aggressive behaviour and expressing more negative affect. The extent to which terrorists used aggressive strategies was related to the resolution of the incident, with attenuated outcomes more likely for those using more aggressive strategies. These dynamics differed across incident type, with aerial hijackings involving more overt power strategies than barricade-siege incidents, which were more likely to involve bargaining for certain outcomes. Finally, terrorist ideology and the associated identity concerns magnified the one-down effect, with religious fundamentalists engaging in more violence and less compromising strategies than terrorists with other ideological backgrounds.

The triple-interact as the building block of negotiation

P. TAYLOR & I. DONALD, University of Liverpool.

Recent papers on negotiation show a renewed interest in understanding the way local cues and responses come together to construct interaction dynamics. We propose the triple-interact (a cue-response-cue-response sequence) as the basic organising unit, identify four generic types of triple-interact, and make predictions about the relative occurrence of each type in negotiation dialogue. An analysis of behavioural sequences coded from 29 conflict negotiations supported the triple-interact as critical to the way interaction unfolds. The unit was found to reduce variance in behavior by over 70 per cent, which compares to less than one per cent from knowledge of negotiation context and approximately 10 per cent from knowledge of individual differences. Further analysis showed that negotiators make consistent use of the four triple-interact types, irrespective of the time period or outcome of interaction. Specifically, in order of decreasing frequency, negotiators used triple-interacts that reciprocated the current position, reoriented between cooperative and competitive positions, refrained their perceptions of the current position, and restructured the interaction onto a new issue. The importance of the triple-interact to the organisation of negotiation dynamics, and to understanding of general interpersonal behaviour, will be discussed.

'Can we always express what we like and why?' Implicit and explicit attitudes towards 'new' food technologies

P. TENBULT, N.K. DE VRIES, E. DREEZENS & M. CAROLLEN, University of Maastricht.

It is widely recognised that biotechnology is one of the most innovative technologies developed in the 20th century with an even more promising future in the 21st century. Biotechnology is currently a hot topic in both academic and political circles for its implications on food security, human health and the environment. Despite the fact that new food technologies are of increasing importance, there has not been a lot of research into how people react to these products. This study investigates the explicit and implicit attitude of people towards genetic modification and ecology. Our main question was to see whether explicit and implicit evaluations are alike or rather different as a function of the novelty, or familiarity of the food issue. Forty-seven participants responded to an explicit measure (questionnaire) and an implicit measure (Extrinsic Affective Simon Task). The results showed that people are explicitly slightly negative and more ambivalent towards genetic modification and positive towards ecology. Implicitly, people have negative associations with genetic modification and positive associations with ecology. Correlations between the two measurements were only found related to Ecology. This suggests that the coherence between implicit and explicit reactions is stronger for uncontroversial and familiar food categories as ecology than for novel and unfamiliar issues such as genetic modification. The attitude towards genetic modification seems to be new and open to change. This is in contrast with the attitude towards ecology, which is suggested to be more embedded in a cognitive structure.

Relevant to few, routine or incompatible: Marginalising religious beliefs in psychotherapy

N. TILIOPOULOS & C. McVITTIE, Queen Margaret University College, Edinburgh.

Various writers have shown that individuals deal interactionally with potential attributions of discrimination against social groups by reducing the visibility of their actions towards the group in question. Such discursive practices however might be problematic when it is the lack of visible action towards the marginalised group that requires justification. One such instance is the psychotherapeutic process, where practitioners are commonly viewed as paying little attention to the religious beliefs of many clients. Here we argue that the limited attention given to such beliefs does not come from any lack of knowledge or awareness on the part of practitioners but rather is the discursive accomplishment of marginalisation. Semi-structured interviews were carried out with six practising psychotherapists. Interviewees were asked about clients' religious beliefs and the role of such beliefs in their practice. All interviews were tape-recorded and later transcribed. Discourse analysis was used to examine participants' accounts of the role of religious beliefs within the therapeutic process. Participants in their accounts explicitly construct religious beliefs as being important. These beliefs, however, are made relevant only to restricted categories of clients. The effect is to make religious beliefs compatible with accepted practice, or to construct particular groups of clients as incompatible with the process. These deployments of categories function to maintain visibility of participants' actions while marginalising the relevance of the potentially discriminatory factor. This discursive strategy provides individuals with a resource for attending to accountability for discrimination in situations where visibility of their actions is an issue.

Everyday management of psychotic illness: A discursive psychological approach

I. TUCKER, Loughborough University.

This paper is drawn from a wider project focused on identifying and analysing some of the ways that people diagnosed 'schizophrenic' manage their lives

on a day-to-day basis. Drawing on data gathered through semi-structured interviews, it seeks to gain an analytic purchase on some of the social and discursive processes involved in the lives of mental health service users, with a particular focus on the role of the body in psychopathology. Some key questions are: how do service users make sense of and relate to their bodies in terms of their 'illness' experiences? What is the relationship between their bodies and their medication? How do they assign meaning and decide how and if their medication is working? What are the types of social spaces service users inhabit, and do these spaces become territorialised and embodied? One cannot conceptualise the body without recognising that it is in a constant relationship with our social world. Our bodies are unfinished products of both social and natural processes (Shilling, 2003), and these processes need to be addressed and analysed as inter-relational rather than distinct factors operating in isolation. This research utilises a discursive psychological approach drawn from the broad area of social constructionism, along with recent work in social theory that has sought to conceptualise embodiment as part of a matrix of different relations (e.g. Shilling, 2003; Burkitt, 1999). In doing this it attempts to add to the psychopathological work that has developed our understanding of living with mental health diagnoses through service users' own experiences.

Ideology and resistance: East German representations of womanhood and their relation to the former state socialist ideology

C. VOELKLEIN, London School of Economics.

This paper examines the influence of the former state socialist ideology on East German representations of womanhood and how these have changed with the transition to capitalism. While the concept of ideology is widely debated within the social sciences, it has received little attention within social psychology. A review of key conceptions reveals three main dimensions in the ideology debate: (a) ideas vs. material practices; (b) social determination vs. possibilities for resistance; and (c) domination vs. common sense. These dimensions are used to analyse the research results gathered in 20 semi-structured interviews with East German women. The findings show that East German women have an ambivalent relationship to the former state socialist ideology since it equally empowered and constrained them. The promotion of gender equality and the creation of extensive welfare services allowed all women to combine work and family life. However, it also prescribed a trajectory that expected every woman to work and masked existing gender differences. The research further points to the power of ideology in shaping and so limiting social representations of womanhood. The interviewed women appear to be guided by the ideal of the working mother despite the fact that the ideology that once inspired it ceased to exist more than ten years ago. Based on an analysis of the research along the three proposed dimensions, the paper develops a critical conception of ideology as a system of ideas and practices that is bound to relations of domination. The data illustrate how while being a powerful means of persuasion and compliance, ideology provokes resistance in sometimes subtle and contradictory ways. By exploring ideology from a social psychological perspective, this paper can advance our understanding of this concept and its dilemmatic nature.

Lack of fit: Consequences of perceived relative prototypicality in organisational settings

I. VOSSEN & A. MUMMENDEY, University of Jena.

It is a well-described phenomenon that members of low status groups (e.g. women or foreigners) experience difficulties to reach top positions in organisations. Low status group members are perceived as not matching organisational prototypes and therefore as not quite fitting into the organisation. However, little is known about the resulting consequences of lack of fit on, for instance, organizational identification. The Ingroup Projection Model (Mummendey & Wenzel, 1999) shows that projection processes result in perceived

lack of fit of a group in relation to another group and their superordinate inclusive category. In extension of the model it is assumed that perceived ingroup-prototypicality triggers different identification processes with respect to ingroup and superordinate category. It is hypothesised that low ingroup-prototypicality leads to a strong identification with the superordinate category (organisation) and a low identification with the ingroup (female colleagues). High ingroup-prototypicality should lead to equal high identification with the superordinate category and the ingroup. Study one aimed at demonstrating underlying projection processes that lead to low ingroup-prototypicality in organisational contexts. In a following experiment ingroup prototypicality had been manipulated and demonstrated the predicted effects on identification with the ingroup and the superordinate category in an organisational setting. These results could be replicated in a third experiment and are discussed with regard to its consequences on behaviour in organisational contexts.

From politics to stand-up comedy: A microanalysis of audience responses

P. WELLS, University of York.

An analysis was conducted of the affiliative audience responses which occurred during four televised stand-up comedy routines, based on a coding system devised by Bull and Wells (2002) for political speeches. Four dimensions were coded: (1) Rhetoricity (whether the response was invited by formulaic rhetorical devices); (2) Invitatority (whether the response was directly invited through the speaker's delivery, e.g. gesture, gaze and/or intonation); (3) Synchronicity (whether the response occurred at or just before the termination of the speaker's utterance); and (4) Mismatch Type (asynchronous responses were coded as Isolated, Delayed and/or Interruptive). Results showed that 50.1 per cent of all affiliative responses to stand-up comedians were a combination of Invited, Rhetorical and Synchronous (cf. 64.5 per cent of all incidences of applause during political speeches). On each dimension the mean response rates to stand-up comedians were: Invited 88.3 per cent; Rhetorical 78.3 per cent; Synchronous 60.0 per cent; Mismatch Type: Isolated 12.5 per cent; Delayed 3.5 per cent; Interruptive 28.2 per cent. Comparative figures for political applause were: Invited 85.9 per cent; Rhetorical 95.0 per cent; Synchronous 65.8 per cent; Mismatch Type: Isolated 4.7 per cent; Delayed 7.5 per cent; Interruptive 17.8 per cent. Only on Invitatority did the mean affiliative response rate to stand-up comedians fall within the 95 per cent confidence intervals for applause to political speakers; the comparative response rate for Synchronicity also approached statistical significance. However, the analysis of mismatch types revealed substantial differences between the two genres. It was concluded that there are both important similarities and differences in affiliative audience responses to stand-up comedians and politicians.

Breaking the rules: Applying Klein's work to further our understandings of cyber-cheating

M.T. WHITTY & A. CARR, Queen's University Belfast.

The current research available suggests that Internet relationships and online erotic interactions can have a 'real' impact on the offline relationship. This paper builds on the current research on both Internet and offline infidelity and explores theoretical explanations for how individuals might rationalise their online affairs. For example, social psychologists have argued that the key to defining betrayal lies in relationship knowledge structures (Fitness, 2001). This would include individuals' theories, beliefs and expectations about how relationships should normally work. Given that the types of interactions that take place online are somewhat different and perhaps in some ways feel less real than offline relationships, it might be that virtual sex and developing close emotional bonds with someone online might be perceived by some as not breaking the rules of the offline relationship. However, in saying this, it is suggested here that acts of infidelity are not necessarily limited to sexual acts, such as sexual intercourse, kissing and

so forth (Whitty, 2003, 2004, in press). Rather, part of the expectations of a relationship can be both 'Thental' as well as 'sexual' exclusivity. Drawing from Klein's object-relations theory, it is suggested here that while on one level individuals might perceive their online interactions to be 'unreal' and hence not 'breaking the rules' in respect to the offline relationship, on another level energy is being taken away from the relationship and given to another, which is indeed 'breaking the rules'. This paper concludes by providing a discussion on therapeutic implications for counselling individuals who have been affected by Internet infidelity.

Discourses of obesity and the construction of individual accountability

S. WIGGINS, University of Strathclyde.

Obesity is becoming one of the more potent social concerns of contemporary Western society. The issue of fatness is treated not only as a burden on healthcare systems and government spending, but also as a social and political issue for which individuals may be held morally accountable. This paper examines the ways in which discourses of obesity are constructed around the notion of individual responsibility, such as the recent proposal to introduce a 'Fat Tax' on certain food types. These constructions are regarded as problematic in that they create a tension between agency/choice and broader social factors. This not only has consequences for the individuals involved in these discourses, but also for the interventions that are used to 'treat' obesity. The paper uses a discursive psychological approach, drawing on empirical examples from everyday conversation, internet discussion groups and health policy documents to illustrate the main arguments. It aims to contribute to the development of both obesity research and discursive approaches within social psychology. In particular, the topic of obesity is used to illustrate how discursive psychological approaches may be used to more directly address practical or applied issues.

Gender roles and dynamic stereotypes: A comparison between Germany and the US

A. WILDE & A. DIEKMAN, University of Koblenz-Landau.

Most work on intergroup relations has focused on the restrictive forces of stereotypes that constrain group members to remain in traditional roles. Work on dynamic stereotypes highlights that stereotypes about a group can incorporate visions of change (Diekmann & Eagly, 2000). From the perspective of social role theory, the perceived malleability of groups stems from actual changes in their typical social roles. If women move into male-dominated roles, they should be perceived as adopting the agentic traits necessary to fulfill these roles. On the contrary, because men's roles have remained relatively stable, stereotypes of men should be perceived as remaining stable. We compared perceptions of the roles and attributes of men and women of the past, present, and future in West Germany and the US. Because changes in social roles in both countries were fairly similar, we expected similar patterns of dynamic stereotypes. The exception to our predictions of cross-cultural similarity was the perception of women in the past. In the postwar period, German women held more nontraditional roles than US women; thus, we expected German women of the 1950s to be perceived as more masculine and less feminine than US women. In both countries, the attributes of men and women were assumed to converge based mainly on the perceived change of women. The largest area of cross-cultural difference was perceptions of women in the past, which included greater nontraditionalism for German than US women. We will examine the implications of these dynamic stereotypes for future social change.

Investigating homicide: The decisions made and the factors that influence the decision making process

M. WRIGHT & D. CANTER, University of Liverpool.

The way in which the police investigate homicide has received much attention over recent years (Byford, 1982; Macpherson, 1999; Innes, 2002). However, due to a lack of academic research in this area little is known about the decision-making processes of detectives during serious crime investigations (Mullin, 1995). This study therefore aimed to explore the types of decisions made by detectives throughout the course of a homicide investigation and the factors that influence the decisions that are made. Eleven Senior Investigating Officers (SIO's) from a large North West Police force in the UK were interviewed about a recent homicide case that they had worked on. Analysis of the interview transcripts revealed three types of decisions (procedural, particular and intuitive) that detectives make throughout the course of a homicide investigation. Five facets (victim, location, witness, suspect and motive) that impact upon the decisions made by detectives and the way in which homicide investigations unfold were also identified. These findings are discussed and the psychological and investigative implications outlined.

Guilty or responsible: How WE vs. THEY forms the link to prejudice

A. ZIMMERMANN, D. ABRAMS & A. ELLER, University of Kent.

This paper discusses the implications of a series of studies for the measurement, conceptualisation, and potential effects of Collective Guilt (CG) within the historical context of Germany. We examined the function of CG in a network of related constructs (such as negative affect, identification, feelings of responsibility, and the expression of anti-Semitic stereotypes) and how this network is affected by whether the individual feels integrated in or dissociated from the ingroup. Three questionnaire studies ($N=76$, $N=191$, $N=120$) focused on three main questions: firstly, how is CG affected by priming atrocities that are either identity-relevant (World War II) or identity-independent (Vietnam War)? Secondly, how do ingroup-identification and feelings of responsibility influence the expression of modern anti-Semitic stereotypes, and how are both of them related to CG? Thirdly, how does the manipulation of ingroup-closeness vs. ingroup-distance affect the relations between the different constructs? In short, the results of the studies revealed an indirect link of the manipulation materials to CG via negative affect. Both, ingroup-identification and feelings of responsibility fully mediated the link between CG and modern anti-Semitism. Interestingly, these processes seem to be strongly influenced by the manipulation of ingroup-closeness vs. ingroup-distance. In further detail, CG is only related to responsibility and modern anti-Semitism when ingroup-closeness is salient. However, as soon as the individual dissociates from the ingroup, CG is fully unrelated to both constructs, and only feelings of responsibility remain as the important factor for the reduction of anti-Semitic prejudices. The results are put in context of the current literature and implications for further research are discussed.

Psychology of Education Section Annual Conference

Psychology of Education Section Annual Conference, Glasgow, 5–7 November 2004.

SYMPOSIA

Symposium: How useful is the concept of mastery?

R. REMEDIOS, University of Stirling, J. ELLIOTT, University of Durham & J. RICHARDSON, The Open University.

The concept of mastery has a long history in the field of achievement motivation but recent evidence in applied settings has failed to show a positive relationship between mastery and academic performance. In this symposium, Richard Remedios (Paper 1) will be outlining the history of the concept of mastery and presenting the most recent evidence that has attempted to map this goal-related construct to outcomes such as motivation and performance. Richard will show how this evidence has (surprisingly?) failed to show a positive relationship between mastery and academic performance. Joe Elliot (Paper 2) will then examine why this might be so focusing upon his cross-cultural work that highlights many historical and cultural factors, other than goals, as crucial in enhancing motivation. Joe will also make reference to his recent work in England where teenagers have been asked to list reasons why they might want to succeed on schoolwork: it was found that mastery/performance goals were given very limited emphasis. Finally, John Richardson (Paper 3) will discuss alternative instruments that have attempted to capture constructs similar to mastery and how useful and predictive these have been in relation to outcomes such as academic performance.

Symposium: Research from the Newcastle University Centre for Learning and Teaching: The Power of Feedback

D. MOSELEY, R. LOFTHOUSE & E. HALL, University of Newcastle.

Learning to learn: Does it work?

D. MOSELEY

Learning to learn approaches are characterised by self-awareness at the individual, group and organisational level, developed through the conscious use of strategic thinking, action and reflection. The Campaign for Learning and others argue that learners and teachers need a shared vocabulary for talking about learning in the context of formative assessment and self-regulation. Centre staff have recently helped produce critical reviews of 35 frameworks for thinking and 13 models of learning styles as well as carrying out a meta-analysis of thinking skills interventions. An integrated framework for understanding thinking and learning has been produced, which accommodates concepts as diverse as educational objectives, strategic intelligence, creativity, emotional intelligence, thinking styles, thinking hats and reversal theory. The integrated framework will be used to interpret evidence from meta-analyses about 'what works' in education, reinforcing Hattie's conclusions about the power of feedback.

The nature of peer coaching and its potential for enabling the professional development of teachers.

R. LOFTHOUSE

This paper explores different models of peer coaching and how they can impact on professional practice. It is argued that the aim of peer coaching is for teachers to enter into a dialogue in which they seek and receive pedagogical feedback from a trusted colleague. This will then enable them to internalise certain forms of enquiry and reflection about teaching and learning. Drawing on recent experience of training and supporting teachers in the use of peer coaching, issues of understanding, implementation and sustainability are addressed.

Reference is also made to current evidence regarding outcomes and to the design of a more systematic evaluation of peer coaching.

A meta-analysis of the impact of thinking skills approaches on pupils

E. HALL

A systematic search of the research literature into the impact of thinking skills approaches on pupils' identified about 30 studies with evidence about the impact of such approaches. These studies used either control or comparison groups and evaluated the impact on pupils with quantitative tests. The studies indicate that thinking skills approaches are effective in improving pupils' learning. A meta-analysis of this impact found an effect size of 0.85 on cognitive measures (such as tests of reasoning or non-verbal measures such as Ravens Progressive Matrices) and an effect size of 0.63 for curriculum outcomes (such as mathematics, reading or science tests). Some caution is required in interpreting this meta-analysis, as there are considerable differences in the thinking skills approaches and programmes and included in the analysis. We interpret the general findings by noting that a key feature of thinking skills approaches is the enhanced quantity and quality of feedback made available through dialogue. We relate our findings to Hattie's conclusions about feedback, which are based on a large-scale analysis of meta-analytic research.

Symposium: Enhancing thinking skills: Evidential basis and organisational constraints for two methods

A. BRYCE, Aberdeen Educational Psychology Service, K. TOPPING, University of Dundee & S. TRICKEY, Clackmannanshire Educational Psychology Service.

This symposium explores two methods for enhancing thinking skills: Philosophy for Children (P4C) and Paired Thinking (PT). The evidence for effectiveness will be explored. Importantly for impact on practice and policy, the organisational constraints for quality implementation of both methods in both primary and secondary schools will also be explored. As the two methods have very different organisational benefits and costs, they have potential for parallel symbiotic deployment in schools. The discussion of P4C will draw on a recent systematic review of the international literature, and a large scale controlled implementation of a local variant in the primary schools of the Clackmannanshire authority, which involved multiple measures of impact. This is now rolling out to secondary schools. The discussion of PT will focus on the utility of the method in enhancing pupil interactivity in highly differentiated contexts with potential for enhancing thinking skills across the curriculum. A controlled study of value added by the method will be reported. The final plenary session will summarise the strengths and weaknesses of the existing research on the two methods and the organisational strengths and weaknesses of the two methods, with implications for impact on practice and policy, leading to an open discussion.

Philosophy for children: Definition and systematic review of evidence

S. TRICKEY

This paper summarises a systematic critical review of controlled outcome studies of the 'Philosophy for Children' (P4C) method (Lipman, 1981) in primary and secondary schools. The process of philosophical enquiry will be described and a brief video shown to illustrate a classroom 'community of enquiry' in action. In the systematic review, ten studies met the stringent criteria for inclusion, measuring outcomes by norm-referenced tests of reading, reasoning, cognitive ability and other curriculum-related abilities; indicators of self-esteem and child behaviour; and by child and teacher questionnaires. All studies showed some positive outcomes. The mean effect size was 0.43 with low variance, indicating a consistent moderate positive effect for P4C on a wide range of outcome measures. The implications of this review for future

research, including the subsequent Clackmannanshire study, will be considered.

Paired Thinking: Description of the method

K. TOPPING

Paired Thinking (PT) is described as a framework for pairs working together which builds thinking skills upon reading skills. Embedding the teaching of thinking skills in the transferable skill of reading has the advantage that reading is probably the most widely used means of obtaining information that requires deep processing. PT can be based upon any fiction or nonfiction reading material, from across the curriculum or outside school. Some difference in reading ability is needed in each pair. PT involves training tutors and tutees to ask increasingly intelligent questions about what they have read together (Socratic questioning). It can easily be differentiated for mixed-ability application. PT provides: modeling of intelligent questioning for the tutee, interactive cognitive challenge for both partners, practice in critical and analytic thinking, scaffolding, feedback, praise and other social reinforcement. A brief video demonstration of the method is included.

Philosophy for children: Evidence from an authority-wide implementation

S. TRICKEY

This study investigated the effects of collaborative philosophical enquiry on children in mainstream classes across all primary schools in an educational authority in Scotland. The Thinking through Philosophy programme was developed in Clackmannanshire to provide support material for the teachers. Teachers were given both initial and follow-up professional development. In a traditional two by two pre-post controlled design, experimental classes used collaborative enquiry for one hour each week over a 16-month experimental period. Outcomes were measured through a range of standardised tests, analysis of video recordings of classroom discussions and questionnaires. The evaluation indicated that children who were regularly involved in collaborative enquiry improved their cognitive ability, critical reasoning skills, self-esteem and level of participation in classroom discussion. The implications for practice, policy and future research are explored, particularly in relation to cost-effectiveness.

Paired Thinking: A controlled study of value added

A. BRYCE

This study aimed to explore the value added for thinking skills of moving from Paired Reading to Paired Reading and Thinking as compared to continuing with Paired Reading. Two classes of 11-year-old tutors were matched with two classes of seven-year-old tutees. All pupils engaged in a six-week Paired Reading programme. An experimental group then followed Paired Reading and Thinking for 10 weeks while a comparison group continued with Paired Reading for the same period. The thinking skills of tutors and tutees in both experimental and comparison groups were assessed before and after the programme. At pre-test there was no difference in thinking skills between the two groups of tutees. At post-test the experimental tutees' scores were significantly higher than those of the comparison tutees. There was no significant difference in thinking skills scores from pre-test to post-test for experimental or comparison tutors.

Symposium: Evaluation of the Department for Education and Skills' Behaviour Improvement Programme

S. HALLAM, F. CASTLE & L. ROGERS, Institute of Education, University of London.

As part of the Government's Street Crime Initiative, the Department for Education and Skills (DfES) funded 34 local education authorities in Phase 1 of the Behaviour Improvement Programme to support measures to improve pupil behaviour and

attendance in two to four selected secondary schools and their feeder primary schools. Over 700 schools were involved in the programme. The LEAs were selected on the basis of an indicator combining truancy and crime figures. The objectives of the Behaviour Improvement Programme are:

- to improve standards of behaviour overall;
- to reduce unauthorised absence;
- to secure lower levels of exclusions than in comparable schools;
- to ensure that there is a key named worker for every child at risk of truancy, exclusion or criminal behaviour by January 2003;
- to ensure the availability of full-time, supervised education for all pupils from day one of either permanent or temporary exclusion.

The purpose of the papers presented in this symposium is to describe the aims and methods of the evaluation being undertaken by the Institute of Education, University of London and to give an account of the initiatives being developed in schools and LEAs and the findings of the evaluation so far.

Paper 1: The Behaviour Improvement Programme: What it is and how it is being evaluated

This paper will begin by considering the aims of the Behaviour Improvement Programme (BIP) and how it has been implemented. This will be followed by a description of the first two phases of the evaluation and the methodologies adopted during them. In Phase 1, the evaluation drew on existing data bases, documentation submitted by LEAs to the programme describing their proposals, and telephone interviews with LEA co-ordinators to establish in more detail the nature of the projects being implemented and their progress. Examples of early difficulties and strengths were identified. From these data, 18 LEAs were selected to take part in Phase 2 of the research. Here, interviews were undertaken with the co-ordinating officers of the 18 selected LEAs and staff actively involved in the implementation of the BIP. From the interviews, data were gathered about the detailed implementation of particular projects, the kinds of problems that may have arisen and successful practices.

Paper 2: The Behaviour Improvement Programme: Behaviour and Education Support Teams

Behaviour and Education Support Teams (BESTs) constitute a crucial aspect of the Behaviour Improvement Programme. All LEAs participating in the programme have BESTs. The way that these function varies between LEAs with some working across the whole LEA, some based in individual schools and others working with clusters of schools. They also vary in the groups with whom they work, some focusing on children perceived to be at risk, others excludees and others parents. The make up of the teams is also varied and includes staff from a range of professional backgrounds. This paper will report the findings of in depth interviews undertaken with LEA co-ordinators and members of BESTs. Issues addressed will include: the nature of the work undertaken and with whom; the extent to which the BEST is perceived as successful; the perceived impact on pupils, parents and teachers; the nature of any problems experienced; and perceptions of the extent to which the effects have become embedded in practice.

Paper 3: The Behaviour Improvement Programme: Overview of the evaluation findings to date

This paper will review the evidence from the evaluation with regard to the overall implementation of the programme.

Based on the data from interviews with staff and LEA co-ordinators, it will consider the extent to which LEAs have:

- supported individual pupils at risk of developing behaviour problems and provided the co-ordinating support of a key worker;
- developed innovative approaches to teaching and learning to meet the needs of pupils at risk of disaffection;
- developed measures to identify and support

pupils and their parents who are not attending school regularly;

- facilitated the development of the role of the Lead Behaviour Professional;
- implemented the Behaviour Audit and its impact on policy and practice;
- extended the use of school premises to provide a range of services, activities and additional learning opportunities;
- based police on school sites working alongside school staff.

The difficulties experienced by schools and LEAs in developing these initiatives will be discussed.

Symposium: Understanding the reading difficulties of children learning English as an additional language (EAL)

J. HUTCHINSON & K. BURGOYNE, University of Central Lancashire.

There are many ethnic minority children within mainstream primary schools for whom English is their second language. Many of these children start school with little experience of the English Language. A greater awareness of the process of literacy development, especially the impact of weaker English language skills, will give a clearer understanding of their educational needs, and have implications for the early identification of educational difficulties and inclusive teaching practice. Within this symposium the first two papers report a longitudinal study following the literacy development of a cohort of 45 primary aged children learning EAL and 37 of their monolingual English-speaking peers (school years 2 to 6, ages six to 11 years). The first looks at the identification of reading difficulties, with a specific focus on the use of the Phonological Assessment Battery with second language children and the second at the developmental progression of reading comprehension and vocabulary skills. The third paper reports a study that explores the comprehension difficulties of 16 children learning EAL and 16 of their monolingual English-speaking peers, with a specific focus on the contribution of background knowledge on text understanding.

Paper 1. The identification of reading difficulties in children learning EAL

There is concern that children learning EAL are under-represented among children identified as having specific learning difficulties. It is generally accepted that literacy related difficulties should be identified early for interventions to have maximum effect. Whilst progress has been made in the development of screening tests for use with monolingual English-speaking children at risk of dyslexia, it is more complicated to identify such difficulties in children learning EAL. If all children are to have equal access to education, this issue must be addressed.

Using the Phonological Abilities Battery the pattern of change between school years 2 and 4 was assessed in relation to the development of reading accuracy between school years 2 and 6. The results raise issues with practical implications for the teaching and assessment of primary-aged children, especially those who are learning EAL. The implications of the findings for classroom practice and the early identification of dyslexia are considered.

Paper 2. The reading comprehension and vocabulary development of children learning EAL

Many ethnic minority children are faced with the enormous task of simultaneously learning a new language and accessing the early stages of the curriculum. Whilst EAL children tend to develop a reasonable level of reading accuracy, their ability to understand text lags behind, even though understanding text is a fundamental part of the reading process. Little research has been conducted on the text comprehension and vocabulary development of this group of children, identifying the specific nature of the comprehension difficulties experienced by EAL children will help teachers plan lessons to meet their needs. This paper focuses on the comprehension difficulties experienced by EAL children. Measures include receptive and expressive vocabulary, reading accuracy, reading and listening comprehension. Findings are considered in terms of the progression of the development of underlying

language skills and the impact of these skills on comprehension. Implications of the results for the understanding of comprehension related difficulties in EAL children are discussed.

Symposium: Is corrupt visual input is a major factor in classroom underachievement? New clinical evidence shows that current classroom environments and the work presented contributes significantly to underachievement.

I. JORDAN, Orthoscopes Ltd.

Paper 1. A brief overview of the Cambridge trials

Optometric, psychometric, EEGs and postural tests were performed in controlled illumination environments. The optimum conditions and school classroom were compared with startling results. The EEGs show that the alpha peak at the occipital cortex is greatly enhanced in the reading disabled group under school lighting conditions. This will inevitably cause underachievement. Optometric responses show that it is impossible for many children to achieve at school. Psychometric results show strong correlations with visual underachievement. Postural and balance tests were also affected adversely by school lighting.

Paper 2. Visual performance requirements in reading

Visual input whilst reading is extremely complex. An overview will be given of the tasks necessary to achieve optimum input before cognitive factors can be assessed. These include retinal responses (magnocellular and parvocellular), central and peripheral vision, the effects of the chiasma, lateral inhibition and excitation, retinal 3D mapping, fourier analysis of input, Pannum's areas, sequencing, Anisokonia, development of saccadal and pursuit movement, suppression, soft wiring effects, image waterfalloing, accommodation and convergence. Abnormal development will be visited and the responses found. Proprioception and sensory integration will be shown to be dependent on mapping. Vestibular responses and visual override will be discussed. The classroom environment is a visually unfriendly place and may provoke underachievement.

Paper 3. A model of visual input that predicts reading underachievement as a result of visual mapping anomalies.

There are many groups of symptoms found in people with reading, mathematics or proprioceptive difficulties (dyslexia, dyscalculia and dyspraxia). A model will be proposed that predicts most of the symptoms experienced together with testing and treatment techniques.

The magnocellular system will be shown to be the initial digital input to the cortex with responses to the cerebellum (and extrinsic muscles) and a proposed efferent response to the amacrine cells, the bipolar cells and the horizontal cells. This response allows the soft wiring to take place in the parvocellular system and accounts for fixation development in children. Parvocellular response becomes a 4D colour mapping effect. Mapping becomes variable and deficiencies in the mapping system replicate symptoms found. Reversals, inversions, movement and loss of visual field that are variable due to position of gaze and lighting become predictable. Testing and treatment techniques produce predictable results. The Optopraxometer, the Optimeyes, the Read eye and a number of other tests will be described briefly. Treatments will also be discussed briefly.

Symposium: Affective learning and emotional barriers to creativity

P. QUALTER, University of Central Lancashire
J. BUNDY, Bolton MBC, S. CORNWELL, Bolton MBC & B. KELLY, University of Strathclyde.

This symposium will present research on emotional intelligence and talk about its impact on educational policy and practice. The first paper considers the theory of emotional intelligence and presents scientific evidence for why emotional

intelligence underpins social and emotional learning and school success. The second and third papers describe and evaluate planned interventions to assist primary school children in developing key emotional intelligence skills. All three papers highlight the need to listen to children and encourage them to develop social-emotional skills.

Paper 1: Educational policy and emotional intelligence

P. QUALTER

In 2000, Mayer and Cobb highlighted the fact that educational policy on emotional intelligence appeared to be based more on mass-media science journalism than on actual educational and psychological research. In this paper, we ask whether the research field has moved on and we examine the scientific evidence for why emotional intelligence underpins social and emotional learning, and how emotional intelligence relates to success at school. We use data from our own and others' investigations to make recommendations for the future of educational policy on emotional intelligence.

Paper 2: Developing emotional intelligence across the primary age range: A case study

J. BUNDY & S. CORNWELL

This paper outlines a year-long project aimed at reframing existing behaviour problems within the context of developing and nurturing emotional competencies. The school involved in this project was situated in a socially deprived area and was experiencing constant low level behaviour difficulties which impacted upon the teaching and learning throughout the school. The project aimed to determine whether the specific teaching of key elements of emotional intelligence would enhance and develop the emotional awareness of pupils. It also aimed to make a positive contribution to the ethos of the school. Outcomes included significant increases in the children's overall emotional vocabulary, their ability to recognise their own emotions and understand their own emotional experiences. The introduction of an emotional literacy curriculum also lessened the gap between children who had high and low levels of emotional intelligence at baseline assessment.

Paper 3: Applying emotional intelligence: Exploring the Promoting Alternative Thinking Strategies (PATHS) curriculum

B. KELLY

This paper describes a collaborative project in one primary school that arose from a mutual interest in applying the concept of emotional intelligence. It involves an exploratory, qualitative study of the PATHS curriculum. This is an approach aimed at promoting emotional competence in children and young people. The PATHS curriculum was chosen because of its clear conceptualisation of emotion, its emphasis on cognitive and developmental aspects, particularly the link between emotion and thinking skills, and its research history. One class of nine- and 10-year-olds took part in the project. Target children were selected from within this group for close monitoring. The outcomes suggest that PATHS was rated very positively by class teachers, pupils and other staff. Positive emotional, social, behavioural and cognitive changes at a class and individual level were attributed to the effects of PATHS. The importance of a positive school ethos was highlighted as promoting these effects.

Symposium: Supporting group work in Scottish primary schools: The influence of rural/urban location and mixed-age classes

D. CHRISTIE, University of Strathclyde, K TOPPING, University of Dundee, A. TOLMIE, University of Strathclyde, K. LIVINGSTON, University of Strathclyde, C. HOWE, University of Strathclyde, A. THURSTON, University of Dundee, C. DONALDSON, University of Dundee & I. JESSIMAN, University of Strathclyde.

This symposium reports on the work of the project funded by the ESRC Teaching and Learning Research Programme as a Scottish Extension of the

TLRP Phase II project, Social Pedagogic Research into Grouping (SPRinG) led by Peter Blatchford, Institute of Education, Maurice Galton, Cambridge and Peter Kutnick, Brighton. The aims of the 'ScotSPRinG' project, which is a collaboration between the University of Strathclyde and the University of Dundee, were as follows:

- To examine how far programmes for supporting effective group work need to be adapted for use in rural and urban primary schools with composite classes, where interactional styles are potentially different from those in same-age classes.
- To identify a representative sample of teachers in rural and urban schools with and without composite classes, and recruit these teachers to in-service programmes which will support them in planning and implementing group work training activities for children and collaborative group work in the area of science.
- To collect data on learning outcomes for participating pupils, both in science and other areas of the curriculum, and also on changes in self-esteem and quality of collaborative behaviour in class.
- To establish whether there are differences in outcomes associated with cross-age vs. same-age pupil groups and rural vs urban settings, and to compare patterns of outcome to those obtained by SPRinG.
- To interpret the findings in the light of current models of factors affecting collaboration between pupils, and extend the social pedagogy being developed by SPRinG.
- To make recommendations about modifications to group work support programmes for teachers of composite classes in rural and urban schools.

It was hypothesised that differences in implementation and effects would be found between urban and rural schools and between single-age and composite classes. This papers in this symposium report data from various aspects of the investigation with relation to these independent variables. Generic training in group work skills was followed by opportunities for children to apply these skills specifically within the science curriculum (particularly two science topics – states of matter and forces and friction), with the expectation of subsequent generalisation across the curriculum. Dependent variables included science attainment, attainment in other core curricular areas, social relationships and self-esteem. The study employed an assessment battery which included general PIPS attainment tests for P7 pupils, tests of specific aspects of science and measures of self-esteem and social relationships. From a large pool of interested schools, 24 were selected in eight local authorities in Scotland. The selected schools provided a balance of urban single age classes, urban composite classes, rural single age classes and rural composite classes. Participating pupils were aged 10-12 years (P6/7). A pre-post design was coupled with gathering process data regarding implementation integrity. Data was also collected on the attainment tests from four control classes or schools. This symposium will be structured as three papers followed by plenary discussion.

Symposium: Research themes in psychology learning and teaching

J. AKHURST, University of York, C. HOWE, University of Strathclyde & C. MCGUINNESS, University of Belfast.

The aim of the Higher Education Academy Psychology Network (LTSN Psychology) is 'to promote excellence in the learning, teaching and assessment of Psychology across the full range of curricula and activities relevant to UK HE'. This symposium summarised the themes which have been explored and developed through the miniproject and special coordinators' work funded by the Psychology Network. The following are current topics receiving attention, and details of some of this research were given: widening participation, student support and retention, improving provision for disabled students, using C&IT to enhance student learning, student learning and development, employability, and the lecturer's experience.

Following an introduction, as outlined above, Christine Howe talked about 'Supporting the Transition to Higher Education Psychology'. The Government's widening participation agenda for

Higher Education means growing diversity across the students entering Psychology degree courses. Developments at secondary level, including the introduction of the new Higher Still programme in Scotland, are magnifying this tendency. This paper will discuss the consequences for Higher Education Departments of Psychology, and will outline some of the strategies that departments have used to deal with potential difficulties. Work sponsored by the Psychology Network will be used as illustrations.

Carol McGuinness will then describe some of the content of a successful workshop run by the Psychology Network: 'Teaching and Assessing Critical Thinking Skills in Psychology'. She will focus on the teaching of critical thinking in psychology, covering key concepts. She will distinguish between different kinds of critical thinking, giving examples of skills taught in psychology and other disciplines. She will then explore methods used to teach thinking and illustrate these with examples. The symposium is aimed at Psychology teachers in FE and HE who might be interested in hearing about our work, and to stimulate interest in research in this area. It will include a discussion of potential future directions for research into psychology learning and teaching.

INDIVIDUAL PAPERS

Creative thinking in a community of philosophical inquiry

C. CASSIDY, University of Strathclyde.

In education we promote creativity and thinking. Don't we? It is important in education that we consider carefully the objective and subjective meanings of 'creativity' and 'thinking'. This paper aims to reflect upon the subjective and objective notions of these terms and show how they may work in conjunction.

First, we must address the issue of whether or not all thinking is in fact creative and we must determine whether all individuals are capable of creative thinking.

For the purpose of this paper the practice of Community of Philosophical Inquiry will be used as a positive model for consideration of the two key concepts of creativity and thinking. I shall argue in this paper that all individuals are capable of creative thinking and shall draw upon both theory and practice to substantiate this argument.

Developing a framework for educators: Rising general intelligence and visuospatial abilities

E. COCODIA, University of New South Wales, Sydney, Australia.

This paper discusses the findings of three studies conducted over the last three years by the current author. The studies investigated whether rising human intelligence is evident in formal education settings. A framework for teachers and educational psychologists is proposed based on these findings. Flynn (1984, 1987) found that IQ scores have been rising steadily for at least, the last three to four decades. Does this rise in IQ scores signify that average general intelligence is also rising? The current researcher sought teacher perceptions of student abilities in four countries namely: Australia, Singapore, Korea and Nigeria. This study found that teachers perceived that students are more creative and very bright compared to thirty years ago (Cocodia *et al.*, 2003). Teachers reported that general knowledge, ability to do school work, average general intelligence and street smartness which are also pertinent aspects of general intelligence have increased significantly in the last three decades. Further investigations were conducted to determine if rapid environmental changes and access to more technology may be influencing intelligence levels. Data was obtained from examination bodies in Australia, the UK and Nigeria. School leavers' examination performance on those subjects which require high levels of visuospatial ability (a subset of the human intelligence framework) was analysed. Results indicated that performance on subjects such as mathematics, technical drawing/engineering science and art showed consistently more passes over a period of two to three decades in all three countries studied.

Recommendations are presented based on the current findings. A framework has been developed which may assist educators to be more equipped to deal with increases in students' creativity and general abilities due to rapid environmental changes, access to multimedia, a more visual environment and more technological advancement.

Creativity and the teaching of fiction writing: Recent innovations

S. ELLIS, University of Strathclyde.

Research suggests that direct teaching of structure, syntax and vocabulary improves the quality and quantity of children's non-fiction writing (Wray & Lewis, 2002). The use of modelling and writing frames to scaffold non-fiction writing in primary schools is now common. Similar approaches to teaching fiction writing are promoted by the National Literacy Strategy in England and by several popular writing schemes in Scotland. This paper argues that the creative processes involved in fiction writing are quite different. The unscripted nature of fiction writing requires a different type of scaffolding and modelling. In this paper I present some evidence from interviews with children, parents and teachers on children's writing. The evidence indicates that all these groups appreciate the value of an approach that prompts creative integration of writing and art. This talk will present the data on feelings and attitudes towards writing that came through from the interviews.

The effectiveness of practice in playful and formal environmental conditions

J. HOWARD, G. MILES & J. GRIFFITHS, University of Glamorgan.

Whilst it is generally accepted that children are naturally predisposed to play, there is limited research which has looked directly at the relationship between play and learning. This has partly stemmed from difficulties in defining what constitutes play. The present study used established knowledge about children's own perceptions of play to manipulate two learning conditions, one 'playful' and the other 'formal', in order to consider the effectiveness of practice in 'playful' versus 'formal' environmental conditions.

Thirty children aged three to five years participated in the study. The procedure was in three stages: (1) pre-test; (2) practice condition; and (3) post-test. During the pre-test, each child was timed in the completion of an 18-piece jigsaw puzzle. They were then allocated to either the playful or formal practice condition. In each practice condition children were given the opportunity to complete a range of puzzles similar in piece size and theme to that used in the test conditions. We used cues previously identified by children as indicative of play or work to set the practice conditions. The playful condition was completed on the floor without adult supervision or instruction, whilst the formal condition was completed at the table with the adult working alongside the child. Each practice condition lasted for eight minutes. In post-test, children were retested and timed in their completion of the initial 18 piece puzzle. The difference between pre- and post-test scores was used to measure the effectiveness of practice type. *T*-tests revealed a significant difference between the playful and formal practice conditions, children completed the test jigsaw puzzle quicker after experiencing playful practice conditions. We conclude that in this particular context playful learning was more effective than a formal approach. Finally, we identify the need for further research in order to allow more general conclusions to be drawn about the effectiveness of playful and formal approaches to learning in early years education.

Have they all got a tutor now?

J. IRESON & K. RUSHFORTH, University of London.

Private tutoring offers a flexible and relatively affordable way for families to support their children as they approach important transitions in the education system. International research indicates that there is wide variation between countries in the extent of private tutoring that follows the school curriculum. Tuition can also take many forms, from supplementary schooling in large

classes to individual tutoring in the home of the student or teacher. There have been very few surveys of tutoring in the UK. The aim of this paper is to provide a systematic description of the nature and extent of private tuition received by students at three points of transition in education. A sample of over 3000 students in 30 primary and 35 secondary schools and colleges participated in the research, in areas representing a range of demographic characteristics and school organisation. In each of these schools, students in year 6, year 11 and year 13 completed a questionnaire survey of the nature and extent of private tuition in school curriculum subjects, their views about and evaluations of private tuition and demographic information. Over a quarter of students reported that they had ever had tutoring. Most tutoring was for mathematics, followed by English and science. The proportion of students with tutors varied considerably from one school to another. Estimates from this survey suggest that there has been an increase in tutoring in mathematics. One of the main reasons for having a tutor was to help improve performance in tests and examinations. Implications for families, researchers and education policy will be discussed.

Towards a psychology of inclusive education

R. KERSHNER, University of Cambridge & P. HICK, University of Manchester.

Making progress towards more inclusive practices one of the main challenges facing educators today. When considering the provision for children described as having special educational needs, teachers and others have traditionally looked to educational psychology as a key source of ideas. Yet those seeking to promote more inclusive education have tended to see psychology and psychologists as part of the problem, given the role of psychology in, for example, providing an IQ-based rationale for the segregation of certain groups of children in special schools. This paper examines the possibilities for developing a 'psychology of inclusive education', with reference to relevant theoretical perspectives and practical strategies. The identification of psychological approaches to understanding teaching and learning in inclusive contexts and inclusive practice in the profession of educational psychology is intended to open up critical discussion on the topic and help formulate an agenda for research and development in the field.

Reflections on pre-schoolers' opportunities for creativity: Some lessons from abroad

M. MADINI & A. COCKBURN, University of East Anglia.

With the discovery of oil in the 1930s, Saudi Arabia has witnessed rapid economic and social changes. The Saudi government has devoted vast resources to the different stages of education as a result. Much of it to good effect. The education of women has expanded dramatically, for example. Sadly, however, there are some potential casualties along the way. This paper sets out to describe how the rapid expansion of pre-school education is, in some cases, severely limiting the opportunities to encourage creativity among both staff and pupils. The conclusions provide valuable insight into the general nature of young children's creativity and the under conditions under which it is likely to prosper.

Promoting joint-imaginative play with 'representational others' in pre-school children with autism

H. MARWICK, University of Strathclyde.

The Joint-Play Intersubjectivity Assessment Method (JPIAM) is a method of intervention and assessment in relation to communication, social understanding and imaginative representation in autism. It uses a joint-play setting for a series of interactions for pre-school children with autism with an adult partner, and applies a comprehensive category system of interpersonal understanding, imaginative representation and engagement. Recent work with the JPIAM has revealed the presence and development of rich joint-imaginative play and symbolic representation across a range of children

with autism over the course of a five-month intervention period, which contrasts with many reported findings in the literature on creative symbolic imaginative representation abilities in children with autism. This paper presents detailed findings for 18 pre-school children with autism of the occurrence and development of shared symbolic representation in imaginary play and joint-imaginative play involving representative others. It is argued that the JPIAM is a most effective context in which to study symbolic representation, imaginative creativity, sense of 'self' and 'other' and perspective awareness in autism because it promotes significant interpersonal motivations, feelings, ideas and expectations between the interactive participants.

Phonological awareness and word reading: Cross-linguistic issues in Oriya and English

R. MISHRA & R. STAINTHORP, University of London.

This paper investigates the relationship of phonological awareness to word reading in Oriya (one of the Indian National languages) and English. Oriya orthography has been characterised as an alphasyllabary (Bright, 1996). On the continuum of transparency, while English is an opaque, Oriya has a transparent orthography. Participants in this study were 115 Oriya-speaking fifth-graders with a mean age of 9.9 years: 66 came from schools taught in the medium of English and 49 came from schools taught in the medium of Oriya. They were given word reading and phonological awareness tasks in both languages. The results indicated that there were group differences on all tasks except for Oriya phonological awareness tasks. Further, correlational analysis showed that there was a strong relationship between phonological awareness and Oriya word reading. This supports the view that phonological awareness is essential in learning to read in all languages (e.g. Goswami, 1999). However, the role of phonological awareness in Oriya reading is yet to be explored. Moreover, the findings suggest that learning to read in an alphabetic language (English) facilitates the learning to read in an orthographically simpler language (Oriya) but not vice versa.

Thinking, feeling and doing: Creativity in Steiner-Waldorf schools

I. OBERSKI, University of Stirling.

The Steiner-Waldorf schools, of which there are 29 in the UK, four in Scotland and several hundred world-wide, are well known for offering a curriculum infused with creative activities. Thus, while in most other schools art, music and dance are maybe taught in addition to the three 'Rs', one could say that in the Waldorf schools the three 'Rs' are taught through art, stories, music and movement. Rudolf Steiner's ideas as well as their application in education are essentially holistic. According to Steiner, the will and feeling, developed through creative activities, gradually transform into healthy thinking. In order to begin to understand how the will and feeling are thought to transform into thinking, a questionnaire was sent to all Waldorf teachers in Scotland asking them how this happens in their own teaching. Some initial responses will be described and explored in the paper.

Students helping students: The effectiveness of peer mentoring in UK higher education

R. PHILLIPS, V. SWANSON & B. MORGAN KLEIN, Stirling University.

Peer mentoring has become increasingly popular in US higher education. However, little is known about its prevalence within the UK or whether it is beneficial. The current study assesses the availability of peer mentoring in UK universities and uses dropout rates to evaluate any possible benefits. Thirty-eight out of the 100 universities questioned provided incoming first years with a formal peer-mentoring scheme. However, 14 were departmentally based and a further six were only available to international, mature or disabled students only. Nineteen of the 38 schemes were within piloting stages and significantly more piloting schemes had been set up for widening

participation and/or retention reasons than the established schemes. The performance indicators for mature students demonstrate a lower than expected dropout rate for students within established schemes. A similar finding can be found for students from low participating neighbourhoods where the established schemes have lower than expected drop-out rate.

The ability to think: Continuing unexplained dramatic increases over time

J. RAVEN.

Raven's *Progressive Matrices* tests are widely thought to measure the ability to think. This view can be challenged by questioning the way 'thinking skills' and 'creativity' are conceptualised. As Spearman noted long ago, the important question is not 'How well can this person think?' but 'What does he or she think about?'

Be that as it may, Flynn and the author have shown that scores on the RPM and other verbal and non-verbal measures of educative ability increased dramatically over the past century and, cross-culturally, these increases were not affected by such things as differences in educational or child-rearing practices or access to television.

Data recently collected with the *Coloured Progressive Matrices* show that the increase is continuing. For example, the 50th percentile for six-year-olds has increased from 17 in the UK and many other countries around 1982, to 19 in Poland in 1991, and to 24 in Korea and Poland in 2001–2003.

Children's understanding of measurement of length

Y. REYNOLDS, University of London.

School curricula, including the National Numeracy Strategy, see measurement as a mundane practical skill to do with increasing precision and accuracy, and heavily featuring elementary number operations. By contrast, the only authoritative account of the development of measurement, Piaget's, sees it as built on important spatial, logical and mathematical foundations that develop through childhood and are independent of number. In the context of a series of tasks, backed up by interviews, this research investigates 83 five- to nine-year-old children's understanding of some logical pre-requisites of measurement of length. It also investigates ways in which children's numerical reasoning may interfere with their ability to measure. Selected findings of the research are presented.

Motivation, attitudes and approaches to studying

J. RICHARDSON, The Open University.

In North America, research on student learning in higher education has tended to focus on the impact of variations in students' motivation and self-regulation upon their academic attainment. However, in other countries, researchers have been more concerned with the quality of student learning, particularly as reflected in students' approaches to studying. There has been relatively little research on how these two conceptual frameworks are related to one another. The present study was designed to address this question by examining the relationship between students' motivations and attitudes towards studying and the approaches to studying that they adopt on their courses. A postal survey was carried out of a random sample of 100 students who were taking each of 10 different courses by distance learning with the Open University in the UK. The survey included the motivations and attitudes scales taken from the Motivated Strategies and Learning Questionnaire (MSLQ: Pintrich *et al.*, 1991) and the Revised Approaches to Studying Inventory (RASI: Entwistle *et al.*, 2000). The results are still being analysed, but they will address a number of issues. First, can the MSLQ and the RASI be employed to understand variations in student learning in the distinctive context of distance education? Second, what relationships exist between students' scores on the MSLQ and their scores on the RASI? In particular, do students' motivations and attitudes predict their approaches to studying across different courses and within the same course?

Finally, do students' scores on the MSLQ and the RASI predict their academic attainment on courses taken by distance learning?

Enhancing thinking and learning in HE students

C. SMITH, H. WHITELEY & R. LEVER, University of Central Lancashire.

This paper outlines ways in which awareness of learning styles can aid thinking and learning in HE students. Examples are given of how individual differences in learning style might be implicated in liking for and effectiveness of learning. A progress report is given on a HEFCE-funded project to allow learners to identify and enhance their learning style and to help teachers to accommodate learning styles into their teaching materials. Data are reported linking learning style to methods of teaching, dyslexia, ADD and learning outcomes. A description is given of a web-based package which allows students to identify their learning style and where it matches and mismatches their curriculum. The package also offers students an opportunity to follow an enhancement programme to reduce the mismatches between their learning style and their curriculum, thereby enhancing their thinking and learning.

Mapping the possibilities of reading: How readers make texts mean

V. SMITH, University of Strathclyde.

How do readers make texts mean? What resources do they bring to new and challenging texts in an attempt to understand them? Based on data gathered through an ethnographic study of children in primary classrooms, and of teachers studying reading at Masters level, this paper presents a series of maps or models that attempt to show the pushes and pulls of thinking that the children and adults use in order to make meaning from text. The paper argues that when these maps are contrasted, implications for the way reading is taught in schools become apparent.

South West Undergraduate Conference

South West Undergraduate Conference,
University of the West of England, 12 March 2005.

INDIVIDUAL PAPERS

The effect of different levels security on secure wards on nurses level of expressed emotion

S. ANDARGACHEW, University of Bath.

Expressed Emotions (EE) refers to 'the amount of criticism, hostility and emotional over-involvement (EOI), of a formal or informal caregiver, with respect to the patient' (Van Humberbeek *et al.*, 2003). Many studies have shown that patients suffering from a range of mental illnesses, whose carers (professional carers included) exhibit high levels of EE are significantly more at risk of relapsing than those who are exposed to low EE environments (Beddington & Kuipers, 1994; Butzlaff & Hooley, 1998; Kavanagh, 1992). The aim of this study is to compare the levels of EE amongst nursing staff on three forensic psychiatric wards all differing in levels of security. A pre-designed questionnaire (FAS) was used to assess the levels of EE amongst nursing staff. Based on the stress-vulnerability model of mental illness and the links found between increased symptom severity and poorer social functioning of patients and higher staff EE scores, the hypothesis is that levels of EE amongst staff increases as levels of security on the wards increases. This trend was exhibited in the results. The difference in EE scores between the ward of highest security and the two with lower security was found to be statistically significant. This research suggests a need for attention being paid to the relationships held on psychiatric wards of higher levels of security, whether in the form of staff support groups or training programs, focusing on the development of optimal therapeutic relationships.

The influence of computer experience on subjective assessments of cognitive workload

L. BATTYE, University of Bristol.

Current research comparing computer-based and paper-based tasks has moved away from traditional performance measures, e.g. speed and accuracy, and has begun to investigate differences in cognitive processing between the two media. Thirty-two undergraduates were used to investigate the relationship between computer experience and subjective assessments of cognitive workload (as measured by the NASA-TLX) between computer- and paper-based presentations of two general knowledge tests. A repeated measures design was implemented where the order of general knowledge tests and task modality was counterbalanced across participants. No significant differences in test scores or workload were found, although results suggest that computer experience influences subjective assessments of workload. This has implications for the use of this workload measure since differences in subjective workload ratings may exist for certain populations and be related to variations in computer experience. The suitability of various cohorts for future assessment of this relationship is discussed.

Crash and you're speeding: Factors affecting eyewitness accuracy when estimating the speed of motorbikes

J. BOWERS, University of Bath.

Research investigating eyewitness accuracy when estimating vehicle speed is sparse. Previously investigated factors include the effects of post-event information on speed estimation and the accuracy of speed estimates based on different perceptual conditions (i.e. auditory-only, visual-only or auditory-visual). However, these studies were methodologically limited, often not utilising a control condition or a variety of speeds. In the current study, 129 students witnessed 13 video clips of a motorbike travelling along a road. These clips varied in terms of the speed of the bike; whether it went on to crash (the post-event information); and whether the clip was seen

(visual-only condition), heard (auditory-only condition) or seen and heard (auditory-visual condition). Results indicate that eyewitness accuracy is generally poor, especially at low speed. It is significantly worsened when participants witness the motorbike crash, particularly in the auditory-only condition, which was the least accurate and most susceptible to post-event information. The results have important legal implications, as eyewitnesses are often a key source of evidence after a traffic accident has occurred. These implications are discussed, as are potential areas for future study.

Is there a relationship between a child's misbehaviour and the severity of punishment administered?

H. BURGESS & E. HENDRICKS, University of Exeter.

The proposed research aims to investigate the currently topical area of corporal punishment, more specifically the behaviours performed by a child that trigger a disciplinary response from a parent or guardian. It is hypothesised that if a child breaks a moral rule the parent will be more inclined to physically punish him/her by smacking compared to if a child breaches a social convention. A questionnaire containing hypothetical vignettes was distributed to a sample of parents, allowing for the six conditions of the study, which differ according to the age and gender of the child, to be investigated. It is expected that the research will highlight the effects of the age and gender of the child on punishment administered as well as situational influences and will raise implications for child socialisation.

Coping mechanisms in crime victims: An exploratory study into the coping mechanisms used by victims of burglary and robbery

S. COMPTON, University of Bath.

Research has focussed mainly on the effects of victimisation, with the majority focussing on rape. Clearly from previous literature the coping responses of victims deserves much more research, with the predominant coping research focussing on illness and encapsulated within health psychology (Filipp, 1992). Seeing as coping is also subjective, and is neither intrinsically adaptive nor maladaptive, an explorative study was created, to focus on crime victim's meaning making of their coping experience. This study focussed on burglary victims and victims of robbery. Two crime types were noted, in order to assess any major cross-crime-type similarities (Maguire, 1980). Six victims (three of burglary and three of robbery) were interviewed using a semi-structured pro-forma. The interview was constructed incorporating appreciative inquiry ethic, a method of organisational inquiry, in order to assess its validity. Victims were asked questions mainly about their coping experience, the positive coping experiences (appreciative inquiry based questioning) and the negative coping experiences. Coping is also segregated into emotion focussed coping (ways of thinking) and behaviour focussed (action) following Lazarus' (1966) similar split of coping into problem-focussed and emotion-focussed. Interpretative Phenomenological Analysis (Smith, 1996) is being used to analyse the transcriptions. Presently in the first stage of analysis, underlying themes of the need for support from family and friends seem prevalent. Also, the impersonality and generalisation of Victim Support services puts victims off. Similarly, the lack of feedback from the police has a negative effect on the victim's coping process.

Temporal arrangement of audio and visual components effects integration in a cross modal illusion: An ERP study

B. CREESE, University of the West of England.

A single flash is illusorily perceived as two when accompanied by two beeps (Shams, Kamitani & Shimojo, 2000). This will form the basis of the present study. In addition to control (no illusion)

and standard illusion conditions there are two experimental conditions that vary the temporal arrangement of the beeps so they either precede or follow the flash. The beeps and flashes remain within the 100ms temporal window of integration, and, therefore, the illusion should still be present according to the discontinuity hypothesis, furthermore the beeps are the most salient of the components and, therefore, the illusion should still occur according to the reliability hypothesis. Event related potentials (ERP) are being measured to determine if there are differences in the sites of integration at a neuronal level as a result of the temporal arrangements of the beeps.

Keeping all the plates spinning: Balancing work, life and parenting in dual-income families

F. CRUMP, University of Plymouth.

This paper explores the factors involved in balancing paid work, home responsibilities and leisure activities in dual-income families. Imbalance is a major source of stress producing high health and financial costs. A qualitative approach was taken in order to explore employees' actual experiences rather than draw conclusions from earlier, often conflicting, research. Participants (dual-income couples/at least one resident child under 14) were identified through their employers and 10 were invited to participate. Respondents participated in 45-minute, audio-recorded interviews – transcribed and analysed using grounded theory methodology. Early findings suggest employers who support flexible-working are rewarded by employees who show strong commitment. However, these employees do not perceive themselves to be happier or less stressed than their counterparts – indeed (women particularly) seem to be more overwhelmed by their lives and feel trapped by having been given what they asked for. Flexible working policies need to be revisited.

How personality styles associated with rumination are related to depression and problem solving

J. DAWSON & A. OTTWEILL, University of Exeter.

Objectives: It was hypothesised that rumination would be significantly correlated with neuroticism, a tendency towards validation seeking rather than growth seeking, and poor problem solving. Validation seeking is the tendency to assess all situations as a test of one's worth, whilst growth seeking is the tendency to assess all situations as an opportunity for growth and learning. **Design:** 60 undergraduate participants completed five questionnaires designed to assess rumination, self-reported problem solving, personality style and validation vs. growth-seeking orientations. **Results:** Standard correlations will be used to test basic relationships for each of our predictions and if more than one factor shows a significant correlation then a hierarchical regression will be used to test interactions between variables.

Study of the visuo-spatial suffix effect: Abrupt versus non-abrupt suffixes

K. FERRIER, University of Plymouth.

The visuospatial suffix effect (loss of recency induced by an irrelevant end of list item) was studied in 22 first-year psychology undergraduates using a serial recall task involving the memory for the locations of dots on a computer screen. A within-subjects design was used to examine the impact a spatially distinct irrelevant item (suffix) would have on serial recall. The experiment compared order memory in three conditions: no suffix, a suffix with abrupt onset, and a suffix with non-abrupt onset. The results revealed that the non-abrupt suffix impaired the overall level of recall accuracy and that the impact of the suffix on normalised recency was stronger for the abrupt suffix than for the non-abrupt suffix. This implies a general as well as specific suffix effect within the visuospatial domain, which is possibly explained by shifts of spatial attention.

Competition and re-analysis in sentence processing

M. GREEN, University of Exeter.

The objective was to examine whether competitive or reanalysis accounts of sentence processing better account for evidence from the gerund/adjective ambiguity. Three conditions were used: temporary ambiguity subsequently resolved to gerund; temporary ambiguity subsequently resolved to adjective; and a globally ambiguous condition. Twenty subjects were sampled from 20- to 30-year-old male and female Exeter University students and recent graduates. Materials were constructed from Tyler and Marslen-Wilson (1977). The materials were presented in segments in a self-paced reading task allowing for examination of effects in the critical ambiguous and continuation segments. Analysis was done by repeated measures ANOVA. The results indicate no support for competitive models in the ambiguous region; support for reanalysis in the continuation region for temporary ambiguities; and support for competition in the continuation region for the global ambiguities.

A longitudinal investigation into the processes underlying gender's effect upon language development

J. HALL, University of Bath.

It has been known for considerable time that gender effects children's language development. Based upon findings such as those from EPPE (Sylva, Sammons *et al.*) (2004) and Shaffer (1993), a supposed mechanism explaining gender differences in language development was tested here. This being children's home environments. In testing the role of the home environment, a longitudinal, multivariate, secondary analysis of the quasi-experimental Families Children and Child Care (FCCC) dataset was performed. With a sample size of 922 children, four time points and three variables being tested, Structural Equation Modelling (SEM) was used to simultaneously test theorised interactions between:

- Gender;
- Home Environment;
- Language Development.

Home environment was comprised of the emotional responsiveness of parents and the avoidance of restriction of their child. It was found that 'Home Environment' had a small, though significant, mediating role in determining how girls and boys differ in their language development. Girls have more responsive parents who are also less restrictive of them. The importance of the home environment's role is only small comparatively though. It was shown that early language development is the largest predictor of itself later on, irrespective of gender, home environment or Socio-Economic-Status (SES).

'He wouldn't like that, it would hurt him': Children's essentialist views of their attachment objects

C. HARDY, University of Bristol.

It is common practice for children to form attachments to chosen objects and to innately categorise natural kinds using unobservable 'essences'. This study aims to show that children use essentialism to categorise their inanimate attachment objects. Children decided whether their object would respond in the same way as an animal or an inanimate toy in three situations. For example, if pinched would it be 'hurt' or 'squashed'. Children were then asked how a 'matched' object, similar appearance and labelling, would respond. A picture triad task confirmed how children categorise in 'normal' circumstances. And parents rated their child's level of attachment to the chosen object. A median split divided results into two groups: A (not attached); and B (attached). Group A categorised all inanimate objects into the same group. Group B, however, used essentialism when judging their attachment objects believing them to hold an animate value that that the other inanimate objects did not.

Sex differences in the dynamics of dyads and groups

S. HEATH, University of Plymouth.

Based on prior evidence of sex differences in social structure, this study examined whether performance by males and females benefited most from participation in dyads or groups. Ninety-five 11-year-old children engaged in a free form task, in which they were required to produce and perform a five-minute drama in either dyads or groups. Analysis of the data has not been conducted yet. The measures used will be observations of comfort, enthusiasm and quality levels. This will be achieved via coding of video the video evidence. Cortisol samples were also taken from the children to indicate stress levels within the dyad or group. Finally self-report questionnaires were also taken.

The effect of ruminative responses on central executive functioning: An experiment utilising eye-tracker technology

M. HEFFORD & R. NICOL, University of Exeter.

Empirical research has shown that rumination is implicated in the maintenance of depression by interfering with normal thought processes. Rumination has also been found to effect central executive functioning when carrying out such tasks as academic work or random number generation. This experiment aimed to examine the effect of rumination and distraction inductions on central executive functioning by means of a measure of saccadic eye movements, using an eye-tracker. A 2 x 2 design comparing dysphoric and non-dysphoric students on a rumination and distraction induction task was used. Fifty participants were recruited by opportunity sampling. All participants completed the Beck Depression Inventory II, mood assessment questionnaires (PANAS), to control for the effects of mood) and undertook both pro- and anti-saccade tasks on an eye-tracker. It was hypothesised that dysphoric participants in the rumination condition would perform significantly worse on the eye-tracker tasks than those in the distraction condition. Future studies would benefit from using a clinical sample.

Eye-catching criminals: Are suspects giving themselves away?

C. JONES, L. WENMAN & R. TERRY, University of Exeter.

The evidence from eyewitness testimony is of extreme importance. The recent introduction of video suspect identification procedures such as PROMAT is likely to spur further research into the validity of identification techniques. Witnesses pick the suspect either because they genuinely recognise them or because the suspect engages in non-verbal behaviour that 'gives themselves away'. Participants were shown real suspect video line-ups and asked to choose who was most likely to be the suspect. Participants had only information about appearance and non-verbal behaviour when making their decision. When analysing our results the focus will be on whether, for participants who haven't seen the people in the line-up before and particularly where a guilty verdict and conviction was the outcome, it is more likely that participants will choose the suspect. If the results show that the suspect is picked more often than chance, this could indicate the influence of non-verbal behaviour. We also predict a difference in suspect certainty in relation to crime severity.

Does speech accompanied gesture facilitate or inhibit verbal and spatial working memory in a dual task experiment?

R. ISON, University of Bristol.

A dual task experiment, based on a study by Wagner, Nusbaum and Goldin-Meadow (2004), was used to compare the effects of gesture upon verbal and spatial working memory. It was hypothesised that whilst gesture may facilitate verbal working memory, it inhibits spatial working memory. The experiment used a two by two within subjects design. The dual task experiment included a primary task, which was to solve a maths problem and explain it and a secondary task, which was a

working memory task, either verbal (digit span) or spatial (Corsi block). The participants were free to gesture during their explanation of the maths, half of the time but had to remain still for the other half. Thirty-nine undergraduates took part and results using a 2 x 2 ANOVA found that there were no significant effects, in relation to gesture and memory. Whilst the evidence was non-significant a discussion about the mental representation and facilitatory effects of speech accompanied gesture was raised.

The role of paternal involvement in predicting language development in children

D. LYUS, University of Bath.

Despite a large number of studies investigating the effects of paternal involvement (PI) upon children's outcomes, few have examined the individual longitudinal effects that fathers can have in the first few years of life upon their offspring's language development. This study used data (N=721) from the Families Children and Childcare project (Sylva, Stein, & Leach, 2000) to test the hypothesis that PI at 10, 18 and 36 months can be predictive of child's language development at 36 months. To determine the individual impact of PI same source bias was avoided, and maternal involvement (MI) was controlled for in the analysis. Hierarchical multiple regression models revealed no significant relationship between the PI at any time point and language at 36 months. The conclusions drawn were, therefore, that the effects of PI upon children's language outcomes were not evident prior to 36 months. However, methodological weaknesses were recognised as having a part to play in determining the results.

An investigation into implicitly learned spatial sequences

C. MARSHALL, University of Plymouth.

The Hebb effect (1961) is the phenomena observed when participants show significantly improved recall for repeated sequences compared to non-repeated sequences (fillers). This experiment attempted to replicate the Hebb effect within the visuo-spatial domain utilising the dots task in 29 first-year psychology undergraduates. In this unique and first study of its kind a between-subjects design examined the effect of increasing the number of filler sequences between the penultimate and final repeated Hebb trial in order to determine if the Hebb memory trace is maintained or degraded via decay theory. In addition, a questionnaire was administered to participants in an effort to determine if awareness of the repeated sequence affected recall performance. The results revealed that the Hebb effect was successfully induced, but both retention interval and awareness were not significant factors in the results, although positive relationships were observed. Therefore, future research requires larger sample sizes for the results to gain statistical significance.

Are you a texter or a talker? An investigation into dispositional factors on mobile phone use

S. NICHOLLS & R. DAVIS, University of Plymouth.

The study investigates whether it is possible to predict an individual's preference for 'texting' rather than 'talking' on a mobile phone. Independent measures of social anxiety, self presentation, self monitoring and social self efficacy were combined in an online questionnaire gauging the preference of mobile phone use. A multi-page online questionnaire was used to collect the data. This method was selected to gain a larger sample. Two-hundred-and-eleven participants were obtained through self selection by responding to an e-mail sent by the researchers. The analytical strategies used were factor analysis on the text/talk dichotomy. Multiple regression on the effects of the IVs on the DVs anticipated results are described, though data is still in progress. Conclusions include recommendations for mobile phone design and importance of the text messaging function.

Emotional and behavioural difficulties in children: The impact of a universal prevention programme

C. OSBORN, University of Bath.

A standard efficacy study exploring the impact of an Australian cognitive behavioural therapy programme on the anxiety and self-esteem levels in children, the results from 213 children were analysed. Two self-report measures were used to evaluate the FRIENDS programme – the Culture-Free Self-Esteem Inventory (CFSEI) and Spence Children's Anxiety Scale (SCAS). The results showed a significant post-intervention elevation in total self-esteem and two of the four esteem sub-scales: general self-esteem and parental self-esteem. There was also a significant post-intervention reduction in total anxiety and five of the six anxiety sub-scales (panic attack and agoraphobia, separation anxiety, social phobia, obsessive-compulsive and generalised anxiety/overanxious disorder). However, the second hypothesis – that those children with high symptoms at time one would not improve as much as those with more intermediate symptoms – was not supported by the data collected, in fact the opposite trend was discerned. The results of this study further bolster the argument that early intervention and prevention CBT programmes reduce anxiety and promote self-esteem and are an important and useful strategy in the combating of childhood depression. The findings are consistent with other evaluations of the FRIENDS programme in Australia and elsewhere.

Design and social science students' groupings of chairs as similar according to design, social context and emotion

F. PALMER, University of Bath.

Investigation into whether Design and Social Science students differ in how they understand living room chairs socially, emotionally and visually – in terms of design, and how they structure these views into their lives. Participants were second/final year Nottingham Trent University students – 12 male, 12 female Furniture and Product Design, and 11 male, 12 female Social Science students; selected by opportunity sample. The methodology was a replication of Miller and Kalviainen (2001), with the added dimension of emotion: A free-sort methodology was used for each participant to group 36 photographs of different living-room chairs, three times, according to their similarities – once in terms of design, again in terms of social context, and again in terms of emotion (with the orders that participants did so being alternated). A multi-dimensional scaling analysis was used in order to produce graphical plot representations of the groupings, and content analysis of participants' descriptions of the chairs to label these graphs. These graphs, thus, depict the different groupings of chairs, patterns of positioning of these groups within each plot and attributed group (land axis) labels. Results seem to indicate common patterns of grouping and differences in emphasis of sort criteria between the Design and Social Science students; however, the continuation of qualitative analysis will reveal the degree to which this occurs.

An investigation into the effect of specificity and amount of evidence on belief revision with conditional statements

K. SANDLE-BROWNLIE, University of Plymouth.

People frequently revise their existing beliefs when they encounter new information that contradicts them. For example, imagine you know the following:

If you read newspaper A you will be well informed about current affairs.

Jack read newspaper A.

How would you explain the situation if you later discovered that Jack is not well informed about current affairs? The purpose of this study is to examine whether the number of contradictory cases (singular: *Jack read newspaper A* vs. multiple: *40 people read newspaper A*) and the nature of the conditional statement (general: *If you read the newspaper* vs. specific: *If you read newspaper A*) affect what beliefs are revised or rejected. Thirty participants will resolve 12 inconsistencies of this

sort. The hypothesis is that people will be more likely to reject a conditional statement if it relates to a specific case or if the contradiction involves multiple cases.

The influence of maternal depression on children's social and behavioural development

P. SCOLLO, University of Bath.

A longitudinal correlational design was employed to investigate the relative importance of maternal depression in specific aspects of children's social and behavioural development in both the home and school environment.

Method: In total 295 mother-child dyads and teachers were included. Maternal depression was measured using the EPDS* at three years of age. Subscales from the ASBI** completed by both mothers and teachers at four years of age were used as variables measuring specific aspects of children's social and behavioural development. **Results:** Multiple regression models for both measures in the home and school environment were constructed. An independent effect of maternal depression was found on 'compliance and conformity' in the home environment ($r=-0.123$) and this was significant ($p<0.05$). An independent effect of maternal depression was found on 'confidence and independence' in the home environment ($r=-0.162$) and this was significant ($p<0.01$). The final model produced for 'compliance and conformity' in the home environment was ($r=0.410$, $F(4,284)=14.144$), the final model produced for 'confidence and independence' in the home environment was ($r=0.365$, $F(4,287)=10.877$). Maternal depression did not have a significant effect on 'compliance and conformity' and 'confidence and independence' in the school environment. Nor were there any relationships between maternal depression and 'anti-social' and 'pro-social' behaviours in the home and school environments.

Conclusion: Maternal depression is a significant factor for mother's ratings of 'compliance and conformity' and 'confidence and independence'. Important implications for children's development are discussed. The present study locates previously unidentified key areas of concern which warrant further study.

The social construction of asylum seekers and refugees: A discourse analysis of the Australian press

A. SERLACHIUS, University of Bath.

The increase in critical analysis of political and public discourse surrounding asylum seekers and refugees in Australia has helped bring awareness to an issue that has caused a lot of controversy in Australia as well as abroad. Recent literature has explored the use of racist rhetoric, constructions of prejudice, and how discourse is used to reinforce negative beliefs about asylum seekers and refugees in Australia. The majority of these studies focus on discourse in relation to key events involving asylum seekers and refugees and how racist rhetoric and other linguistic resources are used to construct asylum seekers and refugees as a threat. The aim of this paper is to build on earlier analyses and to examine how asylum seekers and refugees are portrayed in current every-day news discourse in the Australian broadsheet press. The methodology employs a combination of critical discursive approaches, such as Potter and Wetherell's (1987) discursive approach, as well as Michael Billig's (1995) discursive approach. Discourse analysis can attempt to challenge widespread negative representations of asylum seekers and refugees that are often reinforced through public discourse such as the media. This paper examines how discourse is used to differentiate asylum seekers from other social groups, and suggests that such discourse helps to reinforce the exclusion and blaming of asylum seekers in Australia. The study also examines and suggests how discourse in the press is used to justify policies such as mandatory detention and strict border control. The discourse of power is also considered and how power can be used to reinforce taken for granted assumptions, such as a country's assumed right to decide who can and cannot enter their borders. All of these discourses have significant implications on social understanding and knowledge of asylum seekers and refugees in Australia.

The role of school culture and empathy in two structurally distinct American high schools

J. TONKS, University of Bath.

The relationships between moral reasoning, behaviour, empathy, altruism and school culture were investigated in a sample of students aged 15 to 18 years of age, 48 attended Scarsdale Alternative School (SAS) and 28 studied at a regular American high school (SHS). Using Kohlbergian theory, SAS is an egalitarian democracy strongly encouraging and valuing student contribution in all academic aspects. This Just Community approach aims to raise levels of moral reasoning as well as school culture. It is hypothesised that the greater the empathy of a student, the greater the altruism; the higher the level of school culture, the higher the level of empathy; SAS will have a higher school culture score than SHS; and that SAS will have a higher level of empathy than SHS. The School Culture Scale (SCS), Self-Report Altruism Scale, and Interpersonal Reactivity Index (IRI) for empathy measurements, were the assessment methods used. Preliminary correlative analysis suggests significance between empathy and altruism levels in the direction predicted, high school culture is significantly linked to high empathy, and that SAS does have a higher school culture score than SHS. However, no significance was found between the two schools regarding empathy. These findings are particularly relevant for furthering school-related systems to increase adolescent understanding and exhibition of prosocial behaviour.

When writing helps: The differential effects of experimental and conceptual-evaluative self focus, following an upsetting event

A. TRUNDELL, University of Exeter.

This study aims to test Teasdale's (1999) hypothesis that conceptual-evaluative self-focus hinders emotional processing, whilst experiential self-focus facilitates it. Forty-five participants were asked to identify a real-life upsetting event, which they had experienced in the last three weeks. Participants were then divided into three groups and asked to write for 15 minutes. The 'experiential' group focused on how the event occurred and what happened moment by moment. The 'conceptual-evaluative' group focused on why the event happened and its implications. The control group wrote about a neutral topic (how they spend their time). Self-report measures of mood and behaviour were completed immediately after writing. The same measures were completed approximately 24 hours later, along with measures of rumination and intrusions. It was expected, based on the results of a similar study by Watkins (2004), that participants in the conceptual-evaluative group would exhibit higher levels of negative mood, behaviour and intrusions 24 hours later than participants in the experiential group.

Evaluation of the National Mentoring Pilot Scheme (NMPS) in a Plymouth secondary school

S. WATSON, University of Plymouth.

The NMPS was set up in 2000 to provide student mentors to pupils aged 11 to 18 years of age in schools situated in 19 Education Action Zones across the country. The scheme has reached the end of its pilot term and requires further funding. This provides a rational for a review of its successes, but also the insights that a review of a new scheme can provide into the application of mentoring as a popular and developing tool. An in-depth qualitative study is being undertaken consisting of 12, 45-minute semi-structured interviews with mentors and mentees being selected based on those longest in the scheme at the University's target school. Four areas of interest have been developed; their expectations, the relationship and matching process, helpful aspects of mentoring and changes in the mentee. Grounded theory analysis of the data is being conducted and conclusions may draw upon concepts such as Rogers' person-centred theory and aim to indicate possible improvements to the scheme.

Emotional and sexual infidelity: Gender differences in attitude

C. WILLIAMSON, University of Plymouth.

Using hypothetical situations in which both emotional and sexual infidelity has occurred within a long-term emotional and sexual relationship, participants will be asked to rate their emotional reactions in accordance to their partner's actions. They will also be asked more general questions to gain more background information. Fifteen male and 15 female students will be employed to complete the questionnaire, using a 2 x 2 ANOVA design, in order to examine gender differences in attitude towards both emotional and sexual infidelity. Following the results of past studies it is expected that women will find emotional infidelity more upsetting and threatening, whereas men will be more emotionally reactive to sexual infidelity. This is due to men needing certainty that a child is their own and not someone else's, whereas women find emotional stability more precious as they need support and protection while raising a child.

The social competence of ADHD children and adolescents with comorbid internalising or externalising disorders

R. WILSON, University of Bath.

The study assessed the social competence of 26 ADHD children and adolescents who were clinically evaluated by the Child and Adolescent Psychiatric Evaluation Services (CAPES) within the New York State Psychiatric Institute. The difference in social knowledge and performance was established between groups of children and adolescents with ADHD and a comorbid disorder. The comorbid disorders were either of an internalising nature (anxiety or depression), or externalising (Oppositional Defiance Disorder (ODD) or Conduct Disorder (CD)). The social knowledge was measured with the comprehension subtest of the WISC III. The social performance was measured with the Child Behaviour Checklist (CBCL) and the Teacher Report Form (TRF). It was hypothesised the ADHD group comorbid with internalising disorders would have higher levels of social knowledge, whereas the ADHD comorbid with externalising disorders would have more social performance problems identified on the CBCL and the TRF. A further hypothesis suggests the directions would become more pronounced with age. No significant difference was found between the social knowledge and social performance of the two diagnostic groups. The difference between the two age groups within the diagnostic categories upon the two measures was also non-significant to date. The study identifies the clinical importance of addressing the social problems during treatment of the ADHD child

POSTER PRESENTATIONS

The affect of stage of linguistic development on the suggestibility of children: Could less developed mean less suggestible?

L. ETHERINGTON, University of Bristol.

The study sought to investigate, the developmental understanding of the definite article and its affect on memory for items, contained within a story context. It was predicted that, individuals who were less linguistically developed would be less suggestible to the implication of questions utilising the definite article, than individuals who were more linguistically developed. Twenty-three children participated in the study, ranging in age from three years two months to five years two months. Participants were required to listen to a story, whilst looking at a corresponding picture book, and then to answer questions about whether certain items had appeared. A two factor mixed samples ANOVA will be run on the data, between stage of linguistic development, and number of false positive responses to definite questions. Initial results indicate that the form of the question has little affect on item recall accuracy. However, almost all participants were classified at a lower stage of linguistic development. It could be proposed, that current theories regarding the age of accurate comprehension of the definite/indefinite articles in children need to be revised.

The effect of sex (and age) on helping and hurting behaviour

E. FOYLE & C. HOLT, University of Plymouth.

To investigate whether there are any sex differences in helping and hurting behaviours. Early research suggested that girls engaged in more pro-social behaviour than boys, however this view was contradicted by more recent research showing that girls engaged in relational aggression. This research aimed to clarify which of these is the case nowadays. Two-hundred-and-seventy-four participants were used, 60 stage one psychology undergraduates (30 females, 30 males), 104 Secondary school students (55 females, 49 males) and 110 primary school students (60 females, 50 males). All of the school students were selected by those who had returned their consent letters, and the undergraduates were recruited from the participant pool. A paper-based questionnaire was used, the secondary school and undergraduate students were asked to fill it in on their own and the primary school students were interviewed using the same questions. Results showed that females engaged in more helping behaviour towards their same-sex friends than males and both females and males engaged in the same amount of hurting behaviour towards their same-sex friends as each other. Results indicate that girls are both more pro-social than boys but they are as hurtful as boys, this finding reconciles the previous research.

An investigation into the long-term neurological effects of concussion injuries in athletes

T. GENDERS, S. FARRINGTON & A. FALCONER, University of Exeter.

This study investigated long-term neuropsychological effects of concussion injuries in athletes of both sexes, aged 18 to 25 years of age. Little research into the long-term effects of concussion and more specifically of multiple concussions has been done. The aim was to further the findings of Moser and Schatz's (2002) study on adolescent athletes who found that athletes with a history of multiple concussions performed significantly worse on neuropsychological tests than those without such history. The study consisted of recording signs and symptoms of concussion and a battery of both pen and paper and computer based neuropsychological tests. The results (analysis pending) will focus upon the differences between athletes with no/single/multiple concussions. The data from females and males will be analysed separately and then together as a group. Comparisons will then be made between the gender groups.

The relationship between sleep stages and declarative versus procedural learning difficulties in obstructive sleep apnea patients

R. GIBSON, University of Plymouth.

The object of this research is to consider cognitive deficits faced by obstructive sleep apnea patients with regards to sleep stages and memory processing. The hypothesis tested is that apnea patients will find learning of both procedural and declarative tasks more difficult than apnea patients on treatment and controls due to severe sleep fragmentation and/or hypoxia. Procedural learning may be significantly affected due to a reduction in REM sleep which has been connected with cognitive procedural learning. There are approximately four participants in each group. Participants are being tested on the mirror trace task (procedural learning) and a paired associates task (declarative learning). The results will be considered with respect to daytime sleepiness and a sleep log. Participants are then tested a week later to measure learning after sleep. Data is still being collected.

The phenomenology of the therapeutic relationship in complementary treatments

H. HARAKE, University of Plymouth.

In past research, reports of a 'Special connection' in the therapeutic relationship have been described. In development of this, a full phenomenological analysis was carried out after interviewing five

complementary Therapists. A description of their experiences of the therapeutic relationship with clients was based around the idea of a 'Special Connection' in the interview and analysis stages. The main themes that arose were the importance of trust and openness from both client and therapist. A recurrent degree of difficulty was detected in description of the exact therapeutic relationship across the sample of therapists. An attempt to determine the mechanisms underlying this sense was attempted considering with the 'Entanglement Hypothesis' appearing most explanatory. This seemed to relate to the type of therapy adopted by the Therapist. The implications for further study include sampling more Reiki therapists as this therapy seemed to most highly correlate with the nature of the 'Special Connection'.

How counterfactual primes effect hypothesis testing ability

R. HARDISTY, University of Plymouth.

People generate counterfactual thoughts when they imagine what might have been 'if only' things had happened differently. These counterfactual thoughts serve many functions, one of which may be in priming people to think of alternatives. In this experiment, participants were given either a scenario which primed them to think about counterfactual alternatives or one which primed them to think about what actually happened. Participants were then given the Wason 2-4-6 hypothesis testing task to see if this counterfactual prime affected subsequent behaviour in the way they solved the task and the hypotheses they generated compared to the control group. The results show that participants in the counterfactual group reached the correct hypothesis significantly more often than those in the control group. The results of the number of trials it took, the number of announcements that were made and the amount of confirming, falsifying and varying hypotheses used will be discussed.

A qualitative study of women's feelings about sexual desire

N. HAYFIELD, University of the West of England.

The study's objective was to gain insight into women's feelings around sex and affection and consider whether the stereotype of 'women lacking libido' is still relevant within long-term heterosexual relationships. Research in this area is limited, and appears contradictory; many who have worked within this field call for further research. A sample of 12 participants was recruited to take part in tape-recorded interviews, which were then transcribed. The only stipulation of eligibility was that participants must have been in a heterosexual relationship for over 18 months. The data is yet to be analysed, but will be interpreted via thematic analysis. This qualitative approach will allow exploration of participants' social/personal worlds through recognising emergent themes in the data. Underlying themes or topics that are emerging in early data analysis include men perceived as 'needing' sex, sex as a gift from women to men, and women's mixed feelings about desire.

Using the Wason selection task to investigate the Dual Process Theory of Reasoning

E. HEATH, University of Plymouth.

Thirty first-year psychology students participated in the present study which aimed to investigate the Dual Process Theory of Reasoning by using the Wason selection task. In a study by Feeney and Handley (2000), it was demonstrated that by introducing a second rule in the selection task, individuals were less likely to choose the q card due to the second rule encouraging the individuals to engage in deductive inference (which is carried out by System 2). In the current study, to debilitate explicit deductive reasoning (System 2), participants were asked to keep digits in their working memory. A within-participants 2 x 2 design was used and each participant completed four selection tasks. The results are currently being analysed and it is hoped that the study will give rise to greater insight into the dual process theory and whether or not two separate cognitive systems actually exist.

The effect of state and trait anxiety on saccadic eye movements in relation to emotional stimuli

B. MEAD, University of Bristol.

The purpose of the experiment was to investigate whether the effect of a saccadic bias to threatening stimuli in anxious subjects was a result of state or trait anxiety. Experiment 1 used an eye movement anti-saccade task finding a significant detrimental effect in high state anxiety but not in high trait anxiety. This indicated a possible problem in automatic saccade suppression. Experiment 2 used face stimuli and found a first saccade bias towards threatening faces in high state anxiety compared to low state anxiety. Trait anxiety had no such effect. In addition, a latency effect only occurred in trait anxiety with high trait anxiety linked to faster saccades towards happy faces than low trait anxiety. The results argue against previous research stating trait anxiety is the main factor for a threatening bias, and brings about the view that although high state anxiety causes a problem in automatic saccade suppression, the lack of a faster latency effect towards angry faces in high state anxiety indicates a voluntary preference towards threatening stimuli.

Inhibiting thoughts versus inhibiting overt behaviour for negative and positive emotion

A. MORGAN, University of Plymouth.

This study was conducted to investigate regulation of emotion, 40 female undergraduate students participated in a 2 x 2 factorial design whereby the participant's mood was induced by a series of either humorous photographs (positive emotion) or distressing photographs (negative mood). Ten participants were used in each of the four conditions which consist of: inhibition of thoughts and positive emotion; inhibition of thoughts and negative emotion; inhibition of overt behaviour and positive emotion; inhibition of overt behaviour and negative emotion. The dependent variables that were measured are physiological effort indicated by heart rate and blood pressure, the affect on mood caused by inhibition and further explorative questions. According to recent findings negative emotions are more likely to be associated with thoughts and overt behaviour is more associated with positive emotion. Therefore, it is hypothesised that inhibition of thoughts will be significantly more effective at regulating negative mood than inhibition of overt behaviour. It would also be expected that inhibition of overt behaviour will be more effective at regulating positive emotion than inhibition of thoughts. As negative emotion manifests itself more frequently in thoughts than in overt behaviour the effort required to inhibit thoughts would be significantly more than to inhibit overt behaviour. It is seen that positive emotion is expressed overtly through behaviour so it would be expected that there would be significantly more effort used to inhibit positive emotion through overt behaviour than through inhibition of thoughts.

What is best for the children? The effects of partner sex and social interaction on collaborative problem solving performance in English- and Maths-based tasks in primary school children

N. MURRAY, University of the West of England.

Research has suggested that factors other than ability in collaborative problem solving may influence performance (e.g. Underwood, Underwood & Wood, 2000). This study aims to investigate the effects of sex of partner, and amount of social interaction and type of task on primary school children's collaborative problem solving performance. It is thought that children will perform better when in same-sex pairs due to a larger amount, and type of communication (Bell, 2001; Teasley, 1995). Sixty-four children aged five to seven years of age, participated in two types of task involving English or Maths skills. Behaviour, language, interactions and performance will be analysed. Early analysis suggests that same-sex pairs communicate more often than mixed-sex pairs, however, how this relates to overall performance in either task is not yet known.

Understanding conflicting evidence on the effects of inhibiting emotion:

The role of intensity of mood

J. PAVEY, University of Plymouth.

There have been mixed findings concerning the effects of inhibiting emotions, particularly negative emotion. Experimenters have overlooked the role intensity of mood may play in inhibiting or not inhibiting an emotion. The present paper will investigate this effect. In a between subjects design, investigating three factors, 104 participants were told to: (1) inhibit or not inhibit their emotion; whilst watching a (2) high or low intensity; (3) positive or negative; presentation. The participants completed PANAS scales (Watson, Clark & Tellegen, 1988). A MANOVA was used to analyse the effects of the three factors on negative affect (NA) and positive affect (PA). Experimenters should consider the findings when investigating mood, and findings can also be used to suggest why there has been conflicting evidence in the inhibition of negative emotion

An exploration of the terms women use to describe female genitalia

T. PISCOPO, University of the West of England.

Previous research (e.g. Braun & Kitzinger, 2001) has shown that there is a huge catalogue of slang words used for the female genitalia. This paper seeks to ask women why they use slang words. A questionnaire is used to enquire in which contexts words are used, and why; words that are liked; and words that are disliked. It also includes an unlabelled diagram to be completed by the participant to investigate their knowledge of the correct terms for the anatomy of the female genitalia. Approximately 40 participants will respond to the questionnaire. Once all of the data is collected, it will be analysed using thematic analysis. It is predicted that a number of slang words will be used in place of more standard terms due to embarrassment, social taboos surrounding the subject (Braun & Kitzinger, 2001) and the 'unmentionable' (Braun, 1999, p.368) nature of the subject in society. This provides negative implications for women's sexual health, childbirth and sexual experience and sensation.

A case assessment of a patient with orientation difficulties: Topographical agnosia, an attentional deficit or a working memory deficit?

S. PITT & K. SMITH, University of Exeter.

The patient LP suffered a mild traumatic head injury that has resulted in her suffering from orientation difficulties in familiar environments. The aim of the study was to investigate why this may occur by performing a battery of neurological tests on the patient and 10 age and sex matched controls. These tests were based on three hypotheses. The first hypothesis was that LP's orientation difficulties are due to her suffering from topographical agnosia and was tested by using the Exeter Landmarks tests. The second hypothesis was that her orientation difficulties are due to an inability to sustain multiple attention. This was tested through two computer-based tests; the Manekin test and the multi-attention test. The third hypothesis is that her orientation difficulties are due to a deficit in the visual spatial sketchpad of her working memory which was tested by performing Rey Osterith test. Results have not yet been fully analysed but comparison with the normative sample on the landmarks tests have revealed that LP does not have topographical agnosia. Some differences have been found on the manekin test but conclusions have not yet been drawn.

Evaluation of a mentoring programme: How it affects aspirations and perceptions of higher education

R. PLOEGAERTS, University of Plymouth.

A mentoring programme run by the University of Plymouth was evaluated. The programme is implemented in two local schools and consists of one-to-one sessions between a student mentor and a school pupil (mentee). The aims of the sessions are to provide academic and non-academic support where it is needed, and to raise aspirations and perceptions of higher education. Mentees (eight so far) from one of the schools were interviewed

individually using a semi-structured interview schedule. Also interviewed were two teachers at the school directly involved in the mentoring programme. Grounded theory was used to analyse the data and the conclusion will attempt to explain what aspects of the programme work and how mentoring affects a mentees' view of future education. Implications of this study will hopefully involve an increase in qualitative evaluation of similar widening participation programmes, which presently there is a lack of.

Self-esteem, and the effects of induced mood and self-focussed attention on causal attributions for success and failure

N. SMITH, University of Plymouth.

Previous research suggests that negative mood increases internal attributions of hypothetical failure. The present study examined the hypothesis that an enhanced self focussed attention in negative mood would facilitate this tendency still further, and that self esteem would also play a role in attribution. Psychology undergraduates ($N=40$) were exposed to one of the four conditions: positive mood-attention to self, positive mood-attention away from self, negative mood-attention to self, negative mood-attention away from self. A mixed design two-way analysis of variance (ANOVA) was used to analyse the results and initially found no significance in terms of main effects or interactions. However, when self esteem was studied as a covariate the analysis produced, as expected, differential attributions when in a negative mood (significantly more self attributions for failure than for success), but no effect in a positive mood. This had implications for the role of self esteem in cognitive processes.

A comparative analysis of the behaviour of the Sulawesi crested macaque with the Buto macaque

M. TAYLOR, University of Exeter.

The aim of this paper was to map the effects of habitat encroachment on macaque behaviour. A group of wild Buto macaques were compared to a group of captive Sulawesi crested macaques housed at Paignton Zoo. Comparisons were made via activity budgets and it was found that the macaques at Paignton are significantly more aggressive than wild Buto macaques, with this difference being narrowed down to environmental factors opposed to phylogenical reasons. Additional findings were reported. Bubbler's (1996) theory that moving, resting and feeding behaviour are 'elastic' and social and foraging behaviours are 'fixed' was partially confirmed with groups of wild Buto macaques and captive Sulawesi crested macaques from a number of different sites. Furthermore it was found that a liner hierarchy existed within the Paignton Zoo macaques. Again within the Paignton sample it was found that the main causes of aggression were moving and resting, due to invasion of personal space. The consequence of aggression was found to be reconciliation or redirection in-line with theory (Aureli, 1997). Aureli *et al.*'s (1989) self-directed scratching hypothesis was confirmed by this research.

The effects of different types of rumination on mood and cognitive activity

K. VINER & A. WEST, University of Exeter.

By looking at process-focused and analytical rumination within-subject the following hypotheses were tested: 1. Less rumination will occur after process-focused rumination; 2. Analytical rumination is more verbal than visual; 3. Following each ruminative period, process-focused rumination will result in less negative mood; 4. Process-focused rumination will result in less negative mood after the follow-up uninstructed period; and 5. Analytical thinking will result in more thinking about the past. A 2 x 2 within subject design with counter-balancing of two ruminative conditions was used. Thirty participants were recruited via e-mail. Participants worked through seven x five-minute periods during which thoughts were sampled at random interruption points. Measures included negative mood, imagery vs verbal thought, time orientation, topic of thought. The analysis of results is in progress.

Scottish Branch Undergraduate Conference

Scottish Branch Undergraduate Conference,
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Higher DHA levels in toddlers are related to improved attention performance

A. AUCHINACHIE & S. ORANGE, University of Dundee.

Objectives: Long-chain polyunsaturated fatty acids, especially docosahexaenoic acid (DHA), are necessary for normal brain growth and development. New research has shown that maternal DHA levels in pregnancy are related to measures of infant attention during the first 18 months of life. This study examines the relation between DHA levels and attention in 18-month-old toddlers.

Design: 49 toddlers aged 18 months were observed during four minutes of free play with a noisy electronic toy. Measures of mean look duration and inattention were calculated. DHA levels were obtained from fatty acid analyses of samples of cheek cells.

Methods/Results: Children were divided into high or low DHA groups. Mann-Whitney tests revealed significantly longer mean look durations and lower inattention rates in the high DHA group ($p < 0.02$). Similar results were obtained after adjustment for potentially confounding variables with ANCOVA.

Conclusions: Higher levels of DHA in toddlers are associated with improved attention performance. It is possible that offering children foods containing DHA (e.g. eggs and oily fish) may enhance cognitive development in the second year of life.

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The relationship between self-monitoring and interrogative suggestibility

K. BALLANTYNE, Glasgow Caledonian University.

Objectives: The paper looks at the relationship between self-monitoring, as a measure of sensitivity to social cues, and interrogative suggestibility. Previous studies into interrogative suggestibility have found some of the scores on the Gudjonsson Suggestibility Scales are sensitive to social aspects of the interviewer situation (Bain & Baxter, 2000; Boon & Baxter, 2000; Bain, Baxter & Fellows, 2004). It was hypothesised that participants with higher self-monitoring scores would also have high suggestibility scores, and lower self-monitors would have low suggestibility scores.

Design/Methods: The experiment follows a one-way between participants design. Equal numbers of participants with high and low self-monitoring scores were tested on the GSS1.

Results: The experiment is presently ongoing. However, when all data are collected a one-way ANOVA shall be used to analyse scores obtained from the GSS1 according to self-monitoring condition.

Conclusions: Although the experiment is ongoing, it is hoped that results will support previous studies which show that scores obtained on the GSS1 are mediated by sensitivity to social cues.

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The role of conversation awareness as a predictor of children's theory of mind

R. BOYCE, University of Strathclyde.

Objectives: According to Deleau (1996), children's ability to conceive false belief attributions is rooted in their practice of conversational awareness. This study tested Deleau's theory, and in particular the hypothesis that effective performance of children on conversational awareness tasks would predict effective performance on theory of mind tasks.

Design: Age, vocabulary level and performance on a series of conversation tasks were measured, and tested as predictors of performance on tasks assessing second order false belief understanding.

Methods: 43 children from primaries 2, 4 and 6 participated in the study, completing the British Picture Vocabulary Scale, four tasks of conversational awareness based on those used by

Deleau, and five tasks of second order theory of mind derived from Morrison (2004). The conversation and theory of mind tasks were administered in counterbalanced order.

Results: Multiple regression analyses indicated that with the younger age groups (primaries 2 to 4), vocabulary level was a significant predictor of theory of mind. With the older age groups (primaries 4 to 6), effective performance in theory of mind tasks increased with age, but a task measuring knowledge of Gricean maxims was also a significant predictor alongside vocabulary level.

Conclusions: The data support the hypothesis of an impact of conversational awareness on theory of mind understanding with increasing age, over and above the effects of vocabulary level.

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'To investigate the relationship between phoneme awareness and working memory as predictors of children's early word reading'

D. BRADY, University of Strathclyde.

Objectives: The primary objectives of this paper is to identify if there is correlation between phoneme awareness and working memory, and to be able to distinguish which are the best predictors of children's reading ability.

Design: It was hypothesised that there will be a positive correlation between phoneme awareness and working memory. Secondly, that a test of phoneme awareness will be the most significant predictor. The dependent variable is the reading ability scores and the independent variables are phoneme deletion, rhyme detection and backward digit span.

Methods: The experiment took the form of a repeated measures correlational design with counterbalanced order of presentation of tasks. Thirty children (mean age = 6.5 years) from primary 2 were randomly assigned to the experiment by the schools. The children all had similar socioeconomic backgrounds.

Results: Each child was administered the BAS=2 Reading Test, a Rhyme Detection test, a Phoneme Deletion test and a Backward Digit Span. A multiple regression analysis confirmed that there was a positive correlation between phoneme awareness and working memory.

Conclusions: It is also supported the hypothesis that phoneme awareness would be a better predictor.

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Reading the mind: Social cue decoding

C. BRYERS, University of Aberdeen.

Objectives: Theory of Mind (ToM) is the ability to interpret the mental states of others. Tests of ToM include inferring emotional state from the eyes (Baron-Cohen *et al.*, 1997) or tone of voice (Rutherford *et al.*, 2002). This study investigates whether these tests assess a common ability, and considers potential improvements to the tests.

Design/Methods: 35 undergraduate students were tested. The Eyes Test was presented in its original format and a free-response format. The Voices Test was presented in its original format and a semantic-only format.

Results: There was no significant correlation between Eyes and Voices performance.

Performance on the Voices task with only semantic content was significantly greater than chance.

Conclusions: This study indicates that the Eyes and Voices tests are measuring different constructs. It also implies that a potential improvement to the Voices task would be to rule out semantic content as a confounding factor.

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Homesickness, depression and projective drawings in university students

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Objectives: Most definitions of homesickness tend to include a feeling of insecurity, missing parents and friends, missing familiar surroundings and even missing familiar smells and sounds. Homesickness

has been linked to many health problems including depression. This study investigated homesickness and its consequences on mental well-being in university students.

Design: Both within and between subjects analysis were used in this study.

Methods: 30 undergraduate students (11 males, 19 females) in three groups, depending on the frequency of their visits home, participated in the study. Groups 1 and 2 lived away from home (Group 1, one visit per semester; Group 2, monthly visits); Group 3 lived at home or had weekly home contact. Participants filled in the Beck Depression Inventory, the Utrecht Homesickness Scale and completed projective drawings (Draw a Story Assessment, and Representation of home drawing).

Results: Homesickness and depression scores were significantly higher in Group 1 compared with Group 3, and Group 1 drew more negative, smaller, less colourful pictures compared with those in Groups 3.

Conclusions: The results show that the transition to university, living away from home, can have serious consequences for the mental health and well-being of the students and highlights the need for more awareness of what counselling facilities are available to students to help deal with these problems.

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Short-term exposure to constant light – a role for the 5-HT₇ receptor?

G. CLARK, University of Glasgow.

Objectives: The study aimed to determine whether the serotonin agonist (8-OH-DPAT)-induced phase delays in circadian activity observed after short-term exposure to constant light were mediated by the 5-HT₇ receptor (the receptor most implicated in circadian research. It was hypothesised that co-application of the selective 5-HT₇ antagonist SB-269970 would completely attenuate 8-OH-DPAT induced phase-delays in animals after short-term exposure to constant light

Design: The circadian activity rhythm of Syrian hamsters was used as the model for pacemaker phase in a within subjects design running three conditions. A modified Aschoff Type II procedure was used, with three days of constant light exposure interceding light/dark entrainment and the activity measurements in constant darkness.

Methods: The animals (N=8), obtained from Sprague-Dawley UK, were randomly allocated a condition. Activity was measured by wheel revolutions that were activating microswitches detected by Dataquest LabPRO software. Activity was recorded during entrained activity and after LL exposure. Three conditions were run involving i.p. injections at ZT 17.75 and ZT 18 of the third day of LL. The three conditions were – Saline+Saline; Saline+8-OH-DPAT; SB-269970+8-OH-DPAT. Upon the injection at ZT 18 animals were immediately released into DD.

Results: ANOVA analysis reveals that both experimental conditions resulted in significantly larger phase-delays than the controls of Saline. But most importantly there was no significant difference between shifts to 8-OH-DPAT whether the 5-HT₇ antagonist had been applied or not.

Conclusions: The implications of this are considerable. The actions of 8-OH-DPAT are widely considered to be solely mediated by the 5-HT₇ receptor. Work on advances has indicated so much. But the unique potentiating effect of brief LL, eliciting phase-delays reveals that it is likely that another serotonergic receptor is involved in this circadian phase-shifting. And once again this reveals the circadian pacemaker to be more complex than at first thought

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An exploration into the management techniques parents use when trying to manage a task with their toddlers

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Objectives: Exploration into the management techniques that parents use to keep toddlers focussed on a task is as yet scarce, but important to everyday family life. Most research with two-

year-olds focuses on cognitive tasks and does not stress parent's management of the task.

Design: The present study investigated the task of toothbrushing.

Methods: A total of 18 families videotaped home-based toothbrushing sessions with their toddlers. Ten behavioural variables were coded from the 33 videotaped sessions obtained.

Results: Results showed that instructions were successful at increasing the time child spent brushing alone and the time that parent spent brushing the child's teeth. Parents' use of a mouth opening gesture was also successful at increasing the time parent spent brushing children's teeth. The more invitations used the longer the total time brush was used for activities other than brushing, suggesting invitations are more of a distraction than a useful management technique. Interestingly, praise was not successful at lengthening the time the brush was used.

Conclusions: Overall, these preliminary findings suggest that instructions and gestures made by the parent are successful management techniques in terms of keeping the interaction going for longer and parents should be encouraged to use them as a management technique. Inviting the child to do something would be advised against as the less formal tone seems to initiate the child to 'play up' instead of focussing on the task. Praise may be useful at increasing self esteem but does not contribute to the successfulness of the task of toothbrushing.

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Maternal comments during object-centred interactions with three-month-old infants: What do mothers say?

J. CRAIG, University of Dundee.

Objectives: The objective of this dissertation was to determine through coding 'free play' object-centred interactions between mothers and their three-month-old infants what the mothers said to their infants when an animate toy was brought into play. This is an interesting question because little research has focused on what mothers say during parent-infant interactions.

Design: *Participants* – 21 mother-infant dyads recruited as part of a larger longitudinal study on mother-infant play. The infants were approximately three months of age.

Coding of interactions – 15 minutes of 'free play' was filmed. The analysis focused on instances when mothers commented on the following four themes when a red beanie hippo was brought into play: labelling the toy (e.g. he, it, Harry), the infants' behaviours toward the toy (e.g. smiling, liking, wanting) motivations behind these comments on infant behaviour (e.g. encouragement, infant's reaction) and maternal self-references (e.g. mummy wants a kiss).

Preliminary results: It was found the mothers labelled the hippo significantly more than they commented on infant behaviours and self-references during these object-centred interactions. Of greater interest was the fact that the mothers labelled the toy more often as a subject rather than as an object.

Conclusions: These findings are important because they demonstrate that mothers are socialising infants even when playing with toys. That is, the toy was treated as a subject rather than an object. Research has rarely been able to demonstrate socialisation at this early age. Future work will focus on individual differences in these socialisation strategies.

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How do we understand other people's actions?

A. DAVIDSON, University of Dundee.

Objectives: For successful social interactions, humans monitor and often imitate others. However, it is unknown how we understand the actions of other people. The main aim of this study is to discover how we understand actions. The major hypothesis of the paper is that we will use another person's bodily constraints when asked to estimate their ability at a task, which is in accordance with the 'simulation theory' of action understanding.

Design: A within subjects design was applied and by manipulating the height of the pairs of

participants it was hoped that this difference would allow us to see whose bodily constraints were being used in the judgements.

Methods: 21 participants' from the University of Dundee were paired up to ensure a height difference. A series of circles were projected onto a table and the participants' had to judge for them self and other participant their ability to reach these circles, when the arm was in two different postures, flexed and semi-extended.

Results: Preliminary repeated measures ANOVA's carried out on reaction time, response accuracy and probability of yes show that there is no main effect of reaction time, yet there is a main effect of posture of arm for the probability of saying yes, while also there is a main effect of arm posture for response accuracy. Results from regression analyses will be discussed

Conclusions: Conclusions from the experiment will be discussed at the conference.

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Spotting words and choosing countries: Developing an alternative test of pre-morbid ability

I. DE WIT & K. SCOTT, University of Edinburgh.

Objectives: We aimed to design alternative tests of 'pre-morbid' ability.

Design: Correlational study to assess relationships between new and existing measures. Two new tests, 'Spot-the-Book' and 'Choose a Country' were developed. In the Spot-the-Book, subjects were required to identify a real book in a real book-fake book pair. The Country test involved identifying countries from outlines, given two possible responses.

Methods: We recruited 126 participants (75 men and 51 women) from varied social backgrounds. We administered the National Adult Reading Test and the Spot-The-Word, two tests of 'fluid' ability (Digit-Symbol and Matrix Reasoning from the WAIS-III[®]) and the new tests.

Results: Both new tests were highly correlated with the established pre-morbid measures suggesting that they are valid. The two new tests and 'years of full-time education' were able to predict 63 per cent of the variance in NART scores.

Conclusions: The new tests provide valid alternative ways of measuring pre-morbid ability.

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Discrimination of roars in a captive red deer population: A playback study

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Objectives: A playback study was conducted with captive red deer (*Cervus elaphus*) to examine responses to synthesised roars.

Design: Two independent variables were examined so that there were two sets of experimental conditions: the status of the caller to the recipient (known vs. unknown); and the altered formant frequencies of the call itself.

Methods: The latter condition involved three levels of manipulation: an increase (1.3), decrease (0.7) and a control condition of an unaltered but synthesized roar (1). A variety of behaviours were coded for in both the male stags and female hinds, including roars, orientations and rises-from-sitting; the responses in these categories were monitored for five minutes prior to and five minutes following the onset of playback.

Results: Differentiation of response according to the caller's status would support the hypothesised ability in red deer to use acoustic cues as a means of identification. Similarly, if different reactions were recorded on the basis of formant frequency manipulation, this would support previous research with wild deer that suggests that such cues are utilised as good indicators of vocal tract length, helping to determine the size of the caller. This could well feature as an important component of the proposed 'honest advertising' function of such calls.

Conclusions: Results for the two conditions were found to be significant for both sexes: these outcomes will be presented and discussed forthwith.

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Fatigue in the rowing stroke: How does the rate of perceived exertion affect the motor programme?

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Objectives: This study investigates how fatigue affects the rowing stroke through a kinematic analysis of joint movements in the stroke.

Participants worked at different levels of Borg's Ratings of Perceived Exertion scale to examine how the perception of effort affects the breakdown of the motor programme.

Design: Using a repeated measures design participants completing a work piece at a preferred RPE and at RPE+20 per cent. The rationale for the study was to see if the perception of exertion would influence a change in performance.

Methods: 12 rowers aged 18 to 30 were voluntarily recruited and controlled through skill level.

Results: A within-subjects ANOVA will be used to analyse the kinematic data. It is anticipated that RPE should have an effect upon the breakdown of the programme, with the participants having a significant difference of movement between the preferred and enforced RPE conditions.

Conclusions: Conclusions can then be drawn on the effect of perceived exertion upon motor-programme breakdown.

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The phase-shifting effects of fluoxetine and sleep deprivation in the Syrian hamster

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Objectives: Depression is characterised by low endogenous extracellular serotonin (5-HT) levels. The most widely used antidepressant drugs, SSRIs, provide their therapeutic effect by blocking 5-HT reuptake at the synapse, and thus increase 5-HT. A major drawback of these drugs, however, is the significant time lapse between onset of therapy and the first signs of depression symptoms remission. Sleep deprivation (SD) has been shown to both increase 5-HT levels and result in a transient antidepressant effect. Both SD and some antidepressant drugs lead to phase advances in the activity rhythms of nocturnal rodents when administered during the middle of their active period, and are believed to do so by increasing 5-HT levels. This study examined the effects of combined SD and the SSRI fluoxetine to test the hypothesis that combined treatment with SD and drug will result in greater phase advances (and higher associated 5-HT levels) than single treatment with either.

Design & Methods: Eight male Syrian hamsters underwent treatment with fluoxetine alone (injected intraperitoneally), SD alone (sustained by three hours of gentle handling), and combined SD and drug all at CT6, on three different days. Activity onsets prior and subsequent to each treatment were recorded.

Results: ANOVA was carried out to compare the mean phase advances resulting from each of the three conditions. It was found that combined administration of fluoxetine and SD led to significantly greater phase advances than single treatment with either.

Conclusions: The delay in depression symptoms remission seen with SSRI therapy is thought to be the result of a negative feedback mechanism at the 5-HT_{1A} receptor, which temporarily prevents the drug-induced increase in 5-HT. The results of this study suggest that high 5-HT levels might be sustained in the early days of SSRI therapy by combining the drug with SD, and thus hypothetically lead to a faster onset of the antidepressant effects.

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Imitation as method of increasing social behaviour in children with Autism Spectrum Disorder

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Objectives: Children with Autism Spectrum Disorder (ASD) suffer from communication difficulties, which can affect their behaviour, interactions and result in little physical or close contact with family members.

Design: The purpose of this study was to use imitation as a basis for improving communication between children with ASD and their parents. Four

boys with ASD between the ages of five and seven, and their mothers took part in a series of video-recorded play sessions.

Methods: Three conditions were employed in the study; Free Play, Spontaneous Imitation, and Imitation Training. The results expect to find an increase in physical contact between child-parent dyad facilitated by the introduction of imitation in the play sessions.

Results: These findings will suggest that the use of imitation is an effective method of increasing communication between children with ASD and their parents.

Conclusions: This will also have theoretical implications as sensitivity to imitation would suggest that children with ASD have a sense of self and other and, therefore, have a theory of mind that can be accessed through imitation.
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Are individuals who are typical of certain personality traits more accepting of a Horoscopic Personality Profile or a Psychometric Personality Profile

B. HANDS, University of Strathclyde.

Objectives: The aim of this study was to investigate whether individuals, typical of both the personality traits of neuroticism and openness, as indicated by the Five-Factor Model of Costa and McCrae (1992), would be more accepting of a Horoscopic Personality Profile (HPP) or a Five-Factor Model Personality Profile (FFPP).

Design: 443 participants completed a scaled-down version of the NEO-PI-R, and from this population five different personality groups were identified.

Each group consisting of 20 participants then graded, for accuracy, either the HPP or the FFPP.

Methods/Results: A 2 x 5 Independent ANOVA, was employed to test for significant differences. This showed that the five different personality groups rating the HPP showed no significant differences, however two of the five groups rating the FFPP did show a significant difference in their evaluation of this profile.

Conclusions: This appears to indicate that those scoring highly on these two personality factors are showing a self-awareness of their psychometric personality.
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Examining the perpetrator-victim matrix: A self-categorisation approach to bystander intervention

M. HEWITT & F. NEVILLE, University of St. Andrews.

Objectives: This study investigates bystander intervention from a self-categorisation theory perspective.

Design: Social category relations were manipulated among those involved in the context of physical violence presented as CCTV footage.

Methods: While research has shown that intervention increases when an in-group victim is involved (Levine *et al.*, 2002), there has been no work examining how intervention is affected by group membership of perpetrator.

Results: Our findings show that in-group helping is moderated by group membership of the perpetrator such that helping is more likely when the perpetrator is out-group rather than in-group. We examine the role of reputational concerns, sympathy toward and perceived similarity to victim as potential mediators of the effect.

Conclusions: Our findings highlight the importance of considering the role of the perpetrator in research on bystander intervention.
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Collective guilt and intergroup relations

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Objectives: To investigate the effect of collective guilt on prejudice and reparatory action tendencies towards a harmed outgroup.

Methods: 2 (level of national identification: high vs. low) x 3 (guilt, pride, control) between-subjects. **Design:** After completing a national identification measure, participants (182 British students) were asked to think of a moment in US history that springs to mind (control condition) or of a moment in British history that makes them feel guilty (guilt

condition) or proud (pride condition). Subsequently, participants completed a questionnaire measuring their tendency to derogate, feel threatened by, compensate and support politically Indian people living in Britain.

Results: High in-group identifiers expressed more negative and less positive attitudes towards the outgroup in the guilt than in the pride or control conditions.

Conclusions: Collective guilt exacerbates the negative reaction of high in-group identifiers towards a harmed outgroup and should, therefore, be avoided in attempts at conflict resolution.
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Night terrors, nightmares, stress and alcohol. Is there a correlation?

A. KYLE, Glasgow Caledonian University.

Objectives: The primary objective of this paper is to find out if there is a correlation between sleep disturbances and alcohol, stress and the amount of sleep the participant has.

Hypothesis 1: Nightmares and night terrors will be more frequent when participants stress levels are higher.

Hypothesis 2: Nightmares and night terrors will be more frequent when levels of alcohol consumption is higher.

Hypothesis 3: There will be a correlation between stress levels and alcohol consumption.

Hypothesis 4: Nightmares and night terrors will be more frequent when the participant is overtired (less than eight hours sleep).

Design: This is a between subjects, repeated measures design. A mixture of random and snowballing techniques were adopted, to ensure maximum participation for a seven-day sleep diary.

Methods: In total there were 44 participants, 21 males and 23 females. This is to determine any sex differences when the diaries are collated and analysed. A diary log was the methodology used in this research instead of a questionnaire because it may be more accurate in monitoring nightmare, night terror, stress and alcohol frequencies. The age range of participants was kept between 10 to 70, as these were the most accessible age ranges for the study. Children were not included in the sample as they experience night terrors and nightmares more frequently and for different reasons. Participants were given seven days and seven nights to complete the diaries.

Results & Conclusions: Study ongoing and I expect the hypotheses to be supported.

To inform people with sleep disturbances if stress and alcohol are plausible explanations for their condition.

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An experimental study of the diffusion of traditions in chimpanzees

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Objectives: To date most experimental work in social learning in non-humans primates has been conducted at the level where one individual passes information onto another individual.

Design: This study provides evidence of social learning in chimpanzees (*Pan troglodyte*) in a more natural group setting.

Methods: Our experimental design was to expose three groups of chimpanzees to an artificial drinker for which there were two very different methods of obtaining juice. An expert in each method was to be trained in each experimental group and the pattern of learning within the group recorded.

Results: The full experiment has yet to be completed. However, several different patterns of behaviour did emerge and spread in the first experimental group in a way which is highly consistent with the inference that social learning is at the heart of the 'cultural' differences seen between different study groups in the wild.

Conclusions: Interesting effects of rank and age on who learns from whom within a group were also observed.

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How does personality affect the emotional response to failure?

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Objectives: The effect of neuroticism (N) on a negative event will be tested using cognitive and physiological measures. It is hypothesised that

there will be a physiological reaction to failure feedback and this will be correlated with task-related interference (TRI) thoughts in high N scoring participants.

Design: This is a mixed subjects design. The dependent variables tested are the cognitive and physiological responses to failure whilst the independent variables are high and low N.

Methods: 14 participants selected based on scores on the NEO-PI-R neuroticism scale, are asked to perform a computer-based anagram experiment. During the task they are periodically asked the extent to which they are thinking about the task and to provide an account of the contents of their thoughts at these times. Physiological changes in heart rate, respiration rate and skin conductance response are also measured.

Results: A 2 x 2 ANOVA will be used to analyse the physiological data, whilst Chi square will be used for the cognitive measure, i.e. thought probes/ thought content. It is anticipated that individuals with a high N score will show an increased level of arousal in response to failure feedback as well as a high frequency of TRI scores.

Conclusions: Individuals high in N are more likely to experience difficulty in self-regulation. Consequently, this can lead to ruminative thinking and depression. Identifying the emotional responses of specific personality types may have an impact on the way in which therapy for the depressive conditions is provided in the future.

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Personality and academic disposition as predictors of academic success

S. MAHR, University of Dundee.

Objectives: The aim of the study was to explore the different relationships between personality, academic disposition and academic achievement.

Design: A questionnaire design was adopted for this study.

Methods: 79 students from second, third and fourth year at university participated in the study. Measures comprised of a Big Five Personality Inventory, a 10-item ad-hoc scale to measure various aspects of academic disposition and questions relating to academic achievement. Demographic information was also collected.

Results & Conclusions: Preliminary findings show highly significant relationship between the three variables, conscientiousness, academic disposition and average grades reported. Preliminary analysis on the ad-hoc academic disposition scale has suggested the presence of two sub-scales, one relating to the emotionality of academic disposition and the other to the motivational aspect. This study's findings highlight the impact personality and academic disposition may have on achievement at university and provides support for the consensus that academic success is related to efficient academic study.
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A qualitative study of Scottish women's experiences of myocardial infarction: Implications for health promotion

E. MCKENZIE, Glasgow Caledonian University.

Objectives: Scottish women, and especially those living in the west of Scotland, have higher rates of coronary heart disease (CHD) than their counterparts in the rest of the UK. Both biomedical research and social sciences has historically focused only on men in CHD-related research and little is known about women's attitudes and beliefs about CHD and its prevention.

Methods: This paper describes a recent study which explored women's experiences of suffering a myocardial infarction (heart attack).

Design: Semi-structured interviews were conducted with five participants (mean age = 55) attending a cardiac outpatients clinic in Glasgow. All had recently suffered a myocardial infarction (MI) (mean time since MI = 12 weeks).

Results: Data was analysed utilising Interpretative Phenomenological Analysis (IPA). Five major themes were identified from the data: Lack of perceived risk of MI, searching for meaning, uncertainty/fear associated with being an inpatient, loss of control and fear of the future.

Conclusions: The implications of these results for health promotion are discussed, in particular the gendered nature of perception of risk in relation to

MI and the potential impact of the current male focused research agenda for CHD prevention. elizabethmck@hotmail.com

How do perceptions and experiences of growing up differ between children with Asperger's syndrome and neuro-typical children?

L. MENDUS, University of Dundee.

Objectives: This report aims to show how the perceptions and experiences of growing up differ between children with Asperger's syndrome and neuro-typical children.

Design: All the children were male and aged between 13 and 16 years of age.

Methods: The results were gained through individual interviews with six children with Asperger's syndrome and six neuro-typical children.

Results: The answers were then translated into numerical data by using a Likert scale. Between subject *t*-tests were carried out on the results to see if they yielded a significant result. The results suggest that children with Asperger's syndrome have significantly different perceptions and experiences of growing up compared to neuro-typical children.

Conclusions: Children with Asperger's syndrome are less insightful and have somewhat distorted perceptions of growing up.

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Identity construction of British sojourners in Europe

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Objectives: Previous research shows that Britons perceive Europe as a threat to their national identity. This qualitative study examines whether a similar view is expressed by British students who have spent time on an exchange visit in a European country, or whether their experiences are drawn on in alternative constructions of European or other identities.

Design: This Discourse Analysis is based on transcripts of four focus group discussions (14 participants talking for ca. 1.5 h in groups of three to four) with a semi-structured schedule addressing questions on the change of national and European identities, on stereotypes, and the re-entry to Britain.

Results: The analysis shows how students construct European and national identities discursively. The strategic use of this sojourn experience is examined regarding how participants manage a dilemma of simultaneously claiming British and European identities. The analysis identifies several discursive devices which are used to support identity claims while circumventing possible sceptical responses (e.g. doing surprise, externalising accountability). Strategies involving externalisation and mitigation appear to negotiate compatibility of European and British identities.

Conclusions: Student exchange experiences are shown to be used to construct a European identity while strengthening national identities.

Implications for negative stereotyping, applied issues and further research are discussed. yannikporsche@yahoo.de

Visual experience and attention influence face preferences

E. PRIMROSE & J. BREBNER, University of Aberdeen.

Objectives: To investigate if experiential and attentional factors influence face preferences.

Design: A within-subject design was used.

Methods: Sophisticated computer graphic techniques were used to objectively manipulate face images. A perceptual adaptation paradigm was used to investigate the effect of recent visual experience on face preferences. A change detection paradigm was used to assess the extent to which attractive faces 'grab' visual attention. Forty-three undergraduate volunteers took part in the study.

Results: Repeated-measures ANOVAs indicated exposure to masculinised faces increased preferences for masculinity and that changes to attractive faces were detected faster than identical changes to unattractive versions of these faces.

Conclusions: While exposure to faces of a given type increases subsequent preferences for similar faces, attentional bias towards attractive faces will

influence the type of faces to which one is exposed. Our findings suggest that experiential and attentional factors interact to generate and maintain face preferences. faceresearch@abdn.ac.uk

Risky behaviour of pedestrians at signalised intersections

C. RENNIE, University of Dundee.

Objectives: On observing a particular intersection in Dundee a high proportion of people were seen to be putting them self in unnecessary risk. There is a fully functioning signalised pedestrian crossing facility which enables pedestrians to cross the two sections of road, safely. Yet, a large proportion of people fail to wait for the green man to appear. Therefore, the risk taken by the pedestrians was monitored to determine if the sequences which the pedestrian is faced with effects their crossing choices. It was thought that if pedestrians were faced with a light sequence of Red-Green, then this would result in an increased temptation to cross. Therefore, an increase in risky behaviour would emerge.

Methods: The risk taken by pedestrians was measured by a risk scale which was formed by looking at the time lapse between pedestrians reaching the middle of the road, and vehicles reaching the pedestrian marked out area. The two factors of group size and the length of time into the sequence were also considered in relation to risk taking. These two factors were considered to ensure that any significant values of light sequences was indeed due to the lights the pedestrians were faced with and was not due to one of these confounding variables.

Results: To be discussed at the presentation.

Conclusions: To be discussed at the presentation. c.l.rennie@dundee.ac.uk

An examination of attentional biases in sleep disordered patients.

S. SHAFI, University of Glasgow.

Objectives: Recent models of insomnia have demonstrated that insomniacs report an increased cognitive arousal, prior to bedtime. Through employment of the ICB flicker paradigm, it is hypothesised that if primary insomnia is sustained through cognitive over arousal and thus attentional bias towards sleep-related items, then primary insomniacs will detect a sleep-related change significantly faster than good sleepers and delayed sleep phase sufferers. When a sleep-neutral change occurs within the identical scene, it is proposed there should be a comparable opposite effect.

Design: This study will employ a 2 x 3 between subjects design. Specifically there will be three groups of participants, with differing sleep quality; good sleepers, primary insomniacs and delayed sleep phase syndrome patients. Each of these three groups will be subsequently split, and each participant randomly allocated to one of two experimental flicker conditions, namely a sleep change condition and a neutral change condition.

Methods: The flicker ICB paradigm is a four-step presentation cycle, which is repeated until a change is detected. It consists of a visual scene, followed by a mask, which is in turn followed by the same original scene with one changed item. This task was used to assess the attentional bias of the three groups of sleepers ($N=32$). All participants then completed subjective sleep evaluation, anxiety and depression questionnaires to control for accurate grouping and comorbid disorders.

Results & Conclusions: The flicker ICB paradigm is a four-step presentation cycle, which is repeated until a change is detected. It consists of a visual scene, followed by a mask, which is in turn followed by the same original scene with one changed item. This task was used to assess the attentional bias of the three groups of sleepers ($N=32$). All participants then completed subjective sleep evaluation, anxiety and depression questionnaires to control for accurate grouping and comorbid disorders.

The flicker ICB paradigm implemented within this study has high ecological validity, is quick to administer and appears to be sensitive to reveal IPBs at differing levels of sleep quality. Further, the attentional bias exhibited only by primary insomniacs conveys the key maintaining

components and strengthens evidence of cognitive models of insomnia. 0106159S@student.gla.ac.uk

Stress in the workplace: An ecological momentary assessment perspective

R. SHIVJI, M. ANDERSON & V. BLASDALE, University of Aberdeen.

Objectives: To evaluate two models of stress; Karasek's Demand-Control (DC) model and Siegrist's Effort-Reward Imbalance (ERI) model.

Design: There is increased interest in ecological momentary assessment (EMA) which records mood and behaviour in the participants' natural environment. Electronic diaries were employed in this study to provide EMA.

Methods: 50 participants will complete questionnaires measuring ERI, strain and social support (from the DC model), stress and anger (Perceived Stress Scale) and perceived health (Health thermometer). Additionally, participants will complete computerised diaries, measuring similar variables, for two working days.

Results: This study is still running and will be analysed using regression techniques. Preliminary results suggest ERI to be associated with poorer perceived health and higher levels of anger and perceived stress. Findings have also shown those with high job strain to experience higher levels of stress.

Conclusions: Our study has demonstrated that ERI and job strain may have adverse effects on health, anger and stress. We also hope to show the benefits of EMA.

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Establishing a relationship between smoking and tendency to self focus and engage in ruminative thinking

J. SHIELDS, University of Strathclyde.

Objectives: This study is concerned with establishing a relationship between smoking and tendency to self focus and engage in ruminative thinking.

Design: Previous research has established that tendency to smoke is significantly higher in groups of people who exhibit various psychological disorders when compared to the wider population.

Methods/Results: Self-focus is also predominant within this group and the complex relationship between these factors is investigated within this study. Using a between groups design using a computer based task both physiological and self-report measures were taken to establish this link.

Conclusions: This area of psychology has huge consequences in terms of treatment of co-factors of smoking such as depression, anxiety, etc., and also therapeutic uses of nicotine in non-smokers also. This study proposes that a link will be found between smoking and tendency to self-focus. jenshields1@hotmail.com

A comparison of new pupils of Conductive Education and more established pupils attending the Craighalbert Centre, Cumbernauld

H. STEWART, Glasgow Caledonian University.

Objectives: Primary objective was to observe the frequency of compliant behaviour and group membership of novices to Conductive Education in two separate occasions and compare it with the frequency of such behaviour and group membership of veterans of Conductive Education. It was hypothesised that the novices would demonstrate a significantly lower level of compliance and group membership in the first observational series (time 1) but would show significantly higher levels of both subject factors in the second observational series (time 2).

Furthermore, it was hypothesised that the veteran group would demonstrate significantly higher levels of compliance and group membership.

Methods: The study was carried out in purpose built observational rooms, which allow for non-intrusive observation to capture the natural day to day activities of the group of children and their Conductors.

Design: All subjects attend the Craighalbert Centre in Cumbernauld. The sample consisted of 12 pupils from the nursery group (eight male and four female) – six 'novices' and six 'veterans'.

Results: Study is ongoing, anticipated results are that the hypotheses will be upheld.

Conclusions: To inform policymakers of the implications of integrating Conductive Education into the special needs sector.

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Children's self-knowledge: what they really know and the role of siblings.

T. VANDERBURG, University of Dundee.

Objectives: Rosenberg (1979) reported that not until 11 years old do children recognise that they are the authority on their own self-knowledge. The main objectives of the study are to determine whether children know more about self-knowledge than has previously been shown and whether older siblings can be seen as the authority on children's self-knowledge.

Methods: These were tested by asking the children 'who knows best' questions about their parent's and between them and their older siblings. These questions are based on those used in the Burton and Mitchell study (2003).

Design: 52 children from a state school in Northern Ireland were used. The children had a brief interview to relax them and then they were asked the 20 self-knowledge questions.

Results: The study found that the older age group of children were able to answer successfully on their parent's self-knowledge. Younger children did cite their older siblings as an authority on their own self-knowledge. An interesting finding was that the amount of contact the child had with their older sibling affected both these results.

Conclusions: The conclusions of the study are that children do know more about self-knowledge than was previously shown. This suggests that the problems in previous studies were that children had to compare their self-knowledge with the knowledge of an adult. Young children do also often cite their older siblings as an authority on their self-knowledge, so why they select someone as an authority may be due to time spent with that person.

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A discourse analytic approach to Christian and religious identity

A. VOULGARI, University of Edinburgh.

Objectives: Psychological research has treated religion as a unified concept. It has focused mainly on using quantitative methods to address issues as religion and personality correlates, quality of life and prayer content. However, the ways in which people actually construct their identities and practices surrounding religion has been largely ignored.

Design: This research was designed to examine the ways people construct their religious identities, beliefs and practices.

Methods: A sample of 18- to 25-year-old students who subscribed to the Christian religion were asked to participate in a semi-structured, open-ended interview which addressed these issues. The interviews were recorded on tape, transcribed in full and analysed using a discourse analytic approach.

Conclusions: It was concluded that in talk, people treat religious identity as a concept that is continuously under negotiation, according to the context. (results on prayer and the conceptualization of god still in progress). This research has important implications for psychological research, as the findings imply that religious identity is not a unified concept, but rather it is accepted and rejected in different ways in different contexts. Allowing participants to construct their own ideas surrounding religion will bring to surface aspects of life that have not been addressed in psychological research to date.

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The effect of an amplitude precue on two different perceptual motor integration tasks

L. WATSON, University of Dundee.

Objectives: This study aims to investigate whether an amplitude precue will have a significant effect on reaction time for pointing and grasping at a given object. It is predicted that the reaction time for pointing will be faster than those for grasping when the amplitude of the precue to the target is short.

Design: A within subjects design was used for two conditions (pointing and grasping). Three different SOA's were used to account for the longer preparation time needed for grasping rather than pointing.

Methods: 14 (right-handed) participants, aged between 20 and 27 years, took part in the study. Each was shown 360 trials on a touch screen computer and had to react to half of the given targets by pointing and half by grasping as instructed by the experimenter.

Results: Results and implications to be discussed at conference.

Conclusions: To be discussed at conference.

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The 2004 Annual Conference

*The 2004 Annual Conference,
Imperial College London, 15-17 April 2004.*

The following abstract was accidentally omitted from the August 2004 issue of *Proceedings*.

Virtual putting: Investigating slope perception in golfers

M. CAMPBELL, University College Dublin.

Despite its practical importance for the skill of golf putting, expert-novice differences in people's ability to 'read' and judge the slope of different types of greens have attracted little attention from researchers. This neglect is unfortunate because green reading offers insights into how people assess slopes in natural environments. In an effort to rectify this oversight, the present study reports a method of investigating the slope-detection skills of elite golfers using a combination of qualitative eye-tracking technology and virtual three-dimensional greens. The golf greens were constructed to precise specifications using the modelling software '3d studio max' (Discreet, v.6 2003). The advantages of this three-dimensional software over two-dimensional equivalents are that it offers enhanced realism and increased experimental control (e.g. the green can be manipulated to the viewers' requirements).

Preliminary results of this study are reported along with a brief outline of relevant theoretical and practical implications.

The 2005 Quinquennial Conference

The 2005 Quinquennial Conference, University of Manchester, 30 March – 2 April, 2005.

THURSDAY 31 MARCH

KEYNOTE SPEAKERS

Redefining elementary through postgraduate education through the theory of successful intelligence

R.J. STERNBERG, Yale University.

Traditional educational methods consistently favour students with strong memory and analytical skills and disfavour students with strong creative and practical skills. They also favour students who are socioeconomically advantaged by virtue of their familial background. But creative and practical skills are at least as important as or more important than memory and analytical abilities for career success, and students from diverse backgrounds are often advantaged precisely in those skills that are neither taught nor tested for. The result can be ill-prepared individuals in jobs and selection of the wrong people for those jobs – ones whose skills do not match those demanded by the work they do.

My main points will be these:

1. By teaching for 'successful intelligence,' it is possible significantly and substantially to improve learning outcomes for all students, including those who were thought to be of 'low' ability, and to reduce ethnic-group differences in learning outcomes.
2. By assessing student abilities for successful intelligence, it is possible to substantially increase predictive validity of ability tests and to substantially decrease ethnic group differences.
3. By assessing student learning for successful intelligence, it is possible to obtain enhanced understanding of what students have and have not learned and how they can think with what they have learned.

In sum, the theory of successful intelligence offers an opportunity to redefine education and educational opportunity.

INVITED SPEAKERS

DIVISION OF CLINICAL PSYCHOLOGY

The ups and downs of self-esteem: Explorations of bipolar disorder

R. BENTALL, University of Manchester.

Patients who receive the diagnosis of bipolar disorder present difficult challenges for psychological researchers because their problems are markedly episodic, and because they bare some similarities to schizophrenia patients and some similarities to patients with unipolar depression. A full understanding of their symptoms will, therefore, require an understanding of how the underlying psychological processes change over time. In this talk I will outline a series of studies looking at self-esteem regulation and strategies for coping with negative affect in bipolar patients, students who appear to be vulnerable to bipolar symptoms, and also the children of bipolar parents. The picture that emerges from the findings suggests that mania may arise partly from dysfunctional strategies of regulating self-esteem.

DIVISION OF HEALTH PSYCHOLOGY

Social integration, social networks and health: The upsides and downsides

L. BERKMAN, Harvard University.

Over the last decades an enormous amount of research has focused on the health promoting aspects of social networks and social support. Recently, however with more complex models of social network structure and more subtle assessments of the quality and function of social ties, it has become clear that not all social relations

are health promoting. Conflicted relationships, aspects of integration which lead to the social exclusion of some, and costs of caring have emerged as potent predictors of poor outcomes across a number of health conditions. Integrating complex structural assessments of network structure and social interactions into models of social networks is essential towards understanding both health dynamics and developing successful interventions.

DIVISION OF CLINICAL PSYCHOLOGY

Current developments, challenges and controversies for clinical psychologists

P. KINDERMAN, University of Liverpool.

As Chair of the British Psychological Society Division of Clinical Psychology, Peter Kinderman will give an update on current developments, challenges and controversies for clinical psychologists. He will discuss the current academic, professional and political position in respect to the following issues:

- Agenda for Change;
- Statutory Registration of Psychologists;
- The proposed new Mental Health Act, including the introduction of powers of compulsion for psychologists;
- Practical Issues related to psychotherapy registration, and related conceptual issues including the relationship between clinical psychology and psychotherapy, and clinical psychology and CBT;
- Possible roles for Associate Psychologists;
- The relationship between clinical and other applied psychologists.

In order to co-ordinate and provide a conceptual framework for these discussions, a proposed consensual psychological model of mental disorder will be presented. It will be argued that simple biological reductionism is scientifically inappropriate, and also that the specific role of psychological processes within the biopsychosocial model requires further elaboration. The biopsychosocial model is usually interpreted as implying that biological, social and psychological factors are co-equal partners in the aetiology of mental disorder. The psychological model of mental disorder presented here will suggest that disruption or dysfunction in psychological processes is a final common pathway in the development of mental disorder. These processes include, but are not limited to, cognitive processes. The model proposes that biological and environmental factors, together with a person's personal experiences, lead to mental disorder through their conjoint effects on these psychological processes. Finally, it will be argued that application of this model can help provide an appropriate framework within which to develop solutions to the issues outlined above.

DIVISION OF SPORT & EXERCISE PSYCHOLOGY

Athletes' peer networks and relationships: Links to positive youth development

M. WEISS, University of Virginia.

Social relationships are key to young athletes' experiences in sport and physical activity contexts. Caring and competent adults, including parents and coaches, represent sources through which children and adolescents have the opportunity to glean knowledge and skills that afford them several physical, psychological, and social benefits of participating in sport. Peer groups and relationships are especially important for youths' psychosocial and moral development, including social skills related to role-taking, perspective-taking, empathy, conflict resolution, respect, and responsibility to self and others. Developmental (Piaget, Sullivan, Laursen) and social-cognitive (Cooley, Bandura, Harter) theorists have suggested the mechanisms by which peers influence one another's

psychological and behavioural responses. These include expressing differing viewpoints and working toward mutual solutions, providing a sense of belonging and feelings of security, encouraging a sense of identity, offering interdependence in social exchanges, providing reflected appraisals and various types of social support, and observational learning of attitudes and behaviours. Most of the empirical work stemming from these conceptual guides has been conducted in school and social settings, but more recently several sport psychology researchers have illuminated the importance of peer relations such as group acceptance and friendship in modifying self-perceptions, affective responses, and motivation in sport and physical activity (see Smith, 2003; Weiss & Stuntz, 2004). The purpose of this presentation is to review relevant theory and research related to athletes' peer networks and relationships, with an eye toward understanding how to maximise social and moral development among youth in competitive sport and other physical activity contexts.

AWARDS AND MEMORIAL LECTURES

HANS EYSENCK MEMORIAL LECTURE

Intelligence, health and death: The new field of cognitive epidemiology

I. DEARY, University of Edinburgh.

Introduction: There are well-known, socially-patterned inequalities in health. For example, people in more manual occupations and those with less education tend to die at younger ages. In the last few years it has been established that psychometric intelligence is associated with longevity: people with higher IQ-type test scores tend to live longer. This is found whether the mental tests are administered in childhood, early-mid adulthood, or in old age.

Results: This lecture describes some of the key data that have contributed to this new and fast-growing field of cognitive epidemiology. The analyses based on follow-up studies of the Scottish Mental Surveys of 1932 and 1947, and the Twenty-07 study in Glasgow are especially featured. The data presented will discuss psychometric intelligence as a predictor of: all-cause mortality, cardiovascular disease and death, cancer, and smoking behaviour

Discussion: Possible mechanisms for the association between psychometric intelligence and illness and mortality are discussed. The possibility that the results are confounded by social class are considered. The hypothesis that intelligence is mediated by health behaviours is assessed. Also discussed are the possibility that intelligence is an indicator of prior brain and bodily insults, and the hypothesis that intelligence is a marker for general bodily fitness. At present, none of these provides a satisfactory explanation for these interesting findings, and future studies will be required to understand the mechanisms that link IQ and morbidity and mortality.

PRESIDENT'S AWARD FOR DISTINGUISHED CONTRIBUTIONS TO PSYCHOLOGICAL KNOWLEDGE 1

The social dimension of emotion

A. MANSTEAD, Cardiff University.

Objectives: The aim is to present an overview of recent work on social aspects of the emotion process, conducted in collaboration with my research students. Three lines of research will be reviewed, one on social appraisal, one on facial behaviour, and one on emotion in negotiation. **Design & Methods:** The social appraisal research examines the interplay between gender and social context in shaping anger and anger expressions. The facial behaviour research examines the impact of stimulus valence and social context on smiling. The research on negotiation examines the effect of a negotiation partner's emotional state on how much one concedes during the negotiation.

Results: The main finding of the social appraisal research is that women and men differ in how they express their anger to someone who has treated them unfairly, depending on whether or not they expect to meet this other person. Measures of social appraisal partly mediate the relation between gender and anger expression. The main finding of the facial behaviour research is that how (and how much) one smiles in response to a joke depends on joke quality and who tells the joke. Social motives mediate the relation between joke quality and facial displays. The main finding of the negotiation research is that angry negotiation partners elicit larger concessions than happy ones. The relation between opponent's emotion and concession behaviour is mediated by appraisals of how much the opponent is prepared to concede.

Conclusions: These studies show that, far from being a private, intrapersonal process, emotion is shaped by – and in turn shapes – the social context.

SYMPOSIA

Symposium: Rethinking psychoanalysis for the 21st century

Convenor: C. CRELLIN, Independent.

The theme of this symposium is rethinking the nature of relationships in psychoanalytic scholarship. Our objective is to bring together scholars working at the interface of psychoanalysis, neuroscience and phenomenology. The symposium reverses traditional thinking on relationships both in psychoanalytical practice and in interdisciplinary encounters and poses some of the most important questions for future psychoanalytic scholarship. By re-framing Freud's 'evenly suspended attention' and Bion's 'Negative Capability' as a 'going against reason' Janet Sayers questions the assumption that the psychotherapist 'transforms the experience' of the patient in a beneficial way, since the interpretation might actually falsify rather than transform. At the same time, she creates fresh links between psychoanalytic interpretation/transformation and interpretation/transformation-work in art by asking what dream-work has to do with art-work. Jim Hopkins shows how Neuroscience makes an entirely new relational position possible between Freud, Bowlby and Klein. Traditional boundaries between Freudian Psychoanalysis, Attachment Theory and Object Relations Theory are replaced by interconnections when viewed from the unifying perspective of contemporary research in the neuroscience of motivation and attachment. Del Loewenthal probes post-phenomenological ideas and their implications for new forms of ethical relations in psychological and psychoanalytical research, practice, and interdisciplinary encounters. Calling on Post-phenomenological philosophy, Loewenthal proposes a strong critique of control via professionalism, quantitative research methods and abusive forms of interaction and provides arguments for an ethical relational practice emphasising intellectual honesty, the centrality of human agency, and the 'otherness of the other'.

Exploring human experience from phenomenological/post-phenomenological psychoanalytic perspectives on clinical encounters

D. LOEWENTHAL, University of Roehampton.

This paper examines the implications of phenomenology/post-phenomenology for understanding human experience and relational learning in the context of psychoanalysis/psychotherapy/counselling in the 21st century. What, for example, are the implications of claims of the death of God, science and the subject for how we explore human experience in the clinical encounter? It will be argued that, despite criticisms, it may be essential that the implications of post phenomenology are considered for all existing (modern) modalities of therapy. Questions that will then be examined include: What is the place of psychotherapeutic theory in examining how we explore human experience through psychotherapeutic discourse. Is it possible to have both justice and action? Are, for example, behavioural humanistic, existential and most of psychoanalytic theories merely perpetuating

unintentional violence? Has traditional thinking been replaced by theories with fields of knowledge, territories and ownership of psychotherapeutic subject disciplines policed by economic licensing arrangements, which in turn attempt to control language and thought – appropriating difference in the name of difference? How can we explore human experience within the context of the clinical encounter in terms of ideas of truth, justice and responsibility? Is there an ethical basis on which we can assist as therapists in an embodied way so that we help others not do violence to others? Indeed is it possible for therapists not to interrupt their own and others' continuity, not to play roles in which they no longer recognise themselves and whereby they portray not only their commitments but their own substance? An exploration of the above questions in terms of relational ontologies will be made through the phenomenological aspects of those such as Derrida, Lacan and in particular Levinas's injunction to put the other first and be responsible for the others responsibility.

Psychoanalysis, attachment and neuroscience

J. HOPKINS, King's College London.

Although the main ideas of attachment theory grew out of psychoanalysis, research in attachment has largely proceeded independently of psychoanalytic ideas. Likewise, although many of Freud's conceptions were rooted in the neuroscience of his time, and he anticipated that psychological formulations might someday be supplemented by neurological ones, psychoanalysis has proceeded independently of neuroscience. Recent work, however, suggests an increasing number of links and consilience among these fields.

Research in the neuroscience of motivation suggests that psychological development during the first year can be understood as reflecting the post-natal maturation of the infant's cerebral cortex, as it responds to experience by laying down neural representations of itself, others, and the environment. These representations serve to co-ordinate, elaborate, and regulate the basic mechanisms of motivation, which seem to be innate and realised subcortically. Establishing these regulative representations seems, as Freud suggested, to be correlative with the process of attachment, or the forming of basic emotional bonds, between the infant and those who care for it. Thus the laying down of basic images of the self and others, the process of attachment, and the early shaping of the cortex via the impact of experience, are beginning to appear as interconnected aspects of a unified developmental process, which can be studied – and so, as it were, triangulated upon – from a series of previously isolated perspectives.

Research in attachment also appears to be bearing out Freud's claim that the early images of the parents – or of the self as in relation to the parents – serve as prototypes for later relationships. Examination of these findings, moreover, suggests that the Freudian mechanism of identification plays a significant role in this process, and that a particularly important aspect of the process concerns the role of emotional conflict. Also there seems reason to believe that a crucial part in this is played by the infants attainment of the ability to conceive the mother as an anatomically and psychologically unified object, which seems to occur during the first year.

Against reason? Art and psychoanalysis

J. SAYERS, University of Kent.

The extension of psychoanalysis to schizophrenia has led some psychoanalysts to ally their work with the visual arts. Whatever became then of Freud's talking cure method? Does this alliance entail the abandonment, by psychoanalysts, of all reason and science?

In addressing these questions I will focus on the work of the psychoanalyst, Wilfred Bion. Although he died in 1979, his work has become an increasingly major influence on psychoanalysis and on psychotherapy today. Briefly, he argued that the fragmented state of mind Bleuler (1911) called 'schizophrenia' is an effect of attacking links between incoming sense data. Instead they are projected as 'element' bits and pieces. In analysis

this calls, said Bion, for the analyst to practice 'NO memory, desire, understanding' (Bion 1970, p.129). This enables psychoanalysts to become maximally receptive to taking in the patient's projected element sense data so as to dream and do the 'dream-work' needed to convert this data into a form in which it can be consciously and unconsciously registered and stored. Cultivating no memory, desire, and understanding is more or less the same stance which Freud recommended analysts to adopt. He called it 'evenly-suspended attention' (Freud 1912, p.111), and linked it with free association and with the method for cultivating inspiration recommended by the poet, Schiller. Bion went further. He advocated that psychoanalysts should follow the advice of the poet, Keats, and cultivate 'Negative Capability' (Bion 1970, p.125). Furthermore he argued that the work of transforming the experience of the patient's incoming projected element sense data into element form and from there into an interpretation is akin to the work of painters – specifically Vermeer and Monet – transforming the sense data they receive from the external world and transforming it into a painting enabling their public to take in this sense data in a form amenable for psychological registration, storage, and recall.

Does this justify the psychoanalyst suspending his or her understanding? Does it justify going against reason? And what about the resulting dream-work, art-work transformation or interpretation? Does it too go against reason? Does it risk the psychoanalyst or psychotherapist going against science and seducing the patient into taking in data which, far from transforming his or her experience, mystifies and falsifies it? These are the questions I will address. They arise out of research for my next book, provisionally called *Art and Psychoanalysis: Inter-active Image-making*.

Symposium: Lovers and rivals – Exploring the relationship between psychology and psychotherapy in the modern world

Convenor: A. DOUGLAS, County Hospital, Durham.

The BPS 'Theme' for their conferences in 2005 is 'relationships'. The psychotherapy section, true to its history of championing intellectual and clinical freedom, discussed this and politely declined the pressure to adopt a 'corporate' theme for their conferences. There was, however, support for participation in the Quinquennial Conference and offering a symposium. After some thought by an individual member, a theme for the symposium of 'Lovers and rivals – Exploring the relationship between psychology and psychotherapy in the modern world' emerged.

This title presented itself intuitively but was obviously linked to experience of the world of psychology and psychotherapy over the past 30 years. It resonated with other psychologists, so it also seemed to represent something of the experience of psychologists generally. The relationship between psychology and psychotherapy in academic and clinical worlds has been a source of stimulating, imaginative, perhaps sometimes depressing, debate, collaboration, growth, uncertainty and territorial dispute. It raises issues of professional identity because psychotherapy has become a form of therapy that requires extensive training and professional regulation of its practice. Psychologists working in clinical fields are no longer considered to automatically have the expertise or professional training needed to practice psychotherapy. Territory that formerly belonged to academic and clinical psychology, social work and psychiatry has evolved into the territory of psychotherapy and counselling. There is now a professional register within the BPS for psychologists 'specialising in psychotherapy'. It seems appropriate at this point in the development of psychotherapy within the BPS for the psychotherapy section to consider the relationship between psychology and psychotherapy. This relationship is influenced by social, professional, corporate, academic, clinical, and, (hopefully!), individual, personal processes. In the symposium the papers consider this variety of influences upon the relationship between psychology and psychotherapy as it is expressed in

academic, therapeutic and professional fields of psychology and psychotherapy at this time.

In a spirit of inquiry – from psychotherapeutic conversation to conversational psychology

M. MAIR, Kinharvie Institute of Facilitation, Glasgow.

I tried various alternative titles, like lovers and rivals, strangers and brothers, siblings and families, but none really caught my imagination. However, since I think the intention of the symposium is to explore possible relationships between psychology and psychotherapy, I've chosen to approach this topic from a different direction and in a spirit of inquiry.

I have spent much of my professional life working in the context of psychotherapy. I wanted to begin my psychological inquires in the midst of the kinds of conversations we call psychotherapy, rather than applying formal psychological knowledge to the process or outcomes of psychotherapy. As I worked in this way, the kind of psychology which emerged was very different from what we currently know as 'mainstream psychology'.

This alternative perspective on psychology emphasises understanding rather than the establishing of facts; is based in relationships and a delicate concern for how we ask of others, rather than ask about them; and is conversational rather than static and made up of 'set piece' experiments. I've also found that this approach to psychological understanding opens doors which most psychologists (academic and clinical) have kept firmly closed. Thus, for instance, language has become a living power, rather than being used as a constraining afterthought; relationships become places of diverse, even 'magical', qualities and contours; searching for understanding becomes more central than researching for solid conclusions; and spirit becomes something of basic concern, even though it is invisible and intangible

Psychology and psychotherapy – lovers or rivals?

P. MOLLON, Lister Hospital, Stevenage.

There has always been a tension between clinical psychology and psychotherapy. At the origin of the profession of clinical psychology in the UK, the influential psychologist, Hans Eysenck, declared that clinical psychologists were not in any way to be concerned with therapeutic activities – explicitly contrasting this with the position in the US. Thus there was meant never to be a marriage. The divergent discourse has continued, woven with startlingly divergent values and professional cultures. At times there has been intercourse – sometimes exciting and fruitful, and on other occasions dull and sterile. The two professions, with their contrasting values and perspectives, do need each other – just as the two cerebral hemispheres must collaborate for optimal functioning of the whole. When either goes its own way, without the balancing effect of the other, the results are skewed towards sterility or hyperbole. This need for collaboration became apparent during the debates on recovered memory a few years ago, where neither psychotherapists nor cognitive scientists could understand the issues involved without each learning the other's perspective and supporting each other in a venture into unknown areas of enquiry. There are constructive and destructive features of each profession. Some of these same issues are apparent in relation to the emerging field of 'energy psychology', which presents a paradigm challenge to both clinical psychology and psychotherapy

Do you know who I am? – Reflecting on the impact of large group process upon professional identity in psychology and psychotherapy

A. DOUGLAS, County Hospital, Durham.

When I first qualified as a clinical psychologist, the question most people asked about the job was 'what's the difference between a clinical psychologist and a psychiatrist?' Thirty years later, the question has changed to 'what is the difference between a clinical psychologist and a psychotherapist?' This shift reflects the changes within the profession of psychology and the

emerging profession of psychotherapy. The answer is equally difficult to articulate and equally embarrassing when trying to respond to someone's simple request for the appropriate professional to help with a problem. One is tempted to resort to the old 'light bulb' joke repertoire for illumination! How many...?

Reflecting on the changes in professional roles, I am struck by the impact of social forces upon the practice of clinical psychology and psychotherapy. No longer do psychologists attempt to 'treat' sexual orientation or champion biological explanations of gender differences in IQ or academic achievement (on the whole!). Political and corporate thinking has entered the previously protected domain of the clinician. User involvement, accessibility, accountability and evidence based practice are the 'mission' of modernisation in the NHS. The hope that radical thinking in introducing democracy and policies of diversity and equality will have a positive impact upon clinical practice, is, however, floundering. It can feel like one kind of institutionalisation is being substituted for another.

In this paper, I draw on the theoretical perspectives of group analysis and social psychology in searching for ways of understanding the interplay between large group and institutional processes and professional identity in psychology and psychotherapy. It seems that such an understanding has the potential for contributing to understanding the dilemmas facing psychologists and psychotherapists and to protecting the primacy of the personal in therapeutic and professional relationships.

Constructing the NHS psychotherapy service user

C. NEWNES, Past Chair Psychotherapy Section.

The NHS is simply packed with rhetoric about service users, their 'empowerment', 'rights' and similar issues. In 20 years as an editor I have resisted the use of apostrophes around words of doubtful meaning but now find myself compelled to use them amidst the tsunami of user vocabulary. Who are the service users? What, on earth, is 'double-booking'? This paper explores how the term service user has been constructed as (yet another) unit of barter in today's NHS and what the implications might be for psychology and psychotherapy services.

Symposium: Joint symposium on 'Social support and health' by the Division of Health Psychology and the Social Section of the British Psychological Society.

Convenors: D. JOHNSTON, University of Aberdeen & K.J. McKEE, University of Sheffield.

There is an impressive body of evidence that social support has a powerful effect on health. In this symposium four different aspects of the processes involved will be described to illustrate the psychological and psychobiological pathways involved. Steptoe will draw on the rich dataset provided by the Whitehall study to examine the relationship between social isolation and the acute haemodynamic and haemostatic responses to standard laboratory stressors. He shows that social isolation is associated with disturbances in processes implicated in the development of cardiovascular disease. Sheffield describes a series of studies of the direct effects on cardiovascular reactivity of providing social support during acute laboratory stress. McKee examines the effects of a specific form of support, informal care giving, in the caregivers of older (65+years) community residents and shows that disagreements between carer and care-receiver are important determinants of carers' distress and willingness to provide this social necessary form support. Pistang takes a qualitative perspective to consider support from the perspective of psychological helping using examples from women's health. The symposium is therefore wide ranging and will demonstrate that social support has significant biological correlates, that these effects can be examined experimentally, that features of the interaction of two people in a supportive dyad can have important societal consequences and finally the nature of the

processes occurring in such dyads will be illustrated.

Psychobiological responses associated with social isolation: Cross-sectional and longitudinal effects

A. STEPTOE, L. BRYDON & M. MARMOT, University College London.

Objectives: Social isolation is associated with increased risk of premature mortality and cardiovascular disease. These effects are mediated in part by health compromising behaviours, and partly by direction psychobiological processes (activation of cardiovascular, neuroendocrine and inflammatory responses by central nervous system stimulation). Cardiovascular effects have been studied extensively, but relatively little is known about associations with vascular inflammatory or metabolic processes. In this study, we assessed these relationships both cross-sectionally and longitudinally in a sample of middle-aged men and women.

Design: Laboratory mental stress testing and clinical assessment with three-year follow-up in a subsample of the Whitehall II epidemiological cohort.

Methods: The 224 participants (121 men, 103 women) were aged 47 to 59 years at the time of laboratory testing, and were all in full-time employment. Mental stress testing involved cardiovascular monitoring and blood sampling during baseline (30 minutes), the performance of two standardised challenging behavioural tasks (five minutes each), and post-stress recovery (45 minutes). We analysed human heat shock protein 60 (Hsp60), an indicator of the early inflammatory stages of coronary atherosclerosis, fibrinogen (an inflammatory marker), and lipids from the blood samples. The measurement of social isolation was based reports of contact with family, relatives, and friends, using an assessment developed for the Whitehall study. Clinical blood pressure was reassessed three years after laboratory testing. **Results:** More socially isolated individuals had higher levels of plasma Hsp60 and fibrinogen, independently of age, gender, socioeconomic status, smoking and body mass. There was no association between blood pressure or heart rate stress responses and social isolation, but more isolated participants showed impaired post-stress recovery of systolic blood pressure and heart rate. Acute lipid responses to stress (total to high density lipoprotein ratio) were greater in socially isolated participants. Social isolation also predicted changes in clinic blood pressure longitudinally; greater increases in systolic pressure were observed in isolated individuals, after adjusting for baseline blood pressure, age, gender, socioeconomic position, smoking and body mass. **Conclusions:** Social isolation is associated with disturbances in biological processes that are implicated in the development of cardiovascular disease. Greater understanding of how social networks affect health may emerge with more detailed psychobiological investigations.

Social support and health: The utility of psychophysiological studies for understanding supportive processes and their relationship to health

D. SHEFFIELD, Staffordshire University.

Purpose: This paper argues that laboratory-based studies of social support can aid our understanding of how social support can protect individuals against ill health. In addition, an examination of studies that successfully buffer individuals from the effects of acute stressors may help understand support processes and aid the development of effective interventions.

Background: Although epidemiological studies have demonstrated the efficacy of social support fewer studies have examined underlying mechanisms. One possible causal pathway is that social support might buffer the psychophysiological impact of psychological stress. A variety of studies have found that individuals who respond to psychological stressors in an exaggerated manner are at risk of developing disease, particularly cardiovascular disease.

Key Points: Early psychophysiological studies of social support examined passive support (mere presence) and yielded equivocal results. These

studies were questioned for their lack of ecological validity and so more recent studies have examined active support processes. These studies have yielded important insights about who (strangers, friends, partners and men and women), when (before, during or after the task) and how (emotional or instrumental) support might be beneficial. In addition, they have provided details about the constraints of support and the importance of perceptions of support.

Conclusions: The studies described illustrate the utility of psychophysiological studies for understanding supportive processes. They demonstrate that manipulations of support in the laboratory can attenuate physiological reactions to acute stressful and painful stimuli, which may in turn impact health. Further research is needed in order to identify when and how support attenuates physiological responses to chronic stress and episodic stress occurring in everyday life.

Discrepancies between carers' and care-receivers' perceptions of problems of daily living: Impact on health and well-being

K.J. McKEE, University of Sheffield.

Objectives: This study set out to determine how carers' and care-receivers' discrepant perceptions of the care-receivers' level of dependency for problems of daily living impacts on a range of carer and caregiving outcomes, including health and well-being.

Design: Longitudinal (Time 1 and Time 2) questionnaire survey delivered by face-to-face interview.

Methods: Older people (65+ years) resident in the community were identified through general practice records and recruited to the study ($N=115$). Through interview, family caregivers were also identified. Structured questionnaire-based interviews were carried out separately with the older person and his/her carer, focusing on reported dependency for problems of daily living and incorporating a range of measures of psychological well-being, health, and relationship functioning. After two years, the surviving members of the sample were contacted and re-interviewed, and changes in carer health status and place of residence of the older person noted.

Results: Within the cross-sectional data, disagreement between carer and care-receiver was correlated with carer self-reported stress ($r=0.39$, $p<0.001$), carer willingness to continue caring ($r=0.190$, $p=0.042$), carer acceptance of institutional care ($r=0.21$, $p=0.025$), and carer-receiver's social death ($r=0.18$, $p=0.049$). Longitudinal analyses demonstrated similar relationships over time.

Conclusions: Little research has focused on the relations between carer and care-receiver as a determinant of outcomes of caregiving. This study demonstrates the importance of assessing the nature of the carer/care-receiver relationship, and provides important information for potential supportive interventions.

Social support and health: A phenomenological process-oriented approach

N. PISTRANG, University College London.

Purpose: This paper argues for a phenomenological process-oriented approach to studying social support in health contexts. It sets out the conceptual and methodological rationale for such an approach and demonstrates its potential usefulness with illustrations from several qualitative studies.

Background: Despite the vast body of research on social support, we still know relatively little about how social support is actually communicated. The paucity of research on supportive interactions has limited not only our understanding of effective (and ineffective) support processes, but also the development of empirically based interventions to improve support, particularly within close relationships.

Key Points: The conceptual framework of 'psychological helping' may be useful for studying support processes, as it situates social support within a broad spectrum of formal helping interactions, ranging from 'formal' helping (e.g. by therapists or counsellors) to 'informal' helping

(e.g. by friends or family members). Some of the concepts and methods used by process researchers in the psychotherapy and counselling fields can usefully be extended to the study of informal helping interactions. In particular, a micro-level of analysis, focussing on interactions within a single conversation, can elucidate some of the complex processes that occur when one person is attempting to help or support another.

Furthermore, an idiographic, phenomenological approach using qualitative methods allows access to individuals' personal meanings and interpretations of such interactions. One way of combining a micro-level of analysis with a phenomenological approach is to use the tape-assisted recall methodology. This is illustrated by findings from several studies in the context of women's health.

Conclusions: The studies described illuminate the role of some core processes, such as empathy, that underpin effective helping interactions. Further research is needed in order to identify patterns of helping that occur within and across specific health contexts. Such qualitative research can complement quantitative, macro-level approaches to studying social support.

Symposium: Bipolar disorder and psychosis: New developments and common themes

S. JONES, University of Manchester.

The intention of this symposium is to bring together clinical academics with active research interests in bipolar and psychosis. It is obvious in clinical practice that many individuals with a diagnosis of bipolar disorder experience psychotic symptoms and that many individuals with other forms of psychosis experience mood instability. The presentations will, therefore, report current research findings in both areas and will indicate the ways in which psychological research might make further progress through further consideration of common ground outside the constraints of a purely diagnosis-led approach. The first presentation (Jones) will report on findings from a recent study of children of bipolar parents, indicating candidate risk factors and similarities and differences with previous research in schizophrenia. The second paper (Gumley) considers core common psychological processes in bipolar disorder and psychosis, with a view to future development of comprehensive therapy approaches. The third paper (Bentall) reports recent findings with respect to instability in mania and paranoia. A final paper (Schwanner) considers the role of developmental factors in first episode and chronic bipolar groups. The symposium concludes with discussant Dr Peter Kinderman identifying common themes and differences with respect to the two disorders and considering the implications for future therapeutic developments

Psychological functioning and subsyndromal symptoms in the children of bipolar parents

S. JONES, University of Manchester.

Bipolar disorder has its onset in early adulthood. However, many clients report that subsyndromal disturbances were apparent much earlier than this. It is important to understand more about the developmental aspects of bipolar disorder if we are to increase the effectiveness of current treatments and possibly develop preventative psychological approaches in the future. There is clear evidence that children of bipolar parents are at elevated risk of future illness compared to children with parents without a psychiatric history. However, there is very little research to indicate the extent to which disturbance in psychological functioning might predate any manifestations of illness. The paper will report on a study which investigates subsyndromal symptoms, coping styles, activation, instability and family atmosphere in children of bipolar parents and controls. The implications of findings for current models of bipolar disorder will be discussed.

Instability of psychological processes in psychosis: Studies of patients with bipolar disorder and patients with paranoid delusions

R. BENTALL, University of Manchester.

Symptom fluctuation is a common but rarely analysed feature of serious psychiatric disorder. Changes in symptoms across relatively short periods of time may provide clues about functional relationships between underlying psychological processes. Data will be presented from a series of experimental and naturalistic studies measuring changes in symptoms and psychological processes in both bipolar patients and patients with paranoid delusions. The findings are consistent with the general hypothesis that symptoms arise from dysfunctional strategies for regulating affect and self-esteem, although the precise mechanisms involved appear to be different in the different conditions.

An integrative cognitive, behavioural and interpersonal account of recovery and staying well after psychosis: So what about the affect?

A. GUMLEY, University of Glasgow, Gartnavel Royal Hospital.

Psychosis and bipolar disorders are both associated with extremely high risk of recurrence (90 per cent) leading to greater likelihood of limited and incomplete recovery. This paper will argue that both psychosis and bipolar disorder share common core psychological processes which include cognitive appraisals (including attributions and meta-cognitive beliefs), interpersonal factors, and safety seeking behaviours. These processes play a key role in the regulation of internal cognitive/affective states, which are associated with elevated risk of relapse. The paper will present evidence for an integrated psychological account of relapse. Such an account has implications for the development of more comprehensive psychological therapies aimed at promoting emotional recovery, improving quality of life and reducing medication burden.

A developmental psychopathology of bipolar disorder

M. SCHWANNAUER, University of Edinburgh.

Recent developments in psychological models of bipolar disorder and psychosis emphasise the role of affect and models of affect regulation. The combination of specific cognitive factors and emotional processing does present new possibilities and challenges for the psychological interventions and their underlying theoretical assumptions. In this paper we aim to re-examine psychological aspects of bipolar disorders from a developmental perspective. The recent discourse around the role of affect dysregulation and its cognitive mediators in the course and development of bipolar disorder highlighted the importance to consider clear developmental trajectories of these processes. We will, therefore, compare a first episode population in comparison with a group experiencing multiple relapses we are able to investigate the impact of developmental factors and their associations with the course of the disorder. Specific developmental factors will be considered such as attachment styles, early attachment experiences and early experience of loss and trauma. The influence of these specific developmental factors on processes of affect regulation and interpersonal functioning will be discussed in the context of current clinical models of bipolar disorder.

Symposium: Interpersonal relationships in sport and exercise settings

S. JOWETT, Loughborough University.

There are an abundant number of interpersonal relationships that are formed in sport, exercise and physical education settings. Such relationships include coach-athlete, athlete-parent, and friendships among others. Although, interest in relationships emanates from the work of philosophers for well over 20 centuries, sport and exercise psychology research has only in the last years started to address relationship issues in sport. The symposium concentrates on three types of relationships.

The coach-athlete relationship

The coach-athlete relationship is central to the coaching process. The coach-athlete relationship is characterised as intense and personal and involves a common purpose, a sense of attachment, and mutual responsibility. The coach-athlete relationship serves as a platform from which the coach and the athlete interact in unique ways in order to bring about performance accomplishments, success and satisfaction. The first two papers examine the means by which the interpersonal dynamics between coaches and athletes associate to affective (e.g. athlete motivation, satisfaction) and cognitive outcomes (e.g. team roles or role clarity).

Dual role relationships: The parent/coach-athlete/child relationship

Parents have the responsibility to provide to their children with the opportunity, means and support to pursue their goals in an achievement environment. In sport settings, it is not unusual for parents to coach their child. Many successful athletes, such as Tiger Woods and Venus Williams were coached by their parents and seem to have great relationships with those parents today. Nonetheless, such a direct parental involvement in young athletes sport activities places remarkable demands. The third paper examines the issues involved in dual role relationships (i.e. parents who assume the role of coach to their children)

Friendship relations

The significance of friendship relations during childhood and adolescence is strong. Friendships can influence one's global self-worth, positive and negative emotions, and motivational processes. Making friendships comprise not only prime opportunities of participation but also sources of enjoying sporting experiences. Sport friendship quality provides a means by which to study among others children's and adolescents' choice of activities, effort, persistence and participation patterns. The fourth and fifth paper utilise different conceptualisations to define friendships. Their aim is to examine the impact of friendships on physical self-perceptions, motivation, enjoyment, and anxiety.

Exploring relational and motivational processes on affective outcomes in track and field athletics

J.W. ADIE & S. JOWETT, Loughborough University.

Objectives: Contemporary research in sport psychology has considered the role of approach and avoidance achievement motivation. The purpose of the current study was to test the hypothesis that achievement goals mediate the pathway of coach-athlete relationships on affective outcomes.

Design: In a cross-sectional design, participants completed a multi-sectional survey regarding their experience of participation in track and field athletics. Letters were sent to the head coaches of four UK universities outlining the study purposes. Further contact was initiated with all interested coaches, to arrange times in which to conduct the data collection procedure.

Methods: Participants were 160 track and field athletes (Mean age=21.1 years, SD=2.1). Self-report measures were administered to assess participants': (a) direct perceptions of their coach-athlete relationship (as defined by closeness, commitment and complementarity); (b) tendency to endorse approach-avoidance achievement goals; and (c) indices of athlete satisfaction and intrinsic motivation. Participants provided informed written consent and were advised to answer all the questions as personally and honestly as possible.

Results: To test for mediation, hierarchical regression was employed following Judd and Kenny's (1981) recommendations. A sequential pattern emerged whereby mastery approach goals were found to mediate the pathway between athlete's direct perceptions of complementarity and intrinsic motivation to accomplish. Moreover, athlete's who perceived complementarity (high levels of co-operation) in the relationship with their coach endorsed mastery approach goals, which in turn was found to facilitate intrinsic motivation to stimulate. For those athlete's who were intrinsically motivated to know only mastery approach goals were predictors. Satisfaction with coach's behaviour was only influenced by athlete's

perceptions of commitment and closeness in the coach-athlete relationship.

Conclusions: In support of achievement goal theory, mastery approach goals were positively associated with different facets of intrinsic motivation. Fundamental to the endorsement of mastery approach goals, and athlete's satisfaction experienced in sport, was the athlete's perception of the coach-athlete relationship. Thus, it appears that the coach-athlete relationship in sport psychology cannot be underestimated for its predictive ability of positive based emotions. From the results, an integrative approach combining relational and motivational paradigms appears fruitful in studying athlete's quality of experience in sport.

Psychological needs as mediators of social contexts and role ambiguity

A. OLYMPIOU, S. JOWETT, Loughborough University & J.L. DUDA, University of Birmingham.

Objectives: Self-determination theory proposes that social contexts provide the necessary conditions for the satisfaction of basic needs that in turn lead to the enhancement of general well-being. In sport, such social contexts as the coach-created motivational climate and the coach-athlete relationship have been found to affect athletes' satisfaction, motivation and performance. This study aims to examine the mechanisms by which these social contexts affect athletes' perceptions of role ambiguity applying self-determination theory.

Design & Methods: A cross sectional design was employed. A total of 755 university athletes (477 male and 278 female) aged 18 to 41 (M=21.48, SD=2.50), from a variety of team sports completed the Coach-Athlete Relationship Questionnaire, the Perceived Motivational Climate in Sports Questionnaire-2, short versions of the Role Ambiguity Scale and Need Satisfaction Scale. All scales reported satisfactory reliabilities.

Results: Two models were tested via structural equation modelling using EQS 6.1b; one model tested the impact of motivational climate on athletes' perceptions of role ambiguity through need satisfaction whereas the second model tested the impact of the coach-athlete relationship on athletes' perceptions of role ambiguity through need satisfaction. Both hypothesised covariance structures displayed adequate fit to the data: $\chi^2(363) = 1858$, CFI=0.91, SRMR=0.06, RMSEA=0.07 for the perceptions of the coach-athlete relationship model, and $\chi^2(804) = 2587$, CFI=0.90, SRMR=0.07, RMSEA=0.06 for the perceptions of motivational climate model. Overall, results indicated that both athletes' perceptions of motivational climate and perceptions of the coach-athlete relationship predicted to some extent role ambiguity through the basic needs.

Conclusions: Framed within self-determination theory, the study has shown that psychological needs mediate the effects of the social contexts on athletes' perceptions of role ambiguity (lack of) in team sports. Findings also suggest that although the perceptions of motivational climate and the coach-athlete relationship play an important role in athletes' need satisfaction there may be more factors that account for athletes' role ambiguity (or lack of). From an applied perspective, the development of a task climate and effective coach-athlete relationships can help increase athletes' clarity of their roles (or lack of role ambiguity) in their team through the satisfaction of the athletes' needs.

Too close for comfort: Narratives of the parent/coach – child/athlete relationship

S. JOWETT, M. TIMSON-KATCHIS & R. ADAMS, Loughborough University.

Objectives: In sport settings, research studies have shown that closeness (e.g. caring for, comforting, liking, respecting, trusting, giving and receiving) between young athletes and their parents and coaches provide the optimal platform for the development of effective and supportive relationships. This study aimed to explore the level of interpersonal closeness in a dual role relationship (i.e. parents who assume the role of the coach to their child/athlete).

Design & Methods: One-on-one in-depth

interviews were conducted with six dyads, a total of 12 participants (six parent/coaches and six child/athletes). Specifically four female (mothers) and two male (fathers) coaches took part along with four female and two male child/athletes. The interviews invited participants' thoughts, views, perceptions and narrative accounts of their experiences of the dual role relationship. Questions focused on describing the content (quality) of closeness, highlighting its antecedents and outcomes, as well as unearthing processes of interaction between closeness and other interpersonal components. Interviews were audio taped and transcribed verbatim. Data were subjected to narrative analysis.

Results: Narratives revealed that: (a) closeness was underlined by affective properties such love, affection, and concern; and that (b) closeness differentially affected the quality of both familial and athletic relationships. Narratives uncovered that interpersonal closeness of the athletic relationship was determined by the quality of the closeness experienced at the familial level. It was also revealed that a mechanism of co-ordinating the two relationships was in place, so that problems arising in one relationship would not spill over in the other. However, this mechanism of co-ordination, and at times separation of the two relationships, was not always possible. Issues relating to interdependency renegotiation, communication, concurrent life events, expectations, time, favouritism, satisfaction and commitment, were found to serve as precursors, processes and outcomes of the quality and level of closeness.

Conclusions: Parent-child relationships are unique in that they experience intense levels of closeness; parents who coach their children and their children themselves may experience this special kind of closeness as a challenge, when applied in the sport field. The study suggests that parents' attempts to adjust levels of closeness, co-ordinate the athletic and familial relationships and their corresponding roles and tasks are important mechanisms for maintaining harmony and stability, whilst increased communication aids the prevention and resolution of potential conflict thus leading to better and more satisfying relationships. The development of coach education and coach-athlete relationship intervention programmes specifically tailored to the dual parent/coach role will be useful in ensuring effective coach-athlete interactions and valuable sporting experiences.

Youth peer relationships, self perceptions, and motivation in the physical domain: A relationship profile approach

A.L. SMITH, S. ULLRICH-FRENCH & S.A. WISDOM, Purdue University.

Objectives: An emerging literature on youth peer relationships in sport and physical activity indicates that peers are important motivational agents in the physical domain (see Smith, 2003, and Weiss & Stuntz, 2004, for reviews). Less well understood, however, is if youth may be categorised by distinct peer relationship profiles representing combinations of peer relationship indices and if such profiles are motivationally salient. Pursuit of such work is important because theory (e.g. Sullivan, 1953) and research (e.g. Parker & Asher, 1993) suggest that multiple facets of peer relationships contribute to psychosocial development. The purpose of this study was to: (a) describe peer relationship profiles exhibited by youth in the physical domain; and (b) assess the salience of these profiles to physical self perceptions and other motivation-related variables.

Design: A non-experimental research design was employed, as interest was in describing naturally occurring peer relationship profiles.

Methods: Sixth- and seventh-grade students (N=262, ages 11 to 14 years) completed a multisection questionnaire containing reliable and valid measures of: perceived peer acceptance, positive friendship quality, friendship conflict, physical self-perception variables (i.e. body satisfaction, physical self-worth, social physique anxiety), and motivation-related variables (i.e. enjoyment, self-determined motivation, physical activity). The peer acceptance, friendship, enjoyment, and self-determined motivation measures were contextualised to the physical

activity setting. Non-hierarchical (k-means) cluster analysis of standardised peer acceptance, positive friendship quality, and friendship conflict scores was conducted to uncover peer relationship profiles. Profiles were interpreted using a criterion of $z \geq \pm 0.5$ for final cluster centres. Subsequently, one-way MANOVAs with appropriate follow-up tests were conducted to compare profile groups on the physical self-perception variables and motivation-related variables, respectively.

Results: Five peer relationship profiles emerged from the cluster analysis depicted by: (a) moderate peer acceptance and positive friendship quality with higher friendship conflict ($N=58$); (b) lower peer acceptance, positive friendship quality, and friendship conflict ($N=25$); (c) lower peer acceptance and positive friendship quality with higher friendship conflict ($N=23$); (d) higher peer acceptance, moderate positive friendship quality, and lower friendship conflict ($N=115$); and (e) lower peer acceptance with moderate positive friendship quality and friendship conflict ($N=41$). Group difference analyses revealed that profiles representing more positive peer relationships had more adaptive scores on the physical self-perception variables and motivation-related variables, respectively.

Conclusions: The findings suggest that peer relationship profiles representing combinations of peer acceptance and friendship perceptions are motivationally salient in the physical domain. The findings are consistent with and extend preliminary investigations designed to improve understanding of the integration of relationship perceptions stemming from multiple social agents within the physical domain (Smith, Ullrich-French, Walker & Hurley, 2003; Ullrich-French & Smith, 2002).

Peer motivational climate in youth sport: What is it and does it matter?

N. NTOUMANIS & S. VAZOU, University of Birmingham.

Objectives: In organised sport activities, young athletes interact with and relate to their peers. However, the potential of peers to transmit task-involving versus ego-involving motivational cues has not received much attention in the sport psychology literature. Thus, a series of studies are presented which aim to identify the structure of peer motivational climate in youth sport, its correlates and the extent to which it varies within and across teams.

Method: A combination of interviews (Study 1), and surveys (Studies 2 to 4) were conducted. In Study 1 content analysis was used to identify the dimensions of peer motivational climate. Based on the interview findings from this study, the Peer Motivational Climate in Youth Sport Questionnaire (PeerMCYSQ) was developed to assess athletes' perceptions of peer motivational climate in their team. The PeerMCYSQ was psychometrically tested in Study 2 with three independent samples using both exploratory and confirmatory factor analyses. Study 3 examined the relationship of peer and coach motivational climate with cognitive (physical self-worth), affective (enjoyment, trait anxiety) and behavioural (exerted effort as rated by the coach) responses of young athletes. Lastly, Study 4 used multilevel analysis to examine whether variations existed in the perceptions of peer- and coach-created climate within and between teams, as well as to test a number of possible factors that might account for such variations at both the individual and group level.

Results: Based on the interviews in Study 1, 11 dimensions of peer climate were identified which tapped both task- and ego-involving facets of the climate. In Study 2, the PeerMCYSQ demonstrated satisfactory factorial validity and reliability. The PeerMCYSQ consisted of a task- and an ego-involving higher order factors, each of which comprised of a number of lower order factors (Task-involving: Improvement, Relatedness Support, Effort; Ego-involving: Intra-team Competition/Ability, Intra-team Conflict). In Study 3, peer climate was the only significant predictor of physical self-worth and a stronger predictor of enjoyment than coach climate, whilst reported effort was positively predicted by perceptions of both coach and peer task-involving climates. Lastly, Study 4 showed that perceptions of peer and coach climate varied across and within teams. A number of individual (task and ego goal orientations, gender and age of athletes) and group

level (success of the team, gender of the coach, and type of team) factors were identified accounting for some of this variation. Further, within team variations in perceptions of peer and coach climate as a function of the levels of task and ego goal orientations and the success of the team were detected.

Conclusions: The findings from the four studies indicate the viability of measuring athletes' perceptions of peer motivational climate in youth sport. Such climate can predict a number of important motivational consequences. It also seems to vary within and across teams as a function of the level of athletes' dispositional goal orientations. Future research might consider looking at the motivational consequences of being in a team where the prevailing coach and peer motivational climates are contradictory. We suggest that future intervention studies that aim to enhance task-involving climate in youth sport should take into account both adult and peer climates.

Symposium: Workplace bullying

Convenor: M. KERRIN, City University, London.

This symposium charts the origins of the bullying at work phenomenon, its theoretical bases and its practical applications. Participants in the symposium have been instrumental in setting the agenda for bullying at work research, and are actively involved in shaping national and international debate on the issue.

Bullying at work: The limits of knowledge

C. RAYNER, Portsmouth Business School.

This paper will provide a brief and critical overview of our contemporary knowledge of workplace bullying. As such it will act as a building block for other contributions to the symposium. It will begin by outlining definitional issues, including the distinction between interpersonal and organisational bullying, and progress to a discussion on measurement. Common patterns of bullying likely to be found in British workplaces will be described that include the nature, incidence and the effect of the phenomenon on the targets of bullying.

The second section of this paper will examine some of the 'limits' to our understanding. Specifically, the data and methodologies on which our knowledge has been built will be critically analysed. Gaps in our knowledge (such as the absence of data on the alleged 'bullies') will be identified and discussed. The complexity of the problem for those at the organisational level will be outlined, which is fundamental to the difficulties practitioners face. This complexity similarly provides a very challenging canvas for the researcher to contribute in a meaningful way. The paper will conclude with a discussion of the possibilities for future work, drawing on ideas regarding methodologies, schemata and approach. It will call for considerably more understanding of the organisational aspects of bullying and how these feed into interpersonal bullying and vice versa.

Translating theory into practice – dealing with bullying at work

N. TEHRANI, Assessment & Rehabilitation Consultants Ltd.

Much has been written about the incidence and the impact of workplace bullying. However, for the organisation wishing to create a workplace without bullying there is a need for solutions which are practical and effective in addressing the causes and the impact of bullying.

In October 2004, the Chartered Institute of People and Development (CIPD) published a survey on managing conflict in the workplace. It found that although over 80 per cent of organisations had policies on bullying and harassment, this did not prevent over 13 per cent of employees from the participating organisations experiencing bullying during the previous 12 months.

The survey discovered a number of other interesting facts among which were that 12 per cent of all the accusations of bullying were made against subordinates. The behaviour of line managers was the most influential factor in ensuring success in tackling bullying, and that most of the current bullying and harassment policies

concentrated on defining the intimidating behaviours that were to be rejected rather than providing employees with guidance on the positive behaviours that the organisation wished to promote.

This paper looks at and describes the process employed to develop a guidance document to enable the CIPD to offer support to its members and their employers in dealing with bullying at work. Essential to this project was the understanding that the guidance would be easy to understand and practical whilst maintaining its strong foundation of research and good practice.

An organisational justice perspective to understanding bullying at work

J.A.-M. COYLE-SHAPIRO, London School of Economics.

Organisational justice and workplace bullying have developed as independent streams of research and how the two phenomena relate to each other has largely evaded investigation. Arguably, the importance of this lies with each construct's attempt to capture unfair treatment and mistreatment in organisations, respectively. This paper, therefore, sets out to examine these two phenomena and attempts to: (a) conceptually outline the domain of the two constructs; (b) examine their similarities and assess the degree to which there is conceptual overlap; (c) explore the potential relationships between justice and bullying and; (d) make recommendations for future research.

Bullying is broadly defined as the purposeful, systematic and repeated mistreatment of individuals in the workplace (Einarsen, Hoel, Zapf & Cooper, 2004). Although the dominant emphasis is on interpersonal bullying, some researchers have argued that bullying can occur at the organisational level (Liefoghe & Mackenzie Davey, 2001). Irrespective of the source, in the process of this mistreatment, the recipient's ability (or desire) to exercise voice is thwarted. Herein lies the crux of justice research and in particular, procedural justice which is important due to its process control effect in allowing individuals to have their views heard. This fair process effect influences the acceptability of outcomes to individuals and is important for instrumental and non-instrumental reasons: (a) instrumental/control perspective; (b) group value/relational concerns; and (c) fairness theory heuristic.

The lack of voice (having one's views or opinions ignored) represents a common element to both the justice and bullying literature. Interpersonal bullying involves a lack of respect and voice toward the recipient. The most prevalent form of bullying cited in the literature is rumours, which from a justice perspective can be considered as unjust interpersonal treatment reflecting lack of respect, consideration and untruthfulness. In a similar vein, organisational bullying can be conceptualised as a form of institutionalised procedural injustice whereby practices are adopted with the aim of undermining an individual's voice in organisations or introduced in a manner inconsistent with the tenets of procedural justice thereby influencing employees' interpretation of whether those practices are fair or not.

Given that injustice seems to be inherent in bullying, at what point, does unfair treatment spill over to become bullying? What differentiates injustice from bullying? Is the experience of injustice a precursor to the development of interpersonal bullying? To what extent can interpersonal bullying be conceptualised as escalated interactional injustice fuelled by the negative norm of reciprocity? Can organisational bullying be conceptualised as the systematic adoption of practices that undermine or reduce employee voice and/or are implemented in a procedurally unjust way? Thus, when employees speak of bullying practices, are they manifesting their reactions to organisational practices that are not only deemed as unfair but introduced in an unfair manner and without explanation? This paper will attempt to outline how a justice perspective can contribute to and extend our understanding of workplace bullying.

The language and organisation of bullying at work

A. LIEFOOGHE, Birkbeck College, University of London.

As symposia such as this demonstrate, bullying at work is a growing field of interest in the organisational literature. Over the last decade, a series of international conferences, special journal issues and expert panels have had such an impact that overarching organisations such as trade unions and legislative bodies have sought to develop policies to combat bullying at work. During this endeavour, the aim to 'fix' bullying as a homogenous concept has been paramount – as definitions need to form the basis of legislation, they need to be clear and stable. However, more fluid uses of the term proliferate, for instance in media accounts (where one country is alleged to bully another, the government its citizens, or an organisation its employees). Divergent talk of bullying at work has led some researchers to claim that the term is losing its meaning. Rather than lamenting the loss of meaning, this paper charts the additional meanings of the term, and their function: what kinds of different realities are legitimated, reinforced or subverted by using the term differently?

Lifting the lid on this polyphony, we outline firstly how talk of bullying has become a dominant discourse and in turn institutionalised, and at what price. Secondly, we investigate the role of competing discourses and their functions. The paper concludes by warning that before fixing a monologic definition into a powerful legal text, fluidity needs to be retained for a while longer.

Symposium: Parliament and politics – a psychological examination

Convenor: R. KWIATKOWSKI, Cranfield University.

Perhaps reflecting the apparent disinterest of the wider population, British psychology has not concerned itself to any significant degree with politics or the political process. Some branches of occupational psychology have concerned themselves with power as a variable within commercial organisations, some forms of community psychology have commented on local political action, but, in general, UK psychology has not ventured into the political domain.

This is a significant oversight, since not only are our politicians human beings, but their actions have a crucial impact. For example, the recent war in Iraq caused debate within the British Psychological Society as to what was *ultra vires* (beyond the legal remit of the society to comment on). However, the psychological factors acting on Members of Parliament in coming to their decision to vote for war seem relatively unexamined. In this symposium, we provide a taster of how different perspectives can help us to understand the processes that go on within our democracy. On entering Parliament the forces of socialisation are powerful and pervasive; they operate on the most sophisticated Members of Parliament, and cause changes in behaviour and attitude. The source of this socialisation and its differential impact is examined.

From an almost physiological psychology standpoint we moved to examining stress in Members of Parliament; stress impacts on decision-making, cognition, and health. UK Members of Parliament demonstrate high levels of stress and a lack of locus of control. That has significant implications both for those individuals and our wider democracy.

Psychology has a good deal to say about human computer interaction; yet aspects of usability and of fundamental cognitive processes seem to be being ignored, for example in considering widening participation through technology, or implementing electronic voting, as shown in our third paper concerning the computerisation of democracy. Given the incoming Labour government in 1997 one would have expected that Parliament itself was ripe for modernisation and would have significantly changed; but for institutional, cultural, political, and structural reasons there has been relatively little change. Again the psychological ideas, theories, and models presented in our fourth paper are able to provide an insight into why this might be so.

Yet, what actually happens in Parliament, as well as being ritualised, may also be gendered. In our final paper we examine how women and men may do politics rather differently, and yet because the male version of politics is seen as more valuable and appropriate for the House of Commons, women, and an other gendered way of doing politics, perhaps more consensual and prone to listening, has been discounted.

Finally, in the discussion, the variety of ways in which psychology can examine politics, democracy, and the political process will be commented on, and some of the implications and potential solutions suggested by psychology will be presented.

Given the impending General Election this an important time to be having this debate, and to demonstrate the importance of psychologists utilising a variety of theoretical and practical perspectives in providing input to the broader political process

Doing politics differently? Gendered political styles in the House of Commons

S. CHILDS, University of Bristol.

Purpose: Establishing whether women MPs consider that there is a gendered style of politics is important because it adds to our knowledge and understanding of how women representatives experience their presence in British politics. Moreover, their perceptions may impact on their behaviour. If women MPs feel that their style is regarded as having lesser value, they may feel it necessary to adopt the norms of parliamentary behaviour in order to be effective representatives, even though they may be critical of these and identify them as masculinised.

Background: In 1997 the numbers of women MPs elected to the House of Commons doubled to 120. It had long been perceived of as an 'old boys club'; these women MPs were entering a gendered institution. One of them publicly decried its dominant style as 'willy-jousting' as male MPs engage in adversarial posturing. Women MPs it was assumed preferred a more consensual and co-operative style of politics. Women are said to 'introduce a kinder, gentler politics', one that is 'characterised by co-operation rather than conflict, collaboration rather than hierarchy, and 'honesty rather than sleaze'. These contentions are supported by previous research.

Method: Much of the data is based on in-depth interviews conducted with 23 new Labour women MPs first elected in 1997. The participating women were a representative sample with regard to a range of characteristics, including age, size of majority and socioeconomic breakdowns of constituencies, though it is recognised that the quality of qualitative research is not dependent upon generalisability. Secondary research sources are also drawn upon by the author.

Key Points: Drawing on interviews this paper examines their perceptions of how gender is played out in parliament: it discusses how women MPs consider it affects their behaviour and the behaviour of others. The women MPs' perception that women's style is less legitimate than men's is explored.

The style of politics practised by women as a reflection of women's gender and gendered experiences and stands in contrast to that style practised by men as a reflection of their gender and gendered experiences. As such, it is relational and subject to change over time and place.

Conclusions: Women MPs do not act like women and men MPs like men because of their biology but rather because of the way in which masculine and feminine gender roles are ascribed to males and females. The women interviewed talked about their perceptions of how their style of politics was considered less legitimate and less effective and they discussed the pressures they experienced to conform to the traditional norms of the House. There was also an acknowledgement of the costs associated with acting like (and for) women. Finally the paper explores whether particular political contexts are 'safe' for women to act like (and for) women.

Human computer interaction at large? Systems, politics and public policy: Don't blame the user

L. FERGUSON, Managing Director, Digital Habitats.

Purpose: As the public sector takes on an increasing role in electronic forms of interaction, both internally – amongst staff that provide services to citizens – and externally – in interacting with citizens in government and democratic processes – it needs to take on board lessons from human-computer interaction (HCI) and cognitive psychology.

Background: With systems that incorporate both human and computer elements increasing adopted in the fields of e-government and e-democracy, much attention is paid to project management issues, but little is focused on elements that contribute to optimising interactions, minimising human error, and encouraging participation. Currently, a range of national programmes within the UK promote the use of ICTs in the public sector. Some examples include the NHS National Programme for Health, extensive pilots taking place with e-voting under the auspices of the Electoral Commission and the Office of the Deputy Prime Minister, and the Gershon Review of the public sector. In such initiatives, technology is assumed to be a force for good, rather than a vehicle that can deliver a range of experiences, both good and bad. Little is currently known about how ICTs aid productivity in the public sector, or how, for example, voters react to new forms of voting or other types of e-democracy.

Key Points: More often than not, new projects in the public sector are top-down, with objectives set through central government public policy, and with processes defined by government law makers, based on assumptions about human behaviour. Little or no reference is made to evidence or research into how systems and services can best be designed. In fact, in some such areas, little research has been conducted.

Cognitive psychology and cognate academic disciplines can contribute considerably to the design of systems, processes and services in the public sector.

Adopting user-centred approaches to e-government and e-democracy, deriving from the human-computer interaction tradition, and qualitative research techniques deriving from ethnographic approaches, can aid our understanding of organisational processes and citizen-state interactions that can assist in increasing trust and confidence of citizens in their dealings with the state, as well as helping in designing more efficient and acceptable public workplace processes.

A user-centred approach to design focus on what people – citizens, employees – do, rather than what they say they do, and are essential to understanding how people use systems and technology. This requires a qualitative approach to users, citizens, people, and how they behave in their own environment.

Examples of areas in which user-centred design approaches can be applied include electronic voting, clinical healthcare, and education.

Conclusions: Public policy needs to take on board the human dimension, in a way that goes beyond the survey and the focus group. Instead of supporting a technological determinist view of the world, and blaming the user when human-computer interactions fail, public policy should focus on the design systems and services that best cater for human strengths and weaknesses, based on contextual research rather than assumptions about human behaviour.

Change in Parliament: Reason or resistance?

R. KWIATKOWSKI, Cranfield University.

Purpose: This study, one of the few carried out by psychologists in Parliament, aims to examine how the complex network of situational and institutional factors have combined to resist change in what is arguably the most important aspect of governance in the UK.

Background: In 1997 a new, reforming, and modernising government was swept to power. New Labour carried with it a raft of expectations; 'things could only get better'. Within days, dramatic

economic changes had already been implemented, for example the independence of the Bank of England. It was reasonable to suppose, then, that the modernising zeal of an elected government with a massive and unassailable majority would quickly turn to modernising an ancient but creaking institution known as Parliament.

Methods: In order to chart the interplay of a reforming government within an ancient institution over which it apparently had absolute power, a number of depth interviews were undertaken with a panel of 18 Members of Parliament, and some other people working in the House of Commons (anonymity has been guaranteed to both groups of participants). These interviews were repeated, on average, three times per year for the life of the Parliament. Interviews semi-structured and transcribed.

Key Points: Despite a modernisation committee being formed at a relatively early stage in the life of the 1997 Parliament very few significant changes to the underlying organisation of the House of Commons have actually taken place. Various theoretical psychological perspectives are employed to examine the reasons for this remarkable apparent resistance to change.

Conclusions: Over the course of the first Parliament, where New Labour had a overwhelming majority, individual MPs' understanding of how the House of Commons worked had increased. However, despite dissatisfaction, particularly amongst new MPs of the way in which Parliament operated, very few significant changes were made. Socialisation, institutionalisation, desire for advancement, the power of party, the power of the Executive, and the power of tradition, combined to leave Parliament essentially unchanged, and still operating as a 19th century institution. Psychologists have a lot to say about change at individual, group, and organisational levels; both research and practice can be applied to making organisations more effective as well as healthier. The judicious application of this knowledge would ultimately benefit individuals as well as Society if it were applied to Parliament.

Fit to govern? – Psychological well-being among national politicians

A. WEINBERG, University of Salford.

Aim: This paper examines the impact of the job of the national politician and of organisational initiatives to change working patterns on the well-being of Members of Parliament in the House of Commons in London, as well as the newer legislatures of Scotland and Wales. Implications for the effective functioning of the UK's elected representatives are drawn.

Background: Members of Parliament constitute the most important decision making body in the UK. Over the last 15 years, studies of UK national politicians have demonstrated the psychological impact of the job role on the individuals performing it. Baseline research has demonstrated the elevated levels of symptoms of psychological strain reported by MPs compared to occupations with similar levels of responsibility and also on those performing the job for the first time. This finding has been replicated with national politicians in the new legislatures of Scotland and Wales.

Key Points: The House of Commons is one of the oldest parliaments, yet it has attempted to reform the working hours of its national politicians in the last 15 years. However, baseline and follow-up studies in this legislature have shown that organisational change has not had the desired positive impact on psychological well-being. This has clear implications for effective functioning in the political job role, as it would in any other sphere. In fact the stressors identified by national politicians remain similar between both new and old legislatures, such as high workloads, problems at the home-work interface and a lack of social support in the workplace.

Conclusions: The findings to date indicate that the job of a national politician carries with it considerable psychological strain which has a variable impact on those carrying out this type of role. The need for more effective organisational action to address the impact on the individuals' health and functioning is clear.

Legislative socialisation: The case of British MPs

M. RUSH, University of Exeter.

The learning curve faced by newly-elected Members of Parliament is steep. Parliament normally meets within days of a general election and new MPs are expected 'to hit the ground running' on their arrival at Westminster. They, therefore, face the short-term problem of learning how to be an MP. The longer-term question, however, is to what extent are they socialised into the role of the Member of Parliament? The research on which this paper is based consists of surveys of newly-elected MPs in the 1997–2001 Parliament. The findings suggest that new MPs have expectations about their roles as supporters of their party and constituency representatives which are largely borne out by experience, but that, in learning how to perform the job of the MP, they are subject to socialisation by their party and by the House of Commons as an institution and, to a lesser extent by other organisations and people. However, the research also suggests that socialisation reinforces anticipated behaviour rather than changes it. These findings accord with research on American legislators in terms of expectations about party roles and the job of the legislator, but not about knowledge of how the legislature operates or actually being a legislator. In addition, two important factors appear to effect the attitudes of MPs. First, generations of cohorts of MPs influence attitudes, though here the 1997 cohort presents a problem because nearly three-quarters of new entrants were Labour. Second, and similarly, whether MPs are in government or opposition also appears to matter.

The psychology of selecting politicians

J. SILVESTER, Goldsmiths College, University of London.

Objectives: Four years ago I received a letter from Conservative Central Office asking for help. Having recently published research concerned with bias in selection processes, I was asked whether I would consider reviewing the Conservative Party's selection process for prospective Parliamentary Candidates with the aim of making it fairer for women and ethnic minority candidates. This paper describes the development of the first competency based selection process for political roles and discusses the advantages and challenges in applying occupational psychology research and practice to selecting political candidates.

Design: Six focus groups and 30 critical incident interviews were conducted with Shadow Ministers, MPs, prospective Parliamentary candidates and Party members. Six competencies and associated behavioural indicators were identified for the MP role. An assessment centre involving role-related exercises and psychometric tests was developed and assessors (two MPs and two members of associations for each centre) were trained in assessment and feedback skills.

Results: The assessment centre was validated using data from the first 400 participants. Results demonstrated no significant differences in performance, on exercises or competencies, between male and female candidates. The centre provided the first empirical evidence that female political candidates perform as well as male political candidates when assessed using rigorous, objective and reliable methods – a finding publicly applauded by the Equal Opportunities Commission. **Conclusions:** As a consequence of this work, the Office of the Deputy Prime Minister commissioned a cross-party follow-up project to define the core competencies and behavioural indicators for effective and ineffective local councillor performance. This national and local government work demonstrates that occupational psychology has much to offer in respect to effective selection and development of political role incumbents. However, political roles also present important challenges to many of the assumptions underlying traditional selection and assessment.

Symposium: Theory of Mind: Cross-cultural and transpersonal perspectives

Convenors: L. LANCASTER, Liverpool John Moores & M. BEATON.

In modern psychology, the concept of 'theory of mind' has risen to prominence largely through the

work of developmental psychologists. However, the fundamental premise that individuals carry an implicit set of assumptions about the nature of mind, and about what it is to 'have a mind', has a long history. References to such constructs may be found prior to the rise of psychology in the literature of mystical traditions, in which the challenge to understand the mind was addressed. Accordingly, transpersonal psychology, which attempts to synthesise these mystical ideas with areas of scientific and therapeutic psychology, has a key contribution to make to the discussion on theory of mind. Increasing evidence of cross-cultural variation in the theory of mind has a bearing on assumptions made by a range of psychologists, including those engaged in clinical areas, those studying consciousness, and those addressing the nature of mind through social, cognitive and/or neuroscientific analysis. The symposium will bring together psychologists from a number of these areas in order to explore the value of dialogue across the standard sub-disciplinary divides. Issues under examination include:

- Those assumptions of Western psychology which may fail adequately to account for the diversity of structural features of mind across diverse cultures;
- The extent to which contemporary approaches to consciousness within psychology may suffer from a view of consciousness that is largely a Western cultural construct;
- The role played by embodiment in the development of mind and in the construction of the relationship between the cognitive subject and the 'real world';
- The ways in which recognition of the relativity in theory of mind are/should be influencing clinical practice;
- Cross-cultural variations in the 'self'-construct, and their importance in addressing issues of spirituality and transformational practice.

Jorge Ferrer will address the multiple factors involved in the embodiment of mind, stressing the implications of his model for notions of spiritual or transpersonal development. Chris Sinha will similarly draw on notions of embodiment, but within a more social cognitive frame. His primary concern lies with the referential basis of cognitive representation. Adam Zeman will be adding to the debate with reference to his studies of attitudes to the mind and its relationship to the brain amongst Edinburgh undergraduates. A majority of respondents were shown to carry implicit notions strongly influenced by philosophical and religious views deemed outmoded in most academic theories of consciousness. Tony Marcel will explore the social factors involved in the construction of subjective experience, and Isabel Clarke brings a clinical perspective by illustrating the ways in which Buddhist and other cross-cultural views are influencing recent developments in cognitive behaviour therapy. Finally, Les Lancaster will illustrate various features of the 'theory of mind' present in mediaeval Islamic and kabbalistic texts and examine the potential for dialogue between these kinds of mystical maps of the mind and the models developed through scientific psychology.

The transformation of the embodied mind: A participatory transpersonal model

J.N. FERRER, California Institute of Integral Studies.

Purpose: The aim of this paper is to advance our understanding of the mind beyond the neo-Cartesian models that continue to influence much theorising in contemporary European and American psychology. The model I shall develop is intended to provide a framework not only for further theory but also for the impetus to individual transformation that characterises the transpersonal movement.

Background: In recent work (e.g. Ferrer, 2002), I have argued for a participatory model of human spirituality that attempts to move beyond some of the assumptions often associated with transpersonal psychology. The present paper extends this work by exploring more explicitly the embodied nature of mind that is a central feature of the participatory model. The idea of 'the embodied mind' has received increasing attention from neuroscientists,

psychologists, linguists, and philosophers in the last decade. That the mind is not only 'embodied' but inherently embodied is becoming a truism in many Anglo-American psychology and philosophy departments. Conceptual categories and metaphors, emotions and feelings, mathematics and rationality, and even moral and spiritual intuitions, are said today to emerge from complex interactions between the body and the sensible world. Paradoxically, most of these contemporary proposals tend to be rather disembodied in that, although systematically exploring the embodied roots of mental capabilities, they do so from an eminently mental standpoint, reinforcing thereby the mind-centred Cartesian epistemology they seek to overcome.

Methods/Key Points: The present paper introduces a participatory inquiry model in which all human dimensions – somatic, instinctive, vital, emotional, mental, and spiritual – are invited to co-creatively participate in the elaboration and evaluation of knowledge. The model is informed by analysis of a range of spiritual traditions and their diverse cultural contexts, as well as being situated within the contemporary context of transpersonal inquiry. The primary sources from which the model has been developed include the literature in comparative religion and transpersonal psychology, and the author's experience of practices directed towards transformational states of being. The key point of the argument is that a transformed embodied mind results from an epistemic process that includes all of the multidimensional factors mentioned above. An apposite metaphor for this multidimensional approach is that of 'the four seasons', a metaphor which is used to further explore the ramifications of the model.

Conclusions: The specific model of the embodied mind developed in the paper is viewed as advantageous by comparison with other recent theories in that it can more easily recognise the transpersonal and spiritual dimensions of inquiry and knowing. I shall suggest concrete ways in which the model can be applied to modern academic inquiry, and identify several challenges to the satisfactory implementation of participatory inquiry methods in modern academia.

The clinical perspective: Grounding the transpersonal in cognitive theory

I. CLARKE, Royal South Hants Hospital.

Purpose:

- To explore the clinical implications of transpersonal views of mind.
- To examine the shifting cultural perspective in relation to theory of mind within cognitive therapy – the dominant therapeutic modality within the NHS
- To ground this perspective in cognitive theory in such a way as to suggest a scientific way of understanding transpersonal experience.

Background:

1. 'Third Wave' developments in Cognitive Behaviour Therapies, including Acceptance and Commitment therapy (Hayes *et al.*, 1999) Linehan's Dialectical Behaviour Therapy (Linehan, 1993) and Mindfulness Based Cognitive Therapy (Segal *et al.*, 2000) share a focus on process rather than content, and the activation of a 'ground' experience, accessed through the practice of mindfulness, which affords detachment from both emotional and logical processing. All these authorities recognise their debt to Buddhism.
2. Teasdale and Barnard (1993)'s Interacting Cognitive Subsystems which integrates experimental data on information processing into a model which underpins these developments. A recent paper by Barnard (2004) links ICS to more general developments in CBT.
3. The author's extension of ICS to elucidate both spiritual and transpersonal, and psychotic experience (Clarke, 2001).

Key Points: The 'third wave' cognitive therapeutic approaches represent a cultural shift within cognitive therapy, away from a conception of the self based on propositions, to be challenged where appropriate, and towards a ground of experience. This creates space for an experience of self distinct from particular thoughts and emotions, and for an awareness of wider connectedness. ICS offers a theory of mind that embraces two central meaning-making systems. One system

governs the verbal, logical, side of information processing; the other is concerned with emotional life. The second system reaches beyond the individual since its function is to regulate relationship. This twofold model has explanatory power, both for the fragility of the individual self and its reliance for its coherence on relationship. It is this relational aspect of the self that affords access to the transpersonal mode of experiencing. The author's clinical work with psychosis, and further refinement of the model by Barnard (2003) suggests that the transpersonal mode of experiencing is dependent on the relative dysynchrony of the two central meaning-making systems.

Conclusions:

- Current developments in CBT clinical practice, underpinned by cognitive science, extend our understanding of the human mind to the transpersonal dimension of experience.
- This development has implications for clinical practice, e.g. by providing explanations for psychotic experiences that involve permeability of the self, such as thought insertion and thought broadcasting, and for related transpersonal experiences.

CBT for psychosis is developed to both honour the individual's experience and facilitate change (Clarke, 2002).

Dual grounding and/or theory of mind

C. SINHA, University of Portsmouth.

Classical, or 'rules and symbols' based, cognitive science is widely acknowledged to have run ashore on the reefs of the 'Grounding Problem', of how to explain the reference of symbolic expressions and, in general, the relationship between the cognitive subject and the real world. This failure, and the proposed solution to it in a more organismic and epigenetic, embodied approach to both natural and artificial intelligence, came as little surprise to developmental scientists in the Piagetian tradition. However, sensorimotor grounding alone, it has been argued, cannot provide solutions either to the problem of reference, or the emergence of symbolisation. Sinha (1999) proposed a 'dual grounding' approach based in the dialectical and developmental relationship between sensorimotor (or embodied) grounding and discursive (socio-communicative) grounding. The purpose of this presentation is both to outline this account and to address some problematic issues attendant upon the notion of discursive grounding. Primary amongst these is the question of the relationship between the hypothesis of discursive grounding, and more individual psychological hypotheses which postulate a human species-specific social-cognitive capacity for 'mind reading'. I shall argue that these are, in fact, distinct hypotheses, the first of which recognises and builds upon the emergent autonomy of the ontology of the social, or the existence of what Durkheim called 'social facts'. The hypothesis of discursive grounding does not conflict with hypotheses that there exist cognitive adaptations to social facts, but it is irreducible to such hypotheses, as are social facts irreducible to individual psychological facts – a point made by Wittgenstein, often misinterpreted to imply that individual psychological facts have no existence. Social facts, including linguistic meanings, owe their existence to an intersubjective field permitting the emergence and establishment of norms and conventions. Individual psychological facts include those pertaining to cognitive capacities referring to and representing social facts. The issue of the 'psychological reality' of normative institutions, including grammars, should, therefore, be understood in the same way as the 'psychological reality' of any other knowledge, namely as 'knowledge about', not as identity or transcription. Both social knowledge, and the self, are socially grounded, and cognitive development and the development of the self are mutually implicative, historically situated and culturally variable.

Can our concepts affect our conscious experience?

A. MARCEL, MRC Cognition and Brain Sciences Unit, Cambridge.

I will briefly outline the approach to consciousness I have been developing in which phenomenal experience is separate from and prior to awareness

and is influenced by properties of the latter. This approach is informed by instances of concepts affecting the nature and content of consciousness. Awareness depends on focal attention and both are subject to conceptual structure. If relevant concepts differ individually and culturally, the content of awareness will differ accordingly. A simple example is how analytic concepts such as phonemic structure of alphabetic scripts enable us to experience speech analytically. This is apparently also true of emotion experience. A more complex example concerns evidence that tacit conceptions of the self affect how emotions are experienced differently in different cultures, e.g. somatically vs intrapsychically. At another level, examples will also be given of how our theories of experience affect what we take to be our experience and what we notice in it. Furthermore, since introspection itself influences one's experience and since it can itself be a social process, this provides a way in which our experience is socially affected online. Finally, differences in the 'mode' of attention, one's attitudinal stance (immersed vs detached), produce radical differences in one's phenomenal experience. The talk illustrates how variation in universal psychological properties can lead to differences in conscious experience.

Beliefs about mind and brain among Edinburgh University undergraduates: Implications for the 'science of consciousness'

A. ZEMAN & C. LIEW, University of Edinburgh.

The terms we use in the scientific exploration of the mind are steeped in cultural, religious and philosophical history. Even if we are careful to operationalise these terms, their connotations linger, and may well influence our background assumptions about the subject under study, the choice of appropriate questions and the range of acceptable answers. The beliefs of young educated subjects about the mind and its relationship to the brain have been explored rather rarely. We conducted a questionnaire survey among Edinburgh University undergraduates from a range of disciplines to probe these beliefs. 250/357 (70 per cent) of subjects responded. A majority of subjects endorsed the separateness of mind and brain ($N=168/250$, 67 per cent), the existence of the soul ($N=161/246$, 65 per cent) and spiritual survival after death ($N=174/248$, 70 per cent). Opinions were approximately evenly divided on the chances of understanding consciousness fully using scientific methods. Women, students in the humanities and those with religious faith were especially likely to hold dualistic beliefs implying that mind and brain are separate. The dualistic tendency of these responses was less evident in the answers given by the same subjects to other questions: 81 per cent ($N=199/245$) accepted that the functioning of the brain produces consciousness and 69 per cent ($N=171/247$) agreed that mental illness is a sign of brain dysfunction. It seems likely that religious notions of soul, spirit and spiritual survival continue to exert a background influence on theories of consciousness and the mind, even among scientists who deny any explicitly religious beliefs. This has the curious result that scientific accounts of awareness sometimes appear to be offering an explanation for an essentially magical conception of the mind. I will place our survey of students' beliefs in the context of contemporary scientific theories of consciousness.

Whose mind? Dialogue between mysticism and cognitive neuroscience in understanding 'theory of mind'

L. LANCASTER, Liverpool John Moores University.

Purpose: The aim of this paper is to introduce a transpersonal perspective on 'Theory of mind' (ToM). Diverse spiritual and mystical traditions assert that assumptions generally made about the sense of self, ownership of thoughts, and nature of agency are misguided. Since features such as these are implicit in the ToM established in infancy, we may infer that the kind of personal transformation advocated by these traditions fundamentally entails a shift in the implicit ToM. I argue that an integration between the view of mental functioning found in mystical literature and that

arising through research in cognitive neuroscience can refine our insight into ToM.

Background: ToM refers to the ability to grasp other individuals' mental states, including their intentionality and sense of personal identity. Whilst the universality of constituent features of ToM has recently been challenged on the basis of cross-cultural research (Lillard, 1998), it is generally agreed that the existence of self and other as mental agents is a universal feature of ToM (Symons, 2004). In this paper I draw on insights into mental processes as conveyed in Buddhist (Theravadin Abhidhamma and Yogacara traditions) and mediaeval Islamic and kabbalistic sources, which appear to challenge this view of universality. In addition to the doubt these sources cast on the view of self as agent, they challenge both the divisions generally erected in psychological literature between conscious and nonconscious processes, and the assumptions made about the 'ownership' of thought. These challenges receive some support from cognitive and neuropsychological research into the nature of agency (e.g. Wegner, 2002), and lead to the proposition that it is specifically features of ToM established in infancy that become obstacles to the higher levels of introspective insight advocated by mystical traditions.

Methods/Key Points: The approach to ToM developed in this paper entails an integration across data drawn from research in cognitive neuroscience and analysis of the psychological implications of textual material from the mystical traditions studied. In effect, I claim that this approach constitutes a constructive integration of first-person and third-person data (Lancaster, 2004). The key points of the paper are incorporated in a model of thought processes that is informed by both lines of data. The model incorporates the sense of self as agency as being a narrative construction arising as a result of demand characteristics associated with the ToM established in infancy. The ways in which mystical practice deconstructs this sense of self is discussed.

Conclusions: Whilst being an essential developmental feature of cognition, ToM can become the vehicle for implicit assumptions that inhibit psychological maturation. The model developed in this paper is illustrative of the kind of integration of diverse lines of data that transpersonal psychology is uniquely equipped to generate, and provides a constructive framework for exploring ways to overcome such inhibition.

Symposium: Sexuality and sexual practices

D. LANGDRIDGE, The Open University.

The construction of erotic fantasies

T. BUTT, University of Huddersfield.

Purpose: To explore the role of fantasy in erotic life.

Background: That fantasy plays a key role in erotic life is indisputable, yet it is tricky to research and its relationship to action is complicated. Two features of fantasy are identified as embarrassing. Firstly, its association with masturbation which is still regarded as taboo. Secondly, the objectification of people in fantasy is something people often feel as shameful. This aspect of fantasy is elaborated in this presentation.

Key Points: Drawing on the work of Robert Stoller, William Simon and Maurice Merleau-Ponty, it is argued that the objectification of the other in fantasy is an essential aspect of sexual excitement. Rather than imagining sexual development as linear progress towards a mythical genital maturity, the maintenance of sexual excitement in sexual relationships depends on a cycling between whole and part object relations.

Conclusions: It is argued that objectification plays a key role in all erotic fantasy and needs to be theorised as such as an essential and non-pathological feature of sexual excitement.

Actively dividing selves: S/M and the thrill of disintegration

D. LANGDRIDGE, The Open University.

Purpose: This paper examines the ways in which a divided self may be actively cultivated for thrill in sadomasochistic scenes.

Background: The Divided Self (Laing, 1969) is a

widely known classic of psychological literature. In it Laing presents an existential theory of schizophrenia and personal alienation describing a process where there is a separation of self/body and self/false self amongst the ontologically insecure outsider. This leads to eventual disintegration of the real self and growing unreality of the false self. Whilst Laing's theory concerns an experience of deep despair van Deurzen-Smith (1991) argued that the theory should be reconceptualised as a way of understanding the existential anxiety common to all human experience rather than just the extreme experience of psychosis.

Key Points: In this paper I draw on Laing's theory to look at the way in which the splits between the self/body and self/false self might be deliberately cultivated during sadomasochistic sex scenes amongst ontologically secure individuals. This paper draws on descriptions of S/M scenes from the Web and S/M literature describing the deliberate splitting of self/body and self/false self.

Conclusions: Through an analysis of S/M scenes it is argued that not only is the process of dividing a self fundamental to human experience but also something that may be deliberately cultivated for the thrill that can be found from facing such anxiety.

Feminist SM: A contradiction in terms or a way of challenging traditional gendered dynamics through sexual practice?

M. BARKER, London South Bank University & A. RITCHIE, Southampton Institute.

Objectives: Most academic literature on SM (sadosomochism) still portrays it as anti-feminist. In a recent publication, authors argued that SM reproduces 'the hierarchical ordering of gender', and 'eroticises the crude power difference of gender which fuels heterosexual desire, reinforcing rather than ending it'. This study explored how women who identify as SMers understand and explain their practices in relation to feminist principles and gendered dynamics.

Design & Methods: An in-depth focus group discussion was conducted with a group of women who practice SM. Participants were involved in designing and managing the discussion and in thematically analysing the transcripts. Online discussions of these analyses were also incorporated into the final paper.

Results & Conclusions: It is clear that these women did not perceive their SM practices to be necessarily incompatible with a feminist agenda. The potential for SM scenes to subvert traditional gendered dynamics was discussed as were the implications of scenes in which a man dominates a woman or consciously draws on misogynist language or behaviour.

It's how I like it: Barebacking, rational pleasure and social dividend

J.G. McMANUS, Groundwork UK.

Objectives: To elucidate pleasurable aspects of barebacking sex and the sociocultural scene around this as rational choice which have implications for health promotion behaviour (sexual and mental health) among gay men.

Design: Qualitative purposive study.

Methods: Interviews with men who engage in barebacking and with 'stars' from barebacking films, with use of barebacking representations from film and books with participants to construct personal narratives.

Results & Conclusions: The findings highlight the way in which barebacking may fulfill a pleasurable role in sex which is driven by a rational decision-making process. Many of the constructions of barebacking used in health promotion only partially answer the rational choice of men engaging in barebacking and further work is needed which addresses the rational choice and pleasurable aspects of barebacking

Fear and fantasy: Imagined sexual practice and therapist dilemmas

L. MOON, ERSC, Newcastle University.

Purpose: In this paper I suggest that the non-heterosexual terrain presents a fearful place for heterosexual therapists working with non-heterosexual clients.

Background: Heterosexual scripts are often shaped and monitored by society while non-heterosexual scripts have been plagued by notions of pathology and perversion. When the heterosexual therapist encounters the non-heterosexual client the sexual terrain is established in the space in between them through a myriad of sexual scripts that have to be negotiated and settled.

Key Points: In this paper I present my research findings with lesbian, gay male, heterosexual, transgender and bisexual counsellors, counselling psychologists and psychotherapists working with l,g,b,t clients. The findings indicate that heterosexual therapists found discussions of sex and sexual practice uncomfortable and would avoid this area where possible with their l,g,b,t clients. However, it was also revealed how some heterosexual therapists imagined being a part of the sexual worlds of their non-heterosexual clients and could fantasise about non-heterosexual practices because they worked with lesbian and gay clients. This suggests that they could use their sexual imagination to transgress the sexual terrain.

Conclusions: Non-heterosexual client work concerned with sexual practice presents a particularly fearful place for heterosexual therapists but one in which it may be possible for them to use their sexual imagination to transgress the sexual terrain. In this paper I present the implications of these findings for work with l,g,b,t clients and therapists.

Symposium: Convergent evidence for the importance of early acquired items on later processing

Convenor: V. MOORE, Goldsmiths College, London.

The symposium will be Chaired by Prof. Ken Gilhooly of the University of Hertfordshire. Prof. Gilhooly will also be the discussant. It was his early work that helped to restart the interest in the topic of age of acquisition. We wanted the person would Chair and be the Discussant to be knowledgeable about the literature, with an excellent research mind. We also believed it would be important to have the Chair who did not have a paper on age of acquisition in symposium or in press to promote theoretical versatility.

The recognition and naming of words, objects and faces are fundamental human abilities. However, the ubiquity, ease and speed of these tasks belie the complexity of the underlying cognitive processes. Variables are known to influence recognition and naming. For example frequently encountered items are processed faster than less frequently encountered items. Other studies have shown that a word, object or knowledge of a celebrity acquired early in life is recognised and named faster than those acquired later in life (i.e. the age at which an item is acquired affects the later speed of processing).

Over the past 11 years a debate has continued in the literature. This has been to establish whether word frequency or age of acquisition holds greater predictive power than the other. Supporters of word frequency originally claimed the age of acquisition was merely a frequency effect in disguise. However, over this time, extremely carefully controlled experiments have demonstrated that age of acquisition effects and word frequency effects are indeed, different phenomena. A rapidly increasing number of peer reviewed academic publications demonstrate age of acquisition to affect a wide number of cognitive processes.

What began with faster naming for objects with early-acquired, than late-acquired names, has developed into a research area with far reaching potential. The objective of bringing together a large numbers of researchers from the different research areas, is to extend current theoretic directions. The symposiasts are all leaders in their fields and were invited to submit papers to address, or challenge, current theoretical positions. The papers submitted encompass areas where age of acquisition effects have been established, in general, but these abstracts propose novel methods to tease apart theoretical distinctions. These areas include lexical, object and face processing and developmental studies to demonstrate that early physical interactions with objects reflect the enhanced processing speeds. Three studies have unusual paradigms to investigate how age of

acquisition affects immediate and autobiographical memory. The simulation studies parallel the incremental pattern of a child learning to read. Age of Acquisition is demonstrated to influence eye movements and appears to have far ranging effects on adults suffering from developmental dyslexia. Evidence from the second language learning study demonstrates enhanced effects to be apparent even when learning these novel exemplars later in life, the order of acquisition theme is continued with the work using celebrities on an aged population. There appears to be a growing feeling that order may be the important characteristic, therefore, this symposium is timely in bringing researchers together for discussion. The theoretical debates on age of acquisition has now reached a maturity where it is moving into a more applied world. Here it may help to determine which external influences subserve effective information acquisition and transition from novice to expert knowledge. This could help develop comprehensive strategies and policies of knowledge in areas from skills training, education and rehabilitation. While this is an essentially 'cognitive' symposium, the breadth of influence should be of interest to the conference general especially Clinical, Educational and Forensic Psychology.

Age of Acquisition and the semantic priming of picture naming

K. DENT, R.A. JOHNSTON, G.W. HUMPHREY, University of Birmingham, C. BARRY, University of Essex & T. LLOYD-JONES, University of Kent.

Recent research has suggested that the order in which concepts are learnt has important consequences for the organisation of semantic knowledge, such that early-acquired information is more central in defining meaning (e.g. Brysbaert, Van Wijnendaele & DeDeyne, 2000). This hypothesis was explored in a series of semantic priming experiments. Participants named target pictures with earlier or later acquired names, which were preceded by semantically related or unrelated picture primes. The semantic organisation hypothesis predicts that since later acquired targets are less semantically central they should benefit most from a related prime. The results disconfirmed this prediction, showing that naming times for both earlier and later acquired items were facilitated to the same extent by a related prime. These results are consistent with the possibility that age of acquisition affects the processes which mediate transformations between levels of representation, rather than the representations themselves.

Age of Acquisition effects: Everywhere, yet nowhere

J.C. CATLING & R.A. JOHNSTON, University of Birmingham.

Age of Acquisition (AoA) effects have been robustly demonstrated within a number of different tasks, including object, face and word naming, semantic classification and lexical decision. Possible single locations for its effect have included the phonological representation (e.g. Brown & Watson, 1987), and semantic representation (e.g. Brysbaert, Wijnendaele & Deyne, 2000). Alternatively, Moore, Smith-Spark and Valentine (2004) have suggested a multiple loci account of AoA. To investigate further the locus of the AoA effect, four experiments were undertaken to assess the interaction between AoA and various forms of priming within an object naming task. Experiments 1 to 4 assess the interaction between AoA and phonological, orthographic and repetition priming. The findings are discussed in relation to the relative importance of specific levels of representation and the links between them in determining AoA effects.

Why psycholinguistic variables are the wrong place to look for Age of Acquisition effects

M.B. LEWIS & J. WHITE, University of Cardiff.

The finding that the age (or indeed order) in which things are learnt can affect the way they are retrieved was first suggested following experiments in picture naming tasks. This was followed by a raft of other psycholinguistic tasks. Considerable efforts have been employed to establish exactly which

tasks are or are not affected by age of acquisition. The current research explores what the wealth of psycholinguistic data that has been collected concerning age of acquisition in a range of different languages can really tell us. It is concluded that Age of Acquisition (AoA) effects are probably universal but, while psycholinguistics was the first domain these effects were posited within, it remains the hardest domain in which to demonstrate real AoA effects. A simple category learning task would be a much easier place to explore this probably universal memorial phenomenon.

Are Age of Acquisition effects semantic/structural in nature to picture naming?

P. BONIN, University of Blaise Pascal, France.

Pictures having early-acquired names are named faster than pictures having late-acquired names. Age of Acquisition (AoA) effects in picture naming are generally ascribed to lexical phonological representations, but there are alternative hypotheses which state that they are located at the levels of semantic and/or object recognition. In Experiment 1, a semantic locus of AoA effects was tested. Participants performed both a picture naming task and a name-object verification task on the same items in two different sessions. AoA effects were reliable in picture naming latencies but not in name-object verification times. In Experiment 2, an object recognition task was used with the same items as employed in Experiment 1. Late-acquired items were responded to faster than early-acquired items. The findings do not support a semantic or a structural locus of AoA effects in picture naming.

The origin of the frequency-independent Age of Acquisition effect

M. BRYLSBAERT, University of London.

In a recent review, we (Brysbaert & Ghyselinck, *Visual Cognition*, in press) showed that for most tasks the frequency effect and the Age of Acquisition (AoA) effect are yoked. When one is small, the other is small too; and when one is large, the other is large as well. There is one major exception to this pattern. When participants are asked to name pictures, there is a very robust AoA effect of more than 150ms without an accompanying frequency effect (which does not exceed 30ms). We called this the frequency-independent AoA effect, which cannot be explained on the basis of cumulative frequency. In this talk, I will present a number of studies we ran to try to pin down the origin of this effect.

Lexical predictors of autobiographical memory

C. MORRISON & M. CONWAY, University of Leeds.

Autobiographical memory ratings can be made to concept names to examine the factors that influence the age of earliest memories for those concepts. We analysed autobiographical memory ratings to object names in relation to various psycholinguistic measures such as Age of Acquisition and frequency. Age of Acquisition was a very strong predictor of autobiographical memory. We discuss this finding in relation to theoretical accounts of both age of acquisition and autobiographical memory.

The influence of Age of Acquisition in processing words and pictures in Turkish

I. RAMAN, University of Middlesex.

The paper reports the role of Age of Acquisition in naming words and pictures in Turkish which is characterised by entirely transparent mappings between orthography and phonology. In naming tasks subjects are reliably faster to name early acquired words and pictures than late acquired stimuli. Moreover, the results of a multiple regression analysis show that age of acquisition, frequency and letter length are reliable predictors of RTs in Turkish. This pattern of results is discussed in relation to other writing systems and current theoretical frameworks in order to understand the locus of Age of Acquisition effects.

Learning your first words in a second language: Is the order important?

C. IZURA, University of Wales Swansea & A.W. ELLIS, University of York.

This study examined the possibility of simulating the Age of Acquisition (AoA) effect in humans. Despite the growing evidence of an influence of the age at which words, objects and faces are acquired, the AoA effect is still subject to criticism. One concern is that the observed AoA effects may have been confounded with other variable/s. An effective simulation of the AoA effect would establish an 'ideal' ground from which to investigate its validity. This would avoid the problems generated from variables that correlate with AoA. We present two learning experiments where participants were asked to learn Spanish words in the course of two (Experiment 1) and three weeks (Experiment 2). The AoA variable was simulated by introducing words gradually during the weeks of training. We ensured the control of other variables (e.g. cumulative frequency and frequency of trajectory). The results are discussed within the context of theories on AoA.

There's hope for the oldies yet: Order not age determines enhanced processing

V. MOORE, T. VALENTINE, Goldsmiths College, University of London & J.H. SMITH-SPARK, Advanced Computation Laboratory, Cancer Research, UK.

Age grouped participants, older (e.g. 60 years), middle (50 years) and younger (40 years) performed tasks in three experiments. These investigated the roles of Age vs Order of Acquisition (OoA). Concept, word and celebrity stimuli were manipulated into decades of acquisition (AoA) so that stimuli were acquired at different ages, but in the same order. For example, Ronald Reagan was acquired first, but earlier for younger (AoA = 20 years) than for older participants (AoA = 40 years). Our data supported OoA predictive superiority and suggests that the order in which we learn is more important than how young the information was learned.

Separate influences of Age of Acquisition and frequency in an auditory lexical decision task

P.T. SMITH, J.E. TURNER, L.A.H. BROWN & P.A. HENRY, University of Reading & London South Bank University.

Groups of children, aged five to 10 years old, and adults carried out an auditory lexical decision task with words varying in Age of Acquisition (AoA), Frequency, Neighbourhood Density, Length and Imageability. When the dependent variable was percent correct, early AoA words showed only weak effects of the other variables, whereas late AoA words showed Frequency, Neighbourhood Density and Length effects, with Frequency also interacting with Neighbourhood Density. Imageability effects were present only for words with an intermediate AoA. These results are incorporated into a model of lexical development, where AoA is a primary influence on the representation of a word, but frequency exerts an influence on the processing resources devoted to a word.

Developmental dyslexia, Age of Acquisition and imageability on lexical decision tasks

J.H. SMITH-SPARK, Advanced Computation Laboratory, Cancer Research, UK & V. MOORE, Goldsmiths College, University of London.

Developmental dyslexia is characterised by problems with decoding the written word. However, little research has investigated whether dyslexia-related differences exist for early-learned words compared to late-acquired words. We investigated the Age of Acquisition (AoA) effect in two lexical decision tasks, performed by dyslexic adults and non-dyslexic matched controls. Experiment 1 reports a significant early-acquired advantage overall. Dyslexic response latencies were also significantly slower than their controls. More interestingly, a significant Group x AoA interaction revealed the early-acquired advantage was of greater magnitude in dyslexics. The lexical decision

task administered in Experiment 2 extended Coltheart *et al.*'s (1988) word naming research to examine age of acquisition and imageability. A significant Group x AoA interaction demonstrated that the dyslexic group were also significantly influenced by imageability, in favour of highly imageable words, whilst the control group were not. Implications are discussed.

Effects of gradual, incremental learning in a computational model of reading

A.W. ELLIS & P. MONAGHAN, University of York.

Computational models of reading typically enter all the words that the model has to learn into training from the outset. Human reading development is not like that: we begin by learning to read a few words, then gradually and cumulatively increase our reading vocabularies. We have implemented the reading model of Harm and Seidenberg (1999) with the modification that words were introduced into training at different points, reflecting the stage at which they first occur in children's reading material. After training, the model read words accurately, generalised well to non-words, and demonstrated an interaction between frequency and regularity. In addition, it showed an influence of 'age' (order) of acquisition and an age of acquisition by regularity interaction (it had most trouble with late acquired, irregular words). A control simulation which entered all the words into training simultaneously did not show such effects.

Age of Acquisition effects in reading: Evidence from eye fixations

B.J. JUHASZ & K. RAYNER, University of Massachusetts.

The age at which a word is acquired has been found to influence word recognition speed. There exists a large literature examining these Age of Acquisition (AoA) effects in tasks which present a word in isolation and require participants to respond in some way. There is also a large literature using eye movements to investigate factors that influence word recognition during silent reading. Until recently these two literatures have remained separate. We will discuss results from eye movement studies demonstrating an effect of AoA on eye fixation durations over and above effects of variables such as word frequency (adult and cumulative) and familiarity. Recording eye movements provides a rich source of data that can delineate the time course of lexical variables. The results from these studies inform theories of AoA effects. In addition, the results will be discussed in relation to current models of eye movements in reading.

Action and object picture naming in older adults and in Alzheimer's dementia

J. MASTERSON & J. DRUKS, University of Essex.

We developed the Object and Action Naming Battery (Druks & Masterson, 2001) as a research tool for exploring noun-verb differences. It consists of 100 object and 100 action pictures, the verbal labels of which are matched pair-wise for Age of Acquisition (AoA). In addition, for each item we have information about the written and spoken frequency of the verbal labels and their rated imageability and familiarity. We also have ratings for the visual complexity of the pictures. An earlier study (Bogka, Masterson, Druks *et al.*, 2003) obtained robust AoA effects in picture naming for younger adults with the action and object pictures. The present paper describes two experiments where the action and object pictures were presented for naming to older adults aged 65 to 80 and to a group of older adults with Alzheimer's dementia. We compare the results obtained with the two older adult groups with those we obtained in the original study.

Variations in Ages of Acquisition for naming and knowing across gender and object category. Interests and experience matter

E. FUNNELL, D. HUGHES & J. WOODCOCK, University of London.

We argue that children below the age of six years seven months learn about the objects around them and connect names with their physical properties, rather than associated information. We further argue that older children are increasingly likely to learn about objects indirectly through listening or reading, so that conceptual rather than physical properties are more likely to be associated with the name. Effects of experience on Age of Acquisition (AoA) can also be observed in the effects of gender on different categories of objects. We found that boys aged three to 11 years were consistently better at naming vehicles than girls, and also acquired the names of vehicles at an earlier age. But boys and girls named and knew about fruit and vegetables equally well. The male advantage for naming vehicles persisted into adult life, but a significant advantage to naming fruit and vegetables emerged in women. Clearly, variations in interests and experience influence measurements of AoA.

Symposium: Molecular genetics of complex behaviours

Convenor: M. MUNAFÒ, University of Bristol.

The study of genetic and environmental contributions to human behaviour and behavioural traits is not new. However, recent developments in molecular genetic techniques, allied to other technologies such as fMRI, have enabled a far more detailed understanding of the role of specific genes on individual differences in these behaviours and traits. This symposium will provide a state-of-the-art review of molecular genetic research, including the roles of environmental moderator variables (i.e. gene x environment interactions) and potential mediator variables (e.g. fMRI studies of specific neural regions) on genetic associations. Specific attention will be paid to behaviours that relate to both physical and psychiatric health, such as human personality traits and addictive behaviours, and discussion will focus on the potential that such research has for unravelling the interplay of biological and environmental mechanisms that subserve these.

Functional neuroimaging of genetically driven variation in brain function: Towards a biological understanding of individual differences in behaviour

A. HARIRI, University of Pittsburgh.

Identifying the biological mechanisms that contribute to complex cognitive and emotional behaviours is paramount to our understanding of how individual differences in these behaviours emerge and how such differences may confer vulnerability to psychiatric disease. Advances in both molecular genetics and non-invasive functional neuroimaging have begun to provide the tools necessary to explore these as well as other behaviourally relevant biological mechanisms. With completion of a rough draft of the reference human genome sequence, a major effort is underway to identify common variations in this sequence that impact on gene function (i.e. functional polymorphisms) and subsequently to understand how such functional variations alter human biology. Since approximately 70 per cent of all genes are expressed in brain, many of these functional polymorphisms will affect how the brain processes information. Neuroimaging (i.e. PET, fMRI, EEG/MEG) has unique potential as a tool for characterising functional genomics in brain. We are utilising such imaging techniques to identify brain phenotypes related to functional polymorphisms in genes likely important for human behaviour and neuropsychiatric illness. Recent results illustrating profound effects of variation in monoaminergic genes on the functional integrity of brain regions such as the amygdala and prefrontal cortex underscore the power of this 'imaging genomics' approach to explore and evaluate the functional impact of brain-relevant genetic polymorphisms rapidly and with great sensitivity. In turn, our

appreciation of the biological mechanisms that contribute to complex behaviours and the variations in these mechanisms that lead to both individual differences and vulnerability to disease is likely to expand in a manner previously unattainable.

Serotonin transporter genotype and nucleus accumbens activation to smoking-related pictorial cues in cigarette smokers

S. DAVID, University of Oxford & Brown Medical School, Brown University.

In a recent study, we demonstrated that a promoter polymorphism in the serotonin transporter gene (5-HTTLPR), which has been associated with mood disorders and personality traits, affects both pre-synaptic and post-synaptic serotonin binding to 5-HT_{1A} receptors using positron emission tomography. We further demonstrated that this polymorphism influences nicotine replacement patch therapy for smoking cessation during the early stage of smoking cessation, the peak period of nicotine withdrawal. Using functional magnetic resonance imaging, we also found that smoking-related picture cues activated the nucleus accumbens in smokers whilst abstinent from smoking and in the presence of nicotine withdrawal and that this effect was significantly greater in smokers than in non-smokers. In order to triangulate the results from *in vivo* molecular neuroimaging studies and pharmacogenetic studies, we conducted fMRI using our pictorial cue paradigm and compared the intensity of the nucleus accumbens activation to smoking-related cues in cigarette smokers grouped by 5-HTTLPR genotype. These data from this study will provide a greater understanding of the basic neurophysiological mechanisms underlying the effect of the 5-HTTLPR on nicotine addiction.

Genetics of cognitive abilities in an elderly population

A. PAYTON, University of Manchester.

Over the past six years an increasing number of genes have been associated with cognitive functioning in humans, including catechol-O-methyltransferase, brain derived neurotrophic factor, muscle segment homeobox 1, serotonin transporter 2A, cholinergic muscarinic receptor 2 and, most recently, the class II human leukocyte antigens (HLA). Unfortunately, as with all association studies investigating complex traits and diseases, inconsistent results are beginning to appear in the literature. This is attributed to a number of factors including the use of insufficient sample sizes, multiple testing and lack of replication prior to publication. The University of Manchester cognitive genetics study has utilised a cohort of over 750 volunteers who have been tested for changes in cognitive ability over a 15-year period. This allows us to identify genes that regulate both the level of cognitive ability and its rate of decline. We have investigated over 20 genes and have found associations with both the Cathepsin D gene and replicated a previous HLA-DRB1 finding. Possible interactions between these two genes have also been analysed. Cognitive impairment in the elderly, caused by either the normal ageing process or dementia, is an increasing problem in developed countries that has enormous social and economic consequences. Research investigating the genetic basis of cognition is a new and rapidly developing field that will contribute towards our understanding of cognition and aid in the development of new treatments for age-related cognitive deficit.

Genetic moderation of causal environments in depression and anxiety

M. NASH, King's College London.

The recent demonstration that a sequence variant in the serotonin transporter gene moderates the relationship between recent stressful life events and depression (Caspi *et al.*, 2003; Eley *et al.*, 2004; Grabe *et al.*, 2004) has highlighted the need for researchers to move away from the investigation of genetic variants in a reductionist manner and move on to examination of the interplay between genes and causal environments. However, the selection of genetic variants to examine is not currently driven

by information about which genetic pathways will make good candidates for gene-environment studies. One potentially powerful approach to generate such information is the use of animal studies. For example, by identifying changes to the mRNA expression level in the brains of rodents that have and have not been subjected to certain experimental manipulations (e.g. chronic stress and maternal deprivation), clusters of 'environmental-response' genes can be identified. These can be subsequently examined in humans for their interaction with specific causal environments.

Candidate gene studies in the 21st century: Mediation, moderation and phenotype definition

M. MUNAFO, University of Bristol.

Despite considerable advances in genomics and the study of genetic variants that confer disease risk, successes in the field of psychiatric and behavioural molecular genetics have been limited. This is presumably for two principal reasons: the individual effect size of with an individual genetic variant associated with a behavioural trait is likely to be small, and the genetic architecture of that trait is likely to be complex. Various approaches exist which may offer the possibility of more consistent findings. While the basic candidate gene design is conceptually simple, its success depends on accurate phenotype definition, the adequate characterisation of potential moderating factors (such as sex or ethnicity) and the incorporation of putative mediating variables (such as personality). Data from simple candidate gene studies of social drug use (alcohol and tobacco) will be presented, to illustrate the potential importance of moderating and mediating variables in clarifying the nature of the mechanisms subserving these associations. In addition, data from a recent meta-analysis of association studies of human personality will be presented to illustrate the difficulties of defining behavioural phenotypes for molecular genetic studies using psychometric techniques.

Symposium: New developments in personality disorders

Convenor: M. SAMPSON, Wythenshawe Hospital.

The BOSCOT trial: A randomised controlled trial of CBT for borderline personality disorder. Methodology and preliminary results

K.M. DAVIDSON, A. GUMLEY, H. MURRAY, University of Glasgow, P. TYRER, Imperial College, London, J. NORRIE, University of Aberdeen & P. TATA, Paterson Centre for Mental Health, London.

We report on a randomised controlled trial of cognitive behaviour therapy for borderline personality disorder. One-hundred-and-six patients who met DSM-IV criteria for Borderline Personality Disorder were randomised to either Cognitive Therapy plus Treatment as Usual or Treatment as Usual alone in a multi-centred trial. Those patients randomised to CBT received up to 30 sessions of individual CBT, plus their usual treatment, over 12 months. Patients were followed up every six months for a period of 24 months. The trial design, measures and some outcome data will be described. Attention will be paid to improvements in methodology in this study compared to others for borderline personality disorder.

The BOSCOT trial: Pre-randomisation characteristics of study sample, characteristics and correlates of the Young Schema Questionnaire (Short Form)

A. GUMLEY & K. DAVIDSON, on behalf of BOSCOT group. Section of Psychological Medicine, University of Glasgow, Gartnavel Royal Hospital.

Early maladaptive schemas (EMS) represent underlying cognitive structures, which help mediate and organise one's experience of the world. Young (1990) has argued that EMS are pervasive cognitive themes, which are hierarchically

organised, that evolve from adverse childhood and developmental experiences and underpin the development of psychopathology. The Young Schema Questionnaire (YSQ; Short Form, Young, 1998; Welburn *et al.*, 2002) provides an abbreviated 75-item measure of 15 EMS domains reflecting impaired autonomy (e.g. dependence on others), disconnection (e.g. social isolation and defectiveness), impaired limits (e.g. entitlement, insufficient self control) and over control (e.g. self sacrifice, unrelenting standards). The current paper presents the psychometric properties of the YSQ-SF in a sample of 106 participants with Borderline Personality Disorder, and the predictive value of the scale in terms of interpersonal problems and psychopathology.

Training in personality disorders capabilities framework

E. KANE, Previously, Senior Advisor to the Department of Health Forensic and High Secure Psychiatric Services and PD advisor on Personality Disorder to the Department of Health.

Reviewing the purpose of capabilities framework document presented by National Institute for Mental Health in England. The talk will include a description of what capabilities are required by staff across the whole system to work with people with personality disorders. How capabilities can be applied to psychology. What to consider regarding future training of psychologists and what role psychology can have in the training of staff in capabilities to work with personality disorder.

Proposed changes to the Mental Health Act and other legislation: Implications for psychologists

P. KINDERMAN, University of Liverpool.

On Wednesday 8 September 2004 the Department of Health (and the Home Office) released the redrafted Mental Health Bill. This presages the phase of 'prelegislative scrutiny' by a Joint Scrutiny Committee of the House of Lords and House of Commons before a report in March 2005. The Mental Health Bill includes provisions that have profound implications for many applied psychologists working in health and social care. It proposes substantial changes to the conditions that must be met before compulsory treatment is permissible, changes to the way in which such treatment is planned, and will give psychologists statutory powers. There will, therefore, be a considerable and widespread impact on all psychologists.

On Tuesday 11 October 2004 the Mental Capacity Bill received its second reading. It looks highly likely that the Bill will move rapidly through Committee and receive Royal Assent this year. This (the Mental Capacity) Bill makes provision for the making of decisions when a person is unable to make decisions for themselves. Again, this Bill will impact on the day-to-day work of psychologists. The British Psychological Society will continue to be heavily involved in the negotiations with Government over both Bills and the accompanying issues of implementation (workforce planning, training issues, the Code of Practice, secondary legislation and Expert Reference Groups). This paper will discuss the proposed legislation, its impact on psychologists and the role of the British Psychological Society in its gestation.

Symposium: What's different about psychology in Scotland?

Convenor: K. SKELLINGTON ORR, BPS Scottish Branch.

In recent years, Scotland has witnessed a number of notable social and political changes. Psychological research and practice in Scotland has had to respond to these changes and this symposium offers examples of current Scottish based work that reflects the diversity and importance of psychological research in Scotland. Paper 1, 'Traffic and transport psychology in Scotland' provides an example of research, much of it commissioned by the Scottish Executive, to inform policy and practice aimed at Scottish Road users. Applied research of this kind reflects the way in which the Scottish Executive and others have embraced the need for evidence-based policy

making and highlights how psychological research can contribute to the national policy agenda.

Paper 2 focuses on the devolved area of education in Scotland, exploring ways of promoting effective teaching and learning through the establishment of new links with teachers of psychology in Scottish Schools. This paper focuses specifically on Continuing Professional Development (CPD), an issue that has recently attracted much attention across the Society, not only in Scotland. The challenge of meeting CPD needs of those teaching psychology in the school environment is discussed. Paper 3 explores another area of devolved responsibility, namely health, providing insight into the problems facing the Scottish population and the research being undertaken to help address Scotland's record of poor health. This paper again highlights the contribution of psychological research to evidence based practice, and argues that health improvement requires change at both the individual and social/political level. Paper 4 focuses on the importance of music in social and psychological well-being. A number of Scottish based research studies are used to highlight the interaction between musical, psychological and wider social and cultural variables in contributing to physical and mental well-being in the Scottish context. Collectively, the papers provide an insight into Scotland's rich and unique culture and provide an indication of the ways in which psychology can assist in addressing the challenges faced by Scotland's population. By approaching issues related to health, education, culture and leisure, the session provides an opportunity to discuss the interaction between national context and research in psychology.

Health and psychology in Scotland

E.M. ALDER, Napier University, Edinburgh.

Purpose: To describe the contribution of psychology to health in Scotland.

Background: Scotland has a poor health record, partly related to social deprivation and lifestyle factors. Approximately half a million Scots have coronary heart disease, and this is one of the highest rates in Western Europe. Many risk factors, such as diet and smoking can be modified through behavioural change. Health psychology can contribute to improving health by developing models of health behaviour, informing the design and testing of interventions, and by contributing to the implementation of evidence based practice. The Division of Health Scotland was set up in 2004 in response to awareness of the particular health issues in Scotland and the separate health legislation following devolution.

Key Points: Smoking is the greatest cause of avoidable ill health and premature death in Scotland. Although fewer adults now smoke, there are high levels of smoking among people of lower socio-economic status and among young women, and it is a major contributor to health inequalities. Successful interventions to change behaviour have been based on models developed in health psychology. Political initiatives can also influence health behaviour and there is proposed legislation in Scotland on banning smoking in public places. In a website consultation exercise, nearly 40,000 people expressed an opinion on a proposed ban on smoking in public places, with as many as five out of six supporting at least a partial ban. A law is expected to be passed by Parliament in Spring 2005 with a year for public information exercises before the ban is introduced in 2006. Breastfeeding has health benefits for babies and its initiation and maintenance can also be understood using models of health behaviour developed in health psychology. The proportion of mothers who are breastfeeding at six weeks of life has increased by 33 per cent over a 10-year period, a higher rate than in England and Wales. A Bill to make it a criminal offence to stop mothers from breastfeeding in public was passed in September 2004. **Conclusions:** Health improvement will develop from a combination of change in individual behaviour and change in social and political contexts.

Promoting effective teaching and learning: Establishing new links with teachers of psychology in Scottish schools

L. WOOLFSON, C. HOWE, K. SMYTH & B. SCHRÖETER, University of Strathclyde.

Psychology was introduced as a subject in Scottish schools in 1999 and has steadily grown in popularity since then. Four-hundred-and-twenty-six students took Higher Psychology exams in 2000, 1186 in 2001, 1951 in 2002 and 3062 in 2003. To respond to the demand, teachers trained in other disciplines have been recruited to teach psychology. More students will now be entering university first year psychology classes with prior experience of studying psychology. Psychology's popularity at school level raises two key issues for Psychology Departments in Scottish universities: (1) is there a role to play in addressing Continuing Professional Development (CPD) needs of psychology teachers in schools; and (2) how can they best address the diversity of psychology background entry qualifications that first year university students now present?

This paper reports on the results of a survey of the CPD needs of teachers of psychology in all 446 secondary schools and 48 FE colleges in Scotland. Questionnaires were returned by 62 per cent of secondary schools and 64 per cent of FE colleges currently teaching psychology and a clear picture of qualifications and CPD needs was obtained. The development of an online learner-directed approach to teachers' CPD needs in the three mandatory Higher Psychology units, Understanding the Individual, The Individual in the Social Context, and Investigating Behaviour will be discussed. Possible ways for HE Psychology departments to take cognisance of students' prior learning in Psychology will also be explored.

Traffic and transport psychology in Scotland

S.G. STRADLING, Napier University, Edinburgh.

Objective: This presentation summarises recent applied research undertaken in Scotland, much of it funded by the Scottish Executive, to inform policy and practice aimed at changing driver behaviour, both speeding behaviour and levels of car use.

Key Points: Traffic psychology research on speeding attitudes and reported behaviours using data from large national questionnaire surveys of Scottish car drivers shows: that not all car drivers want to drive fast and many, both male and female, who currently drive on motorways and rural 'A' roads would like to drive at or below the speed limit on these roads; that support for speed cameras varies with age and sex with the majority in support, even amongst those who agree that 'cameras are an easy way to make money from motorists'; that cameras spot 'crash magnets', with twice as many of those drivers flashed by a speed camera in the previous three years also involved in a road traffic accident in that period, and that this relationship is largely independent of exposure – annual mileage driven.

Transport psychology research on car use using data from large national surveys shows: that one third of Scottish car drivers would like to use their cars less in the next 12 months but only a quarter of these think they are likely to; that it is useful to distinguish between those able and those willing to reduce their car use; that undertaking a journey involves the expenditure of physical, cognitive and affective 'costs' as well as time and money; and, using a combination of qualitative and quantitative data from a large survey of bus users, that a combination of personal safety, convenience and freedom from unwanted arousal defines, for many, the ideal urban bus journey experience.

Conclusions: It is suggested that the interaction of obligation, opportunity and inclination are involved in individual transport choices and that policy initiatives to change driver behaviour need to address each of these, separately and in combination.

Musical identities: Communication, education and therapy

R. MacDONALD, Glasgow Caledonian University.

Purpose: To provide an overview of a number of Scottish-based research projects investigating the psychology of music.

Background: The psychology of music is an expanding area of interest for mainstream psychological research incorporating, for example, social, developmental, perceptual, clinical and cognitive issues. Two recent texts, *Musical Identities* (MacDonald, Miell & Hargreaves, 2002) and *Musical Communication* (Miell, MacDonald & Hargreaves, 2005) have highlighted the inextricable link that exists between musical, psychological and wider social and cultural variables. This paper uses these texts as a point of departure for discussing a number of ongoing projects.

Methods/Key Points: Projects from two complimentary areas of research will be presented. The first group of studies investigates the musical identities of professional jazz musicians. Findings are presented from two focus group interviews and 10 interviews with professional jazz musicians in UK, centring on their own definitions and perceptions of what they do and how they see themselves as improvisers and professional musicians. Diverse discourses highlighted the constructed nature of musical identities. Reflexive issues of the research procedure are also addressed. The second group of studies focus on investigating the anxiety and pain reducing effects of listening to music. Two studies focus on music listening after surgical procedures involving general anaesthetic. Both studies involved participants selecting music of their own choice. In study one, following minor surgery on the foot, 20 participants in an experimental group listened to music while 20 participants in a control group did not. Results indicate that the music group felt significantly less anxiety than the control group. No differences in pain measurements between the two groups were found. The second study involved a music listening group of 30 females and a no music control group of 28 females. Both groups underwent a total abdominal hysterectomy. Postoperative measures of pain, anxiety and patient-controlled analgesia were taken. No differences between the groups were obtained on these measurements. The final study compared the effects of preferred music, cognitive distraction and humorous anecdotes on the perception and tolerance of experimentally induced cold pressor pain. Forty-four participants (24 females, 20 males) underwent three cold pressor trials. Participants provided their own preferred music. Listening to their chosen music resulted in significantly lower levels of pain and longer tolerance times. Music listening also resulted in significantly greater feelings of control than the humour.

Conclusions: The findings highlight the sensitive and reciprocal influence of musical variables and wider social factors. The results of these experiments will be discussed with reference to theoretical and practical considerations highlighting ways in which psychological research techniques can be employed to investigate the psychology of music.

Symposium: Continuing Professional Development: Why do we do it, what should we do, and does it do any good anyway?

A.D. WRIGHT, Gwent Healthcare NHS Trust.

CPD and clinical psychologists: Where does the future lie?

V. BURT, CPD Officer, BPS & Z. NADIRSHAW, Chair, DCP CPD Sub-Committee.

The current policy context in which CPD has become an increasingly important activity for psychologists will be reviewed, with particular consideration given to the proposed new regulatory mechanisms likely to be imposed by the Health Professions Council (HPC). There will be an update on the HPC consultation around CPD. The relationship between the HPC and the BPS, and its potential implications for member's CPD requirements, will also be considered. An overview will be presented of the Society's CPD

requirements for members holding Practising Certificates, with an explanation of the central role of the National Occupational Standards in focusing CPD activity.

The DCP's own approach to CPD will be presented, and the likely impact of Agenda for Change and the Knowledge and Skills Framework upon future career development for Clinical Psychologists, and other chartered psychologists working in the NHS, will be considered.

Some awkward questions we ought to ask about CPD for clinical psychologists

D.R. GREEN, University of Leeds.

Purpose: The aim of this brief paper is to counter the sloppy assumption that investment in the continued professional development of clinical psychologists is just an uncomplicated 'good thing'. **Background:** The policy shift towards compulsory continued professional development for health professionals within the UK and elsewhere in the world has largely been propelled by political priorities. However, the evidence base that should inform these development is pretty sparse. All of which leaves the profession of clinical psychology, that likes to pride itself on its scientific credentials, somewhat exposed.

Key Points: Four fundamental questions are posed and considered in the light of relevant empirical and experiential evidence:

1. Can qualified clinical psychologists be relied upon to accurately assess their own training needs?
2. What are the likely relative costs and benefits of the adoption of a policy of mandatory CPD?
3. Will lessons learned on training courses ever get transferred into everyday working practice?
4. Can CPD ever deliver its promise to protect the public from malpractice?

Conclusions: Each of these challenges needs to be taken seriously as there are sound psychological reasons to expect that, under many circumstances, the answers to these questions are not ones that the funders of CPD for health professionals will want to hear. However this is not entirely a tale of doom and gloom. There are measures that can be taken and arguments that can be made which make it easier to justify the substantial investment of limited resources into the post-qualification training of clinical psychologists. But the case has to be made carefully and conservatively.

Continuing Professional Development on a shoestring

L. GOLDING, Bolton, Salford & Trafford NHS Mental Health Trust & D. SHAPIRO, Sheffield Care Trust.

Purpose: This paper discusses the practical issues involved in meeting the continuing professional development (CPD) needs of clinical psychologists, and other healthcare psychologists. It focuses on examples of good practice from across the UK and offers some flexible solutions to the most commonly cited problems in this field – lack of funding for, and time to pursue, CPD activities.

Background: The British Psychological Society requires all of its applied psychologists working with the general public to undertake mandatory CPD activity. This will become a legal requirement with the introduction of statutory regulation for applied psychologists through the Health Professions Council. This is likely to occur in 2005. Within the NHS, the requirement to undertake such activity raises a range of practical issues for clinical, and other applied, psychologists in the context of multi-professional and multi-agency work.

Key Points: This paper explores the challenges that arise from the mandatory requirement to undertake CPD activity by offering practical examples and ideas drawing on relevant research. This includes strategies for providing free and low cost CPD opportunities based on examples of good practice from around the UK. It also explores innovative ways of meeting CPD needs when funding is available.

Conclusions: The paper concludes by underlining the importance, for clinical and other applied psychologists, of undertaking CPD activity in order to maintain and improve professional competence. It emphasises the need for this to be given priority within health and social care.

A framework for evaluating CPD, illustrated by supervision

D. MILNE, I. JAMES & A. SHEIKH, Newcastle University & 3N's NHS Trust.

Objectives: To outline a systematic framework for evaluating CPD, based on a related series of searching questions; and to relate these to clinical supervision, probably the most common and best-researched form of CPD.

Methods & Results: The first CPD evaluation question is: 'what is the 'right' thing to do in the name of supervision (and related CPD)?' In our reply we emphasise the experiential learning cycle. We then show how guidelines and manuals can support such a theoretical model. In addressing the next question, 'has the right thing been done?' we next show how process evaluations contribute to CPD, again providing an example from our own experience of work within the clinical supervision field. Having addressed the questions of what to do and whether it has been done right, we go on to ask whether it has been done correctly? This brings skill (competence) and interpersonal effectiveness. Here we will try to show how CPD can be evaluated by outlining a way of evaluating supervision that has been developed locally. We then proceed to focus on whether a good model, one that has been adopted and followed faithfully, results in the 'right' outcomes? We adopt Kirkpatrick's (1967) approach, with appropriate modifications, to set out the four levels of outcome that CPD can achieve, and again illustrate it from supervision research. Finally, we will concentrate on the question of what is the 'right' organisational climate for successful CPD activity? **Conclusion:** We believe that these questions encourage a thorough evaluation of CPD, as illustrated by our examples from published and current research on clinical supervision. This framework can provide a firm basis on which to evaluate CPD.

INDIVIDUAL PAPERS & WORKSHOPS

Reliability and validity of the International Classification of Functioning Disability and Health (ICF) for children with autism

M. ALJUNIED & N. FREDERICKSON, Educational Psychology Group, University College London.

Objectives: The International Classification of Functioning, Disability and Health or ICF (WHO, 2001) was developed as a tool for practitioners to record individuals' functioning in various domains across all disability/health conditions. A key feature of the ICF is its interactionist framework for understanding functioning and development. While it is widely accepted in psychology, the interactionist perspectives are not reflected in available assessment instruments, which tend to have an individual focus for assessment and evaluation.

The accompanying tool for the ICF, i.e. the ICF checklist, appears to represent a step forward in providing an assessment tool that reflects the interactionist model. However, while the ICF has been field-tested with patients with musculoskeletal disorders, its reliability and validity for use with children with developmental disability, such as autism, remains unknown. The aim of the present study was to evaluate the reliability and validity of the ICF as a measure of special educational needs of children with developmental disabilities, i.e. autism.

Design/Methods: Based on the ICF checklist, an investigator-based interview was developed to obtain information on disability and functioning levels of 40 children with autism (five to 12 years old). The children were selected from a group of mainstream and special schools in Singapore. Ratings for individual items were then combined to obtain indices for body functioning, activity limitation and participation restriction, and the extent of environmental support. To gauge inter-rater agreement, the ICF interviews for 10 children were video recorded and ratings by a second rater were obtained. For a sub-sample of 19 children, additional data on functioning level was obtained using the Diagnostic Interview for Social and

Communication Disorders (Wing, 1999), which is an instrument that was developed specifically for the autistic population.

Results: Analyses for reliability indicated that all components of functioning and disability had adequate to high internal reliability (Cronbach alpha values ranged from 0.61 to 0.98), and, showed adequate to excellent inter-rater agreement (95.36 per cent of the items reached adequate to high agreement levels, i.e. kappa coefficient values ranged from $k > 0.40$ to $k > 0.75$). The total ratings also distinguished children in special schools, with severe special educational needs, from children in mainstream schools, who had less severe learning needs. For the children with autism in special schools, total ratings on body functioning, activity limitation and participation restriction obtained from the ICF checklist correlated significantly with scores on functioning obtained from the Diagnostic Interview for Social and Communication Disorders (Wing, 1999), which is an instrument that was developed specifically for the autistic population ($r = 0.87$, $N = 19$, $p = 0.01$).

Conclusion: Findings from the study suggest that the ICF has adequate reliability and validity, and offers researchers and practitioners a measure of special educational needs of children with autism based on an interactionist conceptualisation of functioning and development.

Gender and age differences in job satisfaction and coping strategies among Greek primary and secondary school teachers

A.-S. ANTONIOU, University of Athens, A.-N. VLACHAKI, Panteion University of Social and Political Sciences, Athens & F. POLYCHRONI, University of Athens.

According to recent international research, teachers serve one of the most stressful occupations. The aim of this study was to investigate the levels of job satisfaction of Greek teachers working in Greater Athens and the specific mechanisms that they use to cope with stress. The initial phase of the research involved in-depth interviews with a sample of 12 teachers. The main sample consisted of 216 (43.8 per cent) male and 277 (56.2 per cent) female teachers teaching in primary (49.7 per cent) and secondary schools (50.3 per cent). The Warr *et al.* (1979) Job Satisfaction Scale and OSI Coping Scale were administered providing data on job satisfaction and coping mechanisms as well as demographics and attitudinal variables. Analyses of the data demonstrated that, overall, teachers presented high levels of job satisfaction regarding their relationships with colleagues and headteachers and low levels of job satisfaction regarding their salary, their opportunities for promotion and the general working conditions. In order to cope with occupational stressors, they preferred to: (a) maintain stable relationships; (b) deal with the situation immediately; and (c) set priorities in their duties. Female participants scored higher on job satisfaction than males, while older teachers scored lower than their younger colleagues. The findings will be discussed in reference to current educational practice and suggestions for intervention will be given. It is envisaged that the identification of the specific sources of job dissatisfaction will shed some light into the problems that make teachers' jobs particularly difficult.

The structure of peak experiences

M.J. APTER, Georgetown University.

The idea of a peak experience, as formulated by Abraham Maslow, has been one of the founding concepts of Humanistic Psychology. Generally speaking, it has been assumed that all peak experiences take essentially the same form. The aim of the present paper is to show that there are in fact a number of contrasting types of peak experience, and furthermore that the different types can be understood in terms of the motivational structure postulated in reversal theory.

Reversal theory proposes that there are eight basic psychological motives, each representing a fundamental value, but that these go in opposites such that only one from a given pair can be fully pursued at a given time. But in psychologically

healthy people, reversals occur between motivational states representing these opposites, so that all the values can be experienced over time. The value oppositions are as follows: achievement versus immediate enjoyment, duty versus freedom, power versus affection, and individuality versus transcendence. (The evidence for this, and related reversal theory ideas, comes from many sources, both quantitative and qualitative.)

An examination of the literature on peak experiences, and in related areas such as mystical states, shows that such a subjective state can be seen as an unusually intense experience of the satisfaction of one or another of these eight basic motivations. For example, some experiences are described in terms of enormously satisfying achievement that makes life meaningful, others refer to ecstatic sensual pleasure. This means that peak experiences not only come in different, but also in opposite, forms. If we look at what might be termed 'abyss experiences', which are the opposite of peak experiences, we find that the same structure applies, as it does for both mania and depression. Among other things, this has implications for psychotherapy.

Vicarious learning and children's acquisition of fear

C. ASKEW & A. FIELD, University of Sussex.

Objectives: Despite widespread acceptance of Rachman's (Behav. Res. Ther. 15 (1977) 375-387) proposition that fears can be acquired vicariously (observationally), evidence has remained equivocal. Almost all past studies have been criticised for methodological weaknesses: in particular for studying adult phobic populations using retrospective measures which are likely to be prone to inaccuracies of long-term memory. In contrast, the present study uses a prospective manipulation to investigate whether children's fear beliefs about a novel stimulus increase after seeing it together with scared faces.

Methods: A group of eight- to nine-year-olds ($N = 50$) were presented with pictures of two novel animals together with either fearful or happy faces. A third animal was not paired with any faces. Fear beliefs about each animal were measured by self-report questionnaire before and after pairing. An affective priming task was used to obtain implicit measures of attitude towards the animals. Measures were taken again one week later. **Results:** A repeated measures ANOVA found that fear beliefs increased for animals paired with fearful faces and decreased for animals paired with happy faces compared to the non-paired animal. The results of the affective priming task indicated negative attitudes towards animals which had been in negative pairings compared to animals in positive pairings. Significant differences in fear beliefs and attitudes were still present one week later.

Conclusions: Seeing novel animals together with fearful faces appears to increase children's fear beliefs and negative attitudes toward the animal. Thus, the results show how children's fear beliefs about a previously unknown stimulus can be affected just by observing another's facial expressions. The findings have implications for both the theory and treatment of fears.

Grumpy old men or calm elderly gents? Sex and age differences in the self-reported experience of anger

J. BARNETT, M. COULSON & N. FOREMAN, Middlesex University.

Objectives: Two studies examined components of anger in detail in order to investigate associations between anger intensity, anger-in, anger-out, aggression, and anger coping, and whether these associations vary as a function of sex, age, and personality type.

Design: The first study involved the administration of the Novaco Provocation Inventory, which measures anger intensity and contains 30 hypothetical anger-causing scenarios. Each scenario was assigned to one of three types of anger-causing situations - unattainable goals, (e.g. buying an expensive appliance which does not work); environmental (e.g. a stranger bumps into you without apologising); or interpersonal (e.g. a good friend who does not listen when you are talking to them). Participants rated how angry each

situation would make them feel on a four-point Likert scale.

The second study involved the administration of seven questionnaires, which as a collective measured all facets of anger identified in the literature. Anger intensity was measured using the Novaco Provocation Inventory; the State-Trait Anger Expression Inventory was used to investigate the experience, expression, and control of anger; anger responses were examined using the Behavioural Anger Response Questionnaire whilst the Aggression Questionnaire examined aggressive tendencies. The Trait section of the State-Trait Personality Inventory and Eysenck's Personality Inventory (Revised) measured aspects of each participant's personality. Finally, masculine, feminine and androgynous qualities were investigated using the Personal Attributes Questionnaire.

Method: Study 1 consisted of 176 participants (101 female and 52 male of ages 18 to 60 years). Study 2 consisted of 180 participants (90 female and 90 male). For both studies, age was sub-divided into three age groups – 18 to 25 years; 26 to 40 years; 41 to 60 years).

Results: Although Study 1 revealed no three-way interactions between age, sex, and scenario, the results demonstrated distinctions between men's and women's self-reported experiences across all age groups and scenarios. The second study more clearly differentiated these distinctions via the constructs of anger-in, anger-out, aggression, and anger coping. Significant results illustrate the changes across the lifespan between males' and females' experience, expression, control, and coping of anger.

Conclusions: Results suggest that with age, women may acquire a more constructive and assertive method of expressing their anger. Similarly, as age increases, men may no longer feel the need to conform to a masculine stereotype. Current anger-management constructs tend to adopt a 'one size fits all' approach, but these data suggest that tailoring interventions to an individual may offer more effective means of treatment. Anger-management therapies could be re-structured to include sex, age, and personality differences as highlighted in the present research, in respect of scenario types that cause the most anger.

The right to kill? Links between attitudes towards the death penalty and beliefs in justice: A work in progress

J.A. BLACKWELL YOUNG, Newman College of Higher Education, Birmingham & C.A. COOKE, University of Leicester.

Objectives: The literature on attitudes towards the death penalty has suggested that these attitudes may be related to other criminal justice attitudes. In particular, literature from the US has suggested that attitudes towards the death penalty, vigilantism, the use of weapons for protection, community safety, punishment and law enforcement are all related to one of two models of punishment beliefs: the 'Due Process' model and the 'Vigilante Tradition' model. The 'Due Process' model holds that it is better that ten guilty men go free than one innocent man be punished and that the State is responsible for crime and punishment but needs to be policed as mistakes can be made. Therefore, those supporting the due process model tend to be opposed to the death penalty. The 'Vigilante Tradition' model suggests that law, order and punishment are the duty of the community because of a distrust of the State. This means that a punitive approach to crime is encouraged, including the use of the death penalty and the right of the citizen to take the life of criminals. However, whilst this link has been suggested there has been little empirical investigation of whether people's attitudes to these areas are in fact related. Research previously conducted has tended to be 'American-centric', biased in its attitudes towards the death penalty and gun use, poorly designed, and dated. This research is timely, in view of the recent debate in the UK on the use of force by householders to protect their property, after a number of cases reported in the media. This paper is the presentation of the preliminary results of a study designed to investigate the attitudes of a UK sample towards the factors noted above.

Design: A questionnaire design is being employed

in order to assess attitudes towards the death penalty, vigilantism, the use of weapons for protection, community safety, punishment and law enforcement.

Methods: The questionnaire is being distributed using an opportunity sample.

Results: No results were available at the time of submitting the abstract, however, data collected by March 2005 will be presented.

Conclusions: The results of this study will provide new insight and add to the literature in this area by providing empirical evidence on the issues above. It will also take the research into a UK context which is currently absent in the literature. There are implications for criminal justice initiatives in the area of punishment. The results from the UK sample will also, in future, be compared to results from a US sample, giving cross-cultural comparisons.

The use of time, life goals and well-being: Identifying factors of satisfaction with time use employing qualitative methodology

I. BONIWELL & J.A. HENRY, The Open University.

Objectives: Existing research provides an incoherent representation of subjective experience of time use (that can otherwise be called satisfaction with time use, or time structure). Furthermore, there is an insufficient understanding of the nature of relationship between time use and well-being, and time use and life goals. The objectives of the current study were: to explore participants' subjective experience of time use; to understand what it means to be satisfied with one's time use; to identify the factors contributing to satisfaction with time use; and to explore associations between the use of time, well-being and life goals.

Design: The study employed a qualitative design using semi-structured in-depth interviews. Following transcription, Interpretative Phenomenological Analysis (IPA) was used and was verified by a secondary analyst.

Method: Purposive sampling was used to recruit 22 participants, half of whom were largely satisfied with their time use, and half of whom were largely dissatisfied with their time use. Participants were from various socio-economic backgrounds. An interview schedule was used to form the basis of all interviews but, naturally, the exact structure of each interview varied.

Results: 148 emergent themes were identified from the interview data. The emergent themes were clustered into ten super-ordinate themes, which then fell into three overarching categories: motivation/factors that influence time use; organisation; execution and evaluation. Coherence or congruence between life goals and the way life is lead appeared to play an important role in subjective satisfaction with time use. Furthermore, the data pointed towards the presence of a relationship between satisfaction with time use and well-being.

Conclusions: The study identified a number of factors of satisfaction with time use previously ignored or under researched in time use literature, including taking responsibility for one's time, balance between discipline and adaptability, and life goals – life congruence. The survey study is now in progress to test the conclusions derived from the above research.

Effects of internet administration and supervision on responses to psychological inventories

T. BUCHANAN, University of Westminster.

Objectives: With increasing use of the Internet for remote administration of psychological questionnaires, attention has been paid to the quality of data collected online and in particular its comparability with data acquired by traditional means. Different score distributions are sometimes obtained (e.g. higher scores on measures of negative affect obtained online). Explanations advanced for these findings include effects of assessment medium (e.g. higher levels of self-disclosure in online testing), and contextual factors such as supervision by an experimenter. The aim of the present study was to test these suggestions using measures previously shown to differ in score

distributions obtained online and offline.

Design: Participants completed questionnaires either in paper-and-pencil or web-based formats. This was done either unsupervised or in the presence of an experimenter.

Methods: 161 Undergraduate student volunteers were randomly assigned to experimental conditions. Participants anonymously completed the Hospital Anxiety and Depression Scale (HADS), and a Five Factor personality inventory (measuring Openness to Experience, Conscientiousness, Extraversion, Agreeableness and Neuroticism). Previous work using these measures has shown elevated online scores on Anxiety, Depression and Neuroticism. Participants also rated the extent to which they believed they as individuals could be linked to the data they provided (perceived anonymity). The measures were completed in either electronic or paper based formats, alone or under supervision.

Results: A series of two-way ANCOVAs indicated that HADS Depression scores were higher in the online conditions. Contrary to expectations, assessment medium did not significantly affect either Anxiety or Neuroticism. For the other variables, there were no significant main effects. However, there was a significant interaction between medium and supervision for both Openness to Experience and perceived anonymity. **Conclusions:** This study provides further evidence that assessment medium (web vs. paper) can affect score distributions, with higher depression estimates being obtained online. This effect is independent of supervision. However, this was not the case for other variables where an expected effect was not observed. Supervision also appears to have a role to play.

In terms of practical significance, the present findings indicate that people may respond differently to online and offline psychological questionnaires. The extent to which this may affect the interpretation of Internet-mediated data (e.g. scores on measures of negative affect obtained in behavioural telehealth contexts) needs to be explored further. Furthermore, it is likely that traditional normative data obtained with paper questionnaires will be unsuitable for use with electronic versions of at least some instruments. These findings should be borne in mind by psychologists using online tests in applied settings.

Voices and whispers: Women's negative experiences seeking help for bulimia

M.L. BURNS, University of Exeter.

Objectives: Women's subjective accounts of treatment for eating disorders are seldom reported within the psychological research or clinical literatures. This paper offers a qualitative analysis of women's reports of their negative experiences seeking and participating in, professional help for the eating disorder bulimia in Aotearoa/ New Zealand.

Design: The data are drawn from a larger study about bulimia in which 15 women (majority aged between 25 and 35 years) were interviewed about their experiences of bulimia. Interviews were used in order to obtain rich, in-depth and personal accounts of women's understandings about bulimia, femininity, embodiment, identity, eating disorders, and treatment.

Methods: The 15 women each took part in a single 60 to 90 minute semi-structured, individual interview conducted by the principal investigator. The interviews were recorded and transcribed verbatim. Of the 15 women, 11 had consulted professionals at some time about their eating disorder. Nine of these reported negative treatment experiences and these nine transcripts constitute the data for this paper.

Results: As part of the larger study, the transcripts were subjected to several forms of qualitative analysis. For this paper, the accounts were analysed using a critical thematic approach. The women's descriptions of dissatisfactory help-seeking and treatment were coded and organised into the following six themes: universalising assumptions, not being heard, difficulties with access, feeling powerless, psychotropic medication norms, and pathologising effects. The analysis highlights some of the potential implications of these experiences for the women involved and for understandings about ineffective or unhelpful treatment.

Conclusions: The findings suggest high levels of

dissatisfaction with accessing and participating in treatment for the eating disorder bulimia, in Auckland. It is reasonable to speculate that these areas of discontent are not unique to Aotearoa/New Zealand but exemplify similar issues for help seeking in other western countries such as the UK and the US. The women's accounts suggest that a power differential operates between professionals and clients, which works to privilege and reinforce professional expertise. The effects of this dynamic can include silencing women, dismissing women's versions of events, withholding treatment and support, inappropriate prescribing of anti-depressant medication, a failure of the therapeutic relationship and the pathologisation of women with bulimia. In response to these outcomes, many of the women in this study reported withdrawing from treatment. This analysis highlights opportunities and areas for improving treatment experiences for women with bulimia.

The effect of contextual change on dimensions of social identity

A. CAMPBELL & E. CAIRNS, University of Ulster.

Objectives: This study aims to explore the extent to which social identity is malleable as a consequence of contextual change. Despite a strong theoretical basis for this argument previous social psychological research suggests little variability in social identity across various situations. Past research, however, has studied social identity as a unidimensional construct. Therefore, the objective of this study is to examine the effect of contextual change on various dimensions of social identity and subsequently ascertain the precise social identity dimensions that vary as a function of context.

Design: A survey was carried out using an opportunity sample of sixth form students visiting the University of Ulster campuses on successive Open Days.

Method: A total of 128 school students ranging in age from 16 to 18 years ($M=17$) made up the final sample. Respondents completed a multi-dimensional measure of social identity and a 'suggested situations' questionnaire.

Results: The results and discussion of this study focus on the extent to which the various dimensions of social identity are dependent upon specific situations.

Conclusion: Highlights the need to consider the different components of social identity when conducting research to test predictions derived from social identity theory.

A comparison of computing-related and driving-related anger content

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Objectives: To compare anger in driving and computing situations, particularly to test the applicability of appraisal theory, typically employed to explain emotions resulting from human-human relationships, to human-computer relationships.

Design: A related participants design was adopted with responses concerning appraisal dimensions and communicative factors being compared across the two situations. The ability of these variables to predict anger intensity was also investigated.

Methods: Among other instruments, participants completed questionnaires relating to recent incidents when driving anger and computing anger had been experienced. The pool of participants consisted of an opportunity sample of 69 members of the general public (30 males, 39 females).

Results: Relative to computing, when driving, participants were more likely to blame other people for an anger provoking event. When computing, there was a tendency to blame the machine, independent of any other person. Of the three appraisal components considered in one version of appraisal theory to be primarily involved in the generation of anger, bivariate analyses showed that two (motivational relevance and incongruence) increased with computing anger intensity, but the third (other accountability) did not. However, the components were not independently predictive of anger intensity in either situation. For both situations, anger intensity increased as people reported having felt increasingly unable to cope emotionally with the situation, this being an

appraisal component considered to be theoretically less central in explaining anger. Both difficulty in communicating anger and need to communicate anger were significantly positively related to anger intensity for computing but not driving.

Conclusions: Appraisal theory variables are at least as capable of accounting for computing anger as driving anger, with emotional coping difficulties being particularly important in both situations. Also, a computer's inability to register a person's discontent with a situation may be important in the escalation of computing anger, assuming a more important role than communicative factors play in the escalation of driving anger.

Describing the relationship between personality traits and post-traumatic stress disorder following myocardial infarction (MI-PTSD)

M. CHEUNG CHUNG, University of Plymouth, Z. BERGER, University of Oxford, R. JONES, Peninsula Medical School, H. RUDD, Aston University & J. WESTON-BAKER, North Road West Medical Centre.

Objectives: The study aimed to: (1) ascertain the prevalence of MI-PTSD; and (2) compare MI patients with different levels of PTSD and different times of onset of MI in terms of general health problems and personality traits.

Design: Cross-sectional survey.

Methods: 120 MI patients ($M=94$, $F=26$) were recruited from two GP surgeries. They were assessed using the Post-traumatic Stress Diagnostic Scale, the General Health Questionnaire-28 and the NEO-Five Factor Personality Inventory. Matched control samples were asked to fill in the General Health Questionnaire-28.

Results: The results showed that 37 (31 per cent), 54 (45 per cent) and 29 (24 per cent) patients suffered from full-PTSD, partial-PTSD and no-PTSD respectively. The full-PTSD and partial-PTSD groups scored significantly higher in somatic problems [$F(3,230)=16.13$, $p<0.001$], anxiety [$F(3,230)=24.98$, $p<0.001$] and social dysfunction [$F(3,230)=21.08$, $p<0.001$] than the matched control. The full-PTSD group scored significantly higher in depression than the control [$F(3,230)=26.17$, $p<0.001$]. There were no significant differences between the no-PTSD group and the control. Controlling for the variables of age, mental health difficulties prior to MI, angioplasty and coronary artery bypass surgery, ANCOVA analyses showed that patients with full-PTSD scored significantly higher in somatic problems [$F(2,80)=5.88$, $p<0.004$], anxiety [$F(2,80)=9.66$, $p<0.001$], social dysfunction [$F(2,80)=5.15$, $p<0.008$] and depression [$F(2,80)=7.76$, $p<0.001$] than the partial-PTSD and no-PTSD groups. Patients with full-PTSD scored significantly higher in neuroticism [$F(2,73)=14.26$, $p<0.001$], agreeableness [$F(2,73)=3.63$, $p<0.03$] and conscientiousness [$F(2,73)=3.73$, $p<0.028$] than the other two groups. The results also showed that patients with different times of onset of MI did not differ significantly in general health problems and personality traits. No significant interaction effects between diagnoses and times of onset were identified.

Conclusions: Following MI, patients could experience PTSD and general health problems, especially those with full-PTSD. Those with full-PTSD tend to have neurotic, agreeable and conscientious traits. However, onset of MI did not seem to affect general health problems and personality traits.

'It's just a laugh': Three men's accounts of going to 'lap-dancing' clubs

V. CLARKE & S. BOOKER, University of the West of England.

Objectives: The aim of this paper is to explore how (heterosexual) men who go to 'lap-dancing' clubs account for their consumption of 'lap-dancing' and why they go to 'lap-dancing' clubs. Lap-dancing is a form of sexual dance largely performed by women in specialised night clubs for heterosexual male consumption.

Design: This is a small scale in-depth qualitative study. Six men who have been to a lap-dancing club at least once were recruited through word of mouth and through the local media.

Supplementary data was collected from managers

of lap-dancing clubs and the media.

Methods: The men (and club managers) participated in a semi-structured interview. The men were asked to respond to questions such as why they go to lap-dancing clubs, when they go to the clubs, and whether and why they buy a dance. The interviews were transcribed in full and read and re-read to identify emergent themes. Key data relevant to the aims were selected and subject to a discursive analysis.

Results: The analysis explores the accounts of three of the men: Graham, a lap-dancing club regular who goes to clubs almost every week; Paul, who goes occasionally with his mates 'just for a laugh'; and Barry who goes on twice-yearly 'lap-dancing' holidays overseas. Although these men represent different kinds of consumers, they all position themselves as 'knowing' consumers of lap-dancing. They construct lap-dancing as a fantasy – a fantasy that they are not seduced by. They contrast themselves with other naïve and foolish men who are seduced by and fully participate in the fantasy. They construct their consumption of lap-dancing as 'just a laugh' or as philanthropic – helping the women who dance to earn a good living and have a good life. The women who dance are positioned by the men as agentic, in control and focused on money. The men's construction of themselves and the women who dance are designed to present their consumption of lap-dancing in a benign light. **Conclusions:** This analysis extends the existing literature on the sex industry by offering one of the first analyses of men's accounts of consuming lap-dancing. We consider the implications of our analysis for feminist and psychological interventions in the sex industry.

Worry: Exploring associations with Locus of Control, Emotional Intelligence and Metacognition

K. CLAYTON, D. PURVES, London Metropolitan University & P. ERWIN, Edge Hill College.

Objective: Previous research in the area of Worry has suggested that high worry is associated with an external Locus of Control (LOC) and low Emotional Intelligence (EI). However, it is presently unclear if LOC is the most important factor in worry, EI and its subscales may be equally responsible. This study investigated the associations between Worry, LOC, EI and Metacognitions.

Design & Methods: A survey was conducted with a primarily student population ($N=167$) using four self-report measures: Penn State Worry Questionnaire (PSW), Rotter Internal-External Locus of control Scale (I-E LOC), Schutte Self Report Inventory (SSRI), and Thought Control Questionnaire (TCQ).

Findings: For both males and females, worry was a significant predictor variable for an external LOC (Adjusted $R=0.046$, $F(1,165)=9.027$, $p<0.01$).

Partitioning the data for sex, multiple regression showed that low scores on the TCQ subscale social-support was a significant predictor of an external LOC in females (Adjusted $R=0.45$, $F(1,102)=5.87$, $p<0.05$). And that lack of EI regulation was a significant predictor of worry in males ($F(1,61)=6.86$, $p<0.01$).

Conclusions: If the function of worry is to give an opportunity for re-appraisal, the tendency of some females with an external LOC to withhold from social-support, and males' with high-worry non-implementation of EI regulation-in-self-and-others could suggest mechanisms that may be causing functional worry to fail.

The relationship between humour, teaching style, gender and student evaluations of university lecturers

L. CLEVE & A.J. McLACHLAN, University of Ballarat, Australia.

Objectives: This study was based on a functional approach to laughter and humour that supports the idea that the relationship between lecturer and audience, specifically, their relative status and the degree of solidarity between them, can be modified by the form and extent of humorous exchanges. It was expected that male lecturers would use more humour than female lecturers, that authoritarian, status conscious, lecturers would direct humour at the students but not the self, and that *laissez-faire* lecturers, concerned with establishing solidarity with the class, would direct humour against

themselves. Finally, it was predicted that lecturers who used humour of any type would be seen by students as more effective.

Design & Methods: Instances of humour used by 19 university staff, each video recorded delivering a lecture, were categorised according to the scheme of Gorham and Christophel (1990). Self-reported teaching styles were assessed using the authoritarian and laissez faire dimensions of the Classroom Management Style Inventory, while student evaluations were derived from 607 students across the 19 lectures using the Snell Educator Effectiveness Index.

Analyses: The results showed that lecturers used on average 7.5 instances of humour during each 50 minute lecture. No gender differences were found for lecturers in terms of total humour used or for the different types of humour. The results also indicated that the degree of authoritarianism sought in teaching style was negatively related to the frequency of humour directed at self ($r=-0.47$) but positively related to the number of general anecdotes relating to the topic ($r=0.58$). In marked contrast, the extent of laissez-faire teaching style was found to be related negatively, but weakly, with general anecdotes relating to the topic ($r=-0.29$) but positively and more strongly related with self-deprecatory comments ($r=0.41$). When all instances of humour were combined, it was found that they tended to correlate with students' evaluations of the lecturer's effectiveness ($r=0.41$) and, more specifically, with ratings of interest ($r=0.53$).

Conclusions: These results have clear implications for our understanding of how lecturers intentionally or unintentionally relate to their students and the manner in which this relationship is reflected in students' reaction to the material. Consistent with previous findings, some forms of humour can be used strategically by teachers to enhance their status but at the expense of solidarity, while other forms will increase solidarity with the class but reduce status. Intriguingly, humour and laughter, irrespective of type, appear to be associated with increased lecturer effectiveness, especially the extent to which students found the material interesting. The results pose some interesting questions with respect to on-line delivery of lecture content.

English beliefs about emotional expression and the influence of psychoanalysis in the early to mid-20th century

H. COOK, University of Sydney, Australia.

Objective: In 1947 an English doctor suggested that an emotionally 'uncontrolled person was a useless member of society'. Anthropologist, Geoffrey Gorer, commented: 'Nearly every foreign observer notes, either with approval or disapproval, that the English do not easily give way to their impulses; they are described as 'law abiding' or 'restrained', as 'puritanical' or 'cold'. Is this a useful and accurate approach to understanding English Emotional culture and if so why did people accept these constraints?

Design: This paper will use novels, oral histories, autobiographies and popular self help text to examine the beliefs of English people about emotion in the mid-20th century. It will then consider the advice offered to those, the great majority, who were unable to find or to afford a therapist.

Methods: The historical analysis of texts and personal testimony, contextualised by my previous research into sexuality and the broad economic and social context.

Results: A brief description of the emotional culture of mid-20th century England

Conclusion: I will conclude by commenting on the relevance of this culture to understanding emotional culture and change in 21st century England.

Sun, fun, rum and graduate selection in the 21st century

P.A. CRUISE, City University London.

Objectives: Identifying graduate skills, knowledge and attitudes for the 21st century has received much attention in recent years. As organisations become more mercurial and technologically advanced, the transformational impact of

globalisation on the changing nature of work has forced both researchers and practitioners to re-evaluate the way in which skills are defined, assessed and developed. The present study is an attempt to explore the complexity of defining requisite skills for the future graduate as well as identifying associated concerns. There are multiple objectives of the research. First, to identify the competencies that Senior HR Personnel recognise as essential for graduates in the future. Second, to determine whether social or technical skills are perceived to be more valuable in the graduate recruitment process. Third, to explore issues and concerns of selecting a future-based workforce. Fourth, to highlight suggestions for tackling challenges.

Design: Drenth and Heller (2004) called for 'an extension of methods, a broadening of the type of problems to be addressed, a stronger integration with associated disciplines and better integration between application and implementation of findings to ensure the usefulness of future work psychology'. However, present organisational academic literature addressing skills in the 21st century, remains predominantly quantitative in nature, North American in orientation, myopic in focus and limited in application. In contrast to the positivist, quantitative approach both preserved and preferred by the discipline up to the end of the 20th century, the present research utilises a qualitative approach to identify and explore themes, issues and concerns in selecting the graduate of tomorrow.

Method: 20 Jamaican HR Managers, Directors and Consultants were randomly selected from the membership list of the Association for Training and Development. Participants represented organisations from both the public and private sectors as well as small, medium and large corporations. In-depth, semi-structured telephone interviews were then conducted over a two-month period.

Results: The data were analysed using thematic content analysis. Data were grouped into five broad categories: (a) personality characteristics; (b) technical competence; (c) facilitative systems; (d) challenges to the process; and (e) practical application. Analyses are currently underway.

Conclusions: The present study hopes to contribute to the discipline by highlighting the value of utilising a qualitative approach for practical, futuristic, applied research. In so doing provide empirical support for the need for a less positivist outlook in research approaches and applications.

Using football to raise the game in a pupil referral unit

K. CULLEN & J. MONROE, CEA@Islington Educational Psychology Service & University College London.

Objectives: This paper will describe the planning, implementation and evaluation of a 12-week pilot project in which an educational psychologist worked with an inner city secondary pupil referral unit (PRU) and Arsenal Football Club's 'Sport in the Community' (AFCSIC) programme. The hypothesis that this particularly challenged student group and the pupil referral unit system as a whole, would benefit from regular, structured input from a locally respected and personally significant sports organisation was tested.

Design: Initial consultations with AFCSIC and PRU staff were used to plan the weekly AFCSIC sessions at the PRU. The educational psychologist and an assistant trainee educational psychologist continued to link with all involved staff throughout the project and collected summative evaluation data at the end of the period. Soft systems methodology was used in order to conduct an analysis of the perceptions and intentions of those involved in order to depict and understand the complexity of the situation being investigated.

Methods: This consisted of semi-structured individual and group interviews. Telephone interviews were also carried out with parents. In addition, a series of observations of AFCSIC sessions and PRU sessions were conducted and also examination of attendance and exclusion data carried out. Analysis of data was done through establishing a 'rich picture' of the project within the PRU and attempting to explore the context, social aspect and political economy of this.

Results: General perceptions of the usefulness of

the benefits of the project for all involved, were unfailingly positive. Staff morale improved and levels of collaboration increased between all adults involved. Individual students' behaviour and attendance improved to varying degrees, depending upon the number of sessions attended. Links with parents were not affected. **Conclusions:** A clear framework, informed by psychological theory, in which attitudes, relationships, resources, structures and systems were examined and clarified, was essential to this project and to possible future developments.

The effects of a mental imagery intervention on interpretation of pre-competition anxiety in cricket batsmen

P.A.J. DANCY, W. SMITH, S. CECIL & D. EDWARDS, St. Mary's College, J. THATCHER, University of Wales, Aberystwyth & J. EVERATT, University of Surrey.

Objective: This study examined the use of motivational general mastery (MG-M) imagery for: (1) increasing athletes' interpretations of the pre-competition anxiety as facilitative for performance; (2) increasing athletes' pre-competition self-confidence; and (3) enhancing athletic performance.

Design: Assessing the efficacy of interventions in an ecologically valid setting requires an idiographic approach. A single subject design was used to examine individual and possibly small changes in the dependent variables. Multiple baselines were employed to reduce the effects of extraneous variables.

Methods: Seven cricket batsmen were purposely selected according to the following criteria: interpretation of their pre-competition anxiety as debilitating for performance and the ability to carry out, but no experience of having used, mental imagery. Imagery ability was assessed using the Vividness of Movement Imagery Questionnaire. Pre-competition measures (taken prior to batting) of self-confidence, anxiety intensity and interpretation were obtained via the modified Competitive State Anxiety Inventory-2. Number of runs scored in an innings was used as an objective measure of performance and ratings of performance by external observers were employed as subjective measures of performance. The procedure consisted of four phases: baseline (five to eight innings across participants); intervention; post-intervention 1 (five innings; imagery use during competition compulsory), and, post-intervention 2 (five innings; imagery use voluntary). Data were collected during all but the intervention phase. Imagery use in competition was recorded during both post-intervention phases and social validation interviews were used to establish the participants' experiences of the intervention.

Results: The data were analysed via visual inspection of data plots. Six of the participants reported increases in self-confidence following the intervention and experienced more facilitative interpretations of pre-competition anxiety. Five participants reported mean increases in the number of runs scored and subjective performance scores increased for five of the seven participants.

Conclusions: MG-M imagery is effective for modifying athletes' pre-competition cognitions but future experimental research should examine the causal mechanisms involved in this relationship.

Perceptions of the sexual abuse of children in a cyberexploitation case

M. DAVIES & P. ROGERS, University of Central Lancashire.

No published studies have investigated judgements towards Child Sexual Abuse (CSA) in cyberexploitation cases, despite the media interest in the topic. How people judge victims in sex abuse cases relates to the treatment that they receive when they disclose to others. Therefore, investigating perceptions of sex abuse cases is very important. In the current study, a 15-year-old female victim was depicted as being groomed by a 40-year-old male perpetrator via an Internet chat room which led to an offence, described either as rape or consenting sex. The perpetrator was also portrayed to have been honest, lied or did not disclose his age to the victim prior to meeting. Two hundred and seventy-six undergraduates completed the questionnaire. Results revealed

evidence of sex differences, although all respondents viewed the rape case to be more serious than that involving consensual sex. Results are discussed in relation to the implications of such research for the treatment of victims. Suggestions for future work in this area are also proposed.

Cognitive and motivational effects of nicotine and nicotine abstinence

L.E. DAWKINS, J.H. POWELL, A. PICKERING, Goldsmiths College, University of London, J. POWELL, Institute of Psychiatry, University of London & R. WEST, University College London.

Objectives: To test predictions derived from current incentive motivation theories of drug addiction, and from previous empirical work conducted by our group, that smokers will demonstrate a number of specific motivational and cognitive impairments during acute abstinence. In particular it is hypothesised that by comparison with performance after consumption of nicotine, acutely abstinent smokers will show reduced responsiveness to rewards, decreased allocation of attentional resources to motivationally salient stimuli, low self-reported pleasure expectations, poor response inhibition, and impaired spatial working memory. **Design:** A double-blind, placebo-controlled, design was used in which all participants received both nicotine and placebo lozenges in counterbalanced order.

Method: 200 smokers, aged between 18 and 65, all of whom reported smoking more than 10 cigarettes a day and smoking within the first hour of waking, were recruited from the local community. Participants were each tested twice, a week apart, and had abstained for at least 12 hours prior to each session. On arrival for testing, on one occasion they were administered a lozenge containing nicotine and on the other a placebo lozenge. Assessment measures included: a simple card sorting task with and without financial incentive (the CARROT); the Snaith Hamilton Pleasure Scale as an index of self-reported pleasure expectations; a modified version of the emotional Stroop task to assess extent of interference from appetitively toned words; the antisaccade oculomotor task as an index of response inhibition; and a spatial working memory task.

Results: Compared with placebo, nicotine administration was associated with a significant decrease in anhedonia, with enhanced ability to inhibit reflexive eye movements, and with increased attentional bias to appetitively toned words on the Stroop task. There was also a strong trend for nicotine to increase response to financial incentive on the CARROT. No effects were observed on spatial working memory.

Conclusions: The pattern of observed results is generally consistent with current incentive motivational models and suggests that suppression of drug reward circuitry during abstinence may manifest behaviourally as dampening of motivational responses. This, together with impaired control of reflexive response, may contribute to the high risk of relapse which characterises attempts at smoking cessation. The extent to which such impairments recover over protracted abstinence, and the question of whether deficits seen during acute abstinence are indeed associated with increased relapse risk, are currently under investigation in a subgroup of these smokers who subsequently initiated a quit attempt and were reassessed on all the above measures at regular intervals.

A follow-up comparison of British and American Codes of Psychological Conduct

E.Y. DROGIN, University of Louisville School of Medicine & J.R. WILLIAMS, University of Wales, Aberystwyth.

Purpose: To conduct an updated comparative analysis of British and American approaches to the promulgation of ethical standards for psychologists, in light of the latest revisions to the BPS *Code of Conduct, Ethical Principles and Guidelines*.

Background: At the BPS Annual Conference 2004, we presented a paper entitled 'Separated by a Common Profession? Comparing the British and

American Codes of Psychological Conduct', concluding that the British *Code of Conduct* compared favourably to the American *Ethics Code*, as the former was 'typically broad in scope as well as normative in focus,' and 'appeared to presume the existence of a solid foundation of professionalism,' while the latter was 'highly directive and specific,' was 'several times as lengthy as its British counterpart,' and 'mentioned the words 'law' or 'legal' no less than 52 times.' Subsequently invited to England to consult with the BPS Ethics Committee on its revision of the *Code of Conduct*, we were pleased to discover that the contemplated changes remained true to the original's concise identification of issues as well as its affirming practitioner-based locus of professional responsibility. The current presentation updates our comparison of British and American standards in light of the subsequently finalised version of the *Code of Conduct*.

Key Points: (1) Professional codes of conduct reflect the differing social, economic, and political environments in which psychologists from different cultures engage in research, consultation, and clinical practice. (2) Specificity in ethical standards lends form and predictability to professional behaviour, but becomes subject to the 'law of diminishing returns' when rules become too complex and their context becomes more legalistic than humanitarian. (3) The increasingly international nature of psychological collaboration makes a greater understanding of the varying ramifications of these differing guidelines a practical necessity, as signalled by conflicts arising from the incorporation of multiple codes of ethics within the American system.

Conclusions: Psychologists have much to learn from a comparative analysis of the content and application of ethical standards in foreign jurisdictions.

Relationships among body dissatisfaction, body fat and physical activity in British school children

M.J. DUNCAN, Y. AL-NAKEEB, Newman College of Higher Education, M.V. JONES, Staffordshire University & A.M. NEVILL, University of Wolverhampton.

Objectives: The present study examined the relationship among body dissatisfaction, body fat and physical activity in British children from different ethnic groups.

Design: The study was cross sectional in design and assessed body dissatisfaction, body fatness and physical activity in 276 11- to 14-year-old boys and girls (Mean age \pm S.D. = 12.5 \pm 0.8 years) following informed consent and approval by institutional ethics committee. Children were selected using cluster sampling from secondary schools ($N=5$) within the West Midlands.

Methods: Body dissatisfaction was assessed using a Figure rating scale, percent body fat was determined by skinfold measures and physical activity was assessed using the Four by One Day Physical Activity Questionnaire. Measures of body dissatisfaction were completed separately before any other measures were taken. All measures were completed within one week of the assessment of body dissatisfaction.

Results: Significant relationships were evident between body dissatisfaction and body fat for the whole sample ($r=-0.65$, $p<0.01$). Similar relationships were evident between body dissatisfaction and body fat when split by gender, ethnicity, socio-economic status and school year (all $p<0.01$). No significant relationships were evident between body dissatisfaction and physical activity for the whole sample or sub samples (all $p>0.05$). ANCOVA controlling for body fat and physical activity revealed that as the covariate of physical activity increased so did body dissatisfaction ($F_{1,269}=12.97$, $p<0.01$). A significant interaction between body fat and ethnicity was also evident ($F_{2,269}=4.36$, $p<0.05$). Girls had lower levels of physical activity ($F_{1,270}=6.00$, $p<0.01$), greater body dissatisfaction ($F_{1,269}=9.07$, $p<0.01$) and greater fatness ($F_{1,275}=37.51$, $p<0.01$) than boys.

Conclusions: Children's body dissatisfaction is multifaceted and influenced by a number of factors. Actual levels of adiposity appear to be central to the way children feel about their body. Children's levels of body dissatisfaction are also

influenced by gender and ethnicity but do not appear to be influenced by levels of physical activity.

Is age kinder to the initially more able? The relationship between IQ and age-related verbal memory decline

R. EDWARDS, A. MARRIOTT & R. BULLOCK, Kingshill Research Centre.

Objectives: Research suggests that changes in cognitive function in the elderly primarily reflect person-specific factors, rather than an inevitable developmental process. This study aims to investigate the possible relationship between age related decline in verbal memory and verbal IQ.

Design: This investigation was a retrospective, longitudinal study and used a repeated measures design.

Method: A group of 58 healthy volunteers, aged 55 to 88 years, completed a measure of verbal IQ (the National Adult Reading Test - NART) and two measures of verbal memory (the AMIPB immediate and delayed story recall tests) at yearly intervals, over five years. Participants were divided into a high IQ and lower IQ group for the purpose of analysis based upon NART scores.

Results: The results of repeated measures ANOVA's showed that those within the high IQ group did not significantly decline in performance on either of the measures of verbal memory, over five years. However, the performance of those in the lower IQ group declined significantly on both verbal memory tests.

Conclusions: This investigation supports the case for cognitive reserve theory and suggests that even relatively subtle differences in IQ could influence age associated memory decline. It is crucial that we do not treat older persons as a homogeneous group but recognise the importance of individual differences in cognitive change.

Teens and the trials of old age: The impact of the old on the young

R. EDWARDS, S. VOSS, A. MARRIOTT & R. BULLOCK, Kingshill Research Centre.

Objectives: Past research has shown that grandparents often fulfil important roles within the family, for example providing emotional support and acting as 'family watchdogs'. However, little research has explored the impact of dementia upon the relationship between grandparents and their grandchildren. This study aims to investigate how the grandparent-grandchild dyad is influenced by the onset and progression of dementia, from a grandchild's perspective.

Design: This is a non-experimental, qualitative study. Interviews are carried out at participants' homes. These are used to identify and describe their experiences of having a grandparent with dementia. Interviews will be semi-structured in order to limit the opportunities for the introduction of preconceived hypotheses and allow unanticipated issues to be explored.

Methods: Participants for this investigation are a sample of approximately 10 grandchildren, aged 13 to 18 years, recruited through patients of a Memory Clinic. Participants are interviewed concerning their experiences of having a grandparent with dementia. Interviews are recorded and transcribed to provide a verbatim record for analysis.

Results: Grounded Theory is the proposed method of analysis of interview data. There are three stages of data analysis proposed: Individual case analysis, cross-case comparative analysis and developing theory/hypothesis. Grounded Theory is considered appropriate because it is intended to drive towards a theory that will be grounded in the data.

Conclusions: The themes identified will be used as a basis for the generation of a model of the impact of dementia on teenagers, with a long-term view to producing interventions that offer support and coping strategies. Data collected will also help add to the literature concerning the grandparent-grandchild relationship within our society.

Crossing the Wanless Rubicon: Moving towards the fully engaged scenario

L. EVANS, School of Care Sciences, University of Glamorgan & J. NICKELS, North Glamorgan NHS Trust.

Definition of Rubicon: A limit that when passed or exceeded permits of no return and typically results in irrevocable commitment.

[Rubicon, a short river of north-central Italy, the crossing of which by Julius Caesar and his army in 49 B.C. began a civil war.]

Objectives: To move towards the 'fully engaged scenario' as outlined by the Review of Health and Social Care in Wales advised by Derek Wanless (July 2003). This report is routinely referred to as the Wanless Report. Three strategic pathways were developed to this end. This specific project aims to develop the confidence, skills and capacity of front-line NHS staff to respectfully engage with and invite local community members to make new healthy lifestyle choices. For example, with chronic disease management, smoking cessation, obesity and so forth. This is done within a given and explicit ethical framework which respects the individuals' rights.

Methods: A group ($N=14$) of NHS staff undertook specific training delivered by a clinical psychologist in the motivational interviewing technique. A community peer support network was developed to give additional pastoral support and encouragement.

Results: Four outcome measures have been identified as follows:

- a training course participant satisfaction questionnaire;
- the uptake rate from local community members;
- the percentage of participants who continued to use the peer-support network;
- the impact of the motivational interviewing technique on local community members.

The data is currently being analysed for completion January 2005; and results appear to be promising with four hypothesised relationships being examined.

Conclusions: The long-term sustainability of the NHS is heavily reliant upon moving towards the 'fully engaged scenario' as outlined in the Wanless Report. This project and associated empirical study illustrates one effective method or approach by which the NHS can cross the 'Wanless Rubicon'.

How do you see me?

M. EVANS & P.S. McDONALD, University College Worcester.

Objectives: The research explored the experiences of LGB people and people where this is an issue in their families, who have had counselling in the last five years. The purpose was to discover how these clients felt they were perceived by their counsellor, as recorded in their completed questionnaires and free writing. The questionnaires are used as triangulation in my wider study of Relate counsellors' perspectives on LGB people and their families, with implications for the training of counsellors.

Design: Advertisements were placed in the LGB press, in the counselling world and in agencies that support families, such as Pink Parents and FFLAG (Families and Friends of Lesbians and Gays) for people who have had counselling of any sort in the last five years. Questionnaires were issued to explore clients' experience of counselling and how they felt they were perceived by their counsellor.

Methods: I explain how the questionnaire was devised and what issues were addressed. Thematic analysis was used in the first instance, with an idea of using grounded theory, but it is apparent to me now that a more reflexive approach is emerging from the data, with interesting language used by the clients to describe their experiences. I recruited four other people to look for themes also, in order to validate mine. They were a gay-male counsellor who has also done research in this area, a straight female counsellor, a non-straight female psychologist who also researches in the area of sexuality, and a straight male psychologist.

Results: There were 62 respondents. Six wrote freely about their experiences, rather than complete the questionnaire. There was a wide variety of response to such issues as preference for a counsellor of the same sexual orientation, or not, to the frustrations of being treated 'the same' as a

heterosexual client and yet not wanting to be special. The coming out process produced the greatest expression of feelings, with strong feelings about disclosure from either client or counsellor. Some exasperation was expressed about the client's need to educate the counsellor in LGB experiences, yet clients did not want to be generalised. There are indications that many counsellors have educated themselves and are able to offer acceptance, understanding and empathy, although some others struggle. A reflexive journal charts my progress from being a straight counsellor, originally with no education or awareness of the issues for sexual minority clients, to accepting my own family LG members and becoming involved in this research. I regret that the transgendered population is not included in my research.

Conclusions: If LGB people and their families are to have a fair deal in counselling, counsellors and therapists must address their own prejudices and assumptions and educate themselves about LGB experiences in our society. Specifically counsellors need to be aware of the effects of growing up gay, of the dangers of seeing the world through a heterosexist lens and of making assumptions about LGB ways of life. This has implications for the training of counsellors. It appears from my results, that the counselling world is taking this challenge seriously and has already moved some way in this direction.

Do you see what I see? The invisible hand of sexism

T. FINCH-LEES, The Global Effectiveness Group.

The objective of this paper is to examine the prevalence of increasingly subtle manifestations of exclusion and discrimination. Using elements of critical discourse analysis located within a social constructivist paradigm, it is argued that, within the workplace and indeed society more generally, visual images, coded language and exclusionary practices are increasingly being used to subvert discrimination legislation, giving rise to subtle yet pervasive forms of exclusion. From a systemic/cultural perspective, institutionalised practices of discrimination are woven into the very fabric of our society and its organisational forms. These are constructed according to a masculine paradigm and enshrined in cultural assumptions that define what we typically accept as 'normal', 'rational' and 'common sense'. Manifestations of these subtle forms of exclusion can be found by deconstructing organisational policies, procedures, leadership styles (enshrined, for example, in competencies) and generally taken for granted ways of doing things. The paper draws on case studies from advertising, marketing, HR and recruitment, in order to bring the theory to life. The author concludes that the discourse of the dominant sets out different rules for those with and without power. Language, which itself can be understood to be constitutive of both knowledge and power, is hijacked to legitimise what is deemed mere 'common sense'. Protestations that serve to challenge this rationality are ridiculed and labelled as 'radical', 'militant' or 'on the fringe'. However robust and intellectually rigorous one's arguments for equality and inclusion, those with vested interests in the status quo need only reduce them to a cry of 'PC gone mad' in order to 'rest their case'. The author also posits that in order for discrimination legislation to make more progress than it has in the last thirty years, we need to move out of our 'zones of indifference' and be prepared to switch our diversity radars on: to notice whose voice is heard, whose opinions are validated, to ask the difficult questions, to seek transparency, and to actively promote inclusion. This, it is argued, is unlikely to be achieved by restricting the debate to the stifling and censorious confines of the dominant discourse and by ignoring the suffusive dynamics of power and politics.

Relationships in older people with memory loss: The impact of dementia on romantic couples using different methodologies

L. FOSTER, Kingshill Research Centre and University of Bath, K RODHAM, University of Bath & R. BULLOCK, Kingshill Research Centre.

Objectives: Literature surrounding dementia and relationships has highlighted personality, attribution and attachment as playing an important role in coping strategies that spouses engage in. This part of the symposium will explore the appropriateness of two different methodologies that have been employed to assess the impact of dementia on couples?

Design: Two projects were undertaken to determine the suitability of questionnaires and interviews respectively.

Methods: 1. Twenty participants with mild dementia were invited to complete five existing questionnaires that were designed for a general adult population. These questionnaires assessed attachment, coping, life satisfaction and personality. 2. Interviews will be conducted with six couples (each with one person who has been diagnosed with mild dementia). Each member of the couple will be interviewed separately about their perception of the impact of dementia on their relationship.

Results: 1. Between 20 per cent and 70 per cent of participants were able to complete the questionnaires. Participants found it difficult to choose an option from the Likert scales used by the questionnaires to represent their feelings. They also had difficulty with negatively-worded statements. 2. These interviews have not yet been conducted but results will be available for the conference.

Conclusions: 1. Existing questionnaires designed for a general adult population are not suitable for people with mild dementia. As yet, no questionnaires have been designed specifically for people with dementia that address issues surrounding coping with dementia and the impact of the illness on the spousal relationship. Therefore, project No. 2 will use interviews to try and access views from this population. Exploratory work of this nature is necessary for researchers to begin to understand the experience of being in a couple where one partner has been diagnosed with dementia. Results will be available for the conference regarding the use of interviews to address the impact of dementia on romantic couples.

Daily hassles, daily uplifts, sleep loss and stress: A two-wave analysis

R.L. GERVAIS, Manchester Business School & G.R.J. HOCKEY, University of Sheffield.

Objectives: This research aims: (1) to examine the effects of daily hassles and daily uplifts on job strain and job performance while controlling for sleep loss. Sleep loss is an extraneous variable that may exacerbate stress levels and may influence the ability to function effectively; and (2) to determine if uplifts would moderate the effects of hassles, especially as it is not usually considered in stress research.

Design: The study used a diary methodology, with data collected nine months apart on two occasions, for one month each time.

Methods: A sample of nurses (Time 1: $N=71$, Time 2: $N=44$) was administered four diaries at the beginning of each wave, one per week. Twice daily entries allowed for the completion of scales assessing hassles (work, non-work), uplifts (work, non-work), time asleep, job stress (strain, psychosomatic symptoms) and job performance.

Analysis: A hierarchical regression procedure was used. This was based on pooled-time series analysis to control the between and within participant variance. The results showed that uplifts were able to moderate the effects of hassles on psychosomatic symptoms at Time 1 and on strain and performance at Time 2, when controlling for sleep loss.

Conclusions: The present study showed that daily uplifts were able to influence the effects of daily hassles on stress. These results suggest that uplifts can operate as a support mechanism for nurses, and should be explored further. Some researchers

have advocated the use of hassles as a stressor when examining stress related conditions at work. The present research assists in supporting hassles as a viable stressor. Finally, the diary methodology with multiple entries allowed for consistency of the measures and is recommended for future studies.

An examination of the psychometric properties of the Behavioural Regulation in Exercise Questionnaire-2 (BREQ-2) within an adolescent population

F.B. GILLISON & M. STANDAGE, University of Bath.

Objectives: In recent years, decrements in physical activity and increases in obesity within UK children and adolescents has accentuated the need for a greater comprehension of adolescent exercise behaviour. Understanding the theoretical mechanisms underpinning adolescent exercise motivation patterns represents one important avenue for future work. A motivational framework that has formed the conceptual foundation for a number of contemporary studies within this area and one that embraces a multidimensional conceptualisation of motivation is *Self-Determination Theory* (SDT; Deci & Ryan, 1985, 1991). The development of valid and reliable inventories represents a fundamental process in order to assess multi-faceted exercise motivation. To this end, a number of key measures have only been used and validated with adult populations, the purpose of the present study was to test the factorial validity and internal consistency of the modified Behavioural Regulation in Exercise Questionnaire (BREQ-2) (Markland & Tobin, 2004) within an adolescent population.

Design: After establishing internal consistencies for all scales, bivariate and inter-factor correlations were calculated with results supporting a SIMPLEX pattern among the motivational types (Ryan & Connell, 1989). The BREQ-2's factorial validity was tested via confirmatory factor analysis (CFA).

Method: A number of secondary schools were approached to take part in the questionnaire study, open to all students between the ages of 11 and 15. A final sample of 404 schoolchildren (*M* age = 13.25 years; *SD* = 0.96; *range* = 11–15 years) was obtained.

Results: Our findings were congruent with those of Markland and Tobin (2004) revealing an excellent fit between the proposed measurement model and the data [$\chi^2(142) = 314.99, p < 0.001; CFI = 0.94, SRMR = 0.059; RMSEA = 0.55$ (90% CI = 0.047 – 0.063)]. Finally, results of a multi-group CFA revealed the BREQ-2's factorial structure to be partially invariant across gender.

Conclusions: The results of the present work provide support for the tenability of the BREQ-2 as a measure of multidimensional exercise motivation within an adolescent population.

Building a consensus of the challenges and solutions facing parent/carers training as clinical psychologists

R. GOLDWYN, University of Leeds, Clinical Psychology Training Programmes.

This research was commissioned by the Personal and Professional Issues Subcommittee.

Objectives: This Poster presents qualitative and quantitative findings from the first survey of parent/carers about their experiences of training in clinical psychology in the north of England & Wales

Design: A Delphi Technique questionnaire postal survey in two rounds was utilised to build a consensus of opinion among parent/carers about their experience of training.

Methods: Participants were recruited from eight training courses in the north of England and Wales via mail and e-mail requesting Parent/Carers Psychologists in Clinical Training (P/C PICTs) to join the survey mailing list. A total population of 54 P/C PICTs were identified by this method, 43 per cent of the total population participated in round 1, 39 per cent in round 2. Round 1 comprised an open questionnaire asking participants to identify 5 challenges they faced in being both a PICT and a parent/carer and 5 solutions to these challenges. These responses were thematically analysed to identify major themes of Core Challenges and Core Solutions. This data analysis was used to construct

Questionnaire 2 for Round 2. Questionnaire 2 comprised a set of seventy five items statements that represented the Core Challenges and the Core Solutions identified from Round 1. Participants were asked the extent to which they agreed with each of the seventy five statements on a 1–5 likert type scale.

Results: Round 1: Identifying the Challenges and Solutions. Core Challenges: Balancing commitments & time management*, maintaining family relationships, social life & sense of self*, finding time for self care, managing stress & conflicted feelings*, managing financially, travelling long distances*, not having needs as a Parent/Carer PICT met. Core Solutions: Course to support needs of P/C PICT*, part time training*, flexible working hours*, flexibility in course work*, increase financial support*, reduce amount of travelling required, adoption of family friendly practices*, Supportive relationships*. Round 1 also identified a diversity of experiences of being a P/C PICT and that employment conditions varied across courses.

Round 2: Building a Consensus of Opinion. Consensus was measured by using a 'percentage rating of agreement' where the agreement responses were calculated as a per cent of total responses. Four of the six Core Challenges and seven of the eight Core Solutions reached a level of agreement of between 70–100 per cent and this suggested a consensus of opinion had been established for these Core Challenges/Solutions. These are indicated above by*. Analysis of responses to Core Challenges/Solutions not reaching consensus indicated that either some courses are better at supporting P/C PICTs or that some trainees are better at getting such support.

Conclusions: The strength of these findings lies in the identification of core challenges faced by P/C PICTs and the use of their 'expert status' to suggest a range of solutions to such difficulties. This study has identified that the challenges facing P/C PICTs are complex and has enabled such challenges to become more explicit and to locate them as a 'training community problem' rather than an 'individual's problem'. These results are clearly meaningful for courses and their development.

Relationship between genotype and positive psychological attributes in national-level swimmers

J. GOLBY & M. SHEARD, University of Teesside.

Objectives: Recent research has demonstrated the moderating effect of a particular polymorphism of the 5-HTT gene on the risk of developing symptoms of depression (Caspi *et al.*, 2003). Specifically, the long allele of the 5-HTT gene seems to demonstrate a 'protective effect' against stress or trauma. The present study set out to extend these findings to investigate the moderating effect of this polymorphism of this gene on selected positive psychological variables related to high-level sporting performance.

Design: Ex post facto and correlation design employing self-report methods.

Method: 31 young swimmers (mean age = 13.80; *SD* = 2.93) volunteered to participate in this study. All were recognised as national-level competitors in their respective age categories. Selected measures of positive psychological attributes relevant to sporting performance were administered. DNA was extracted from buccal cells using swab samples and employing standard procedures.

Results: Statistical analysis involved MANOVA, regression, and correlation techniques. A discernible trend was observed whereby swimmers possessing the two long allele version of this polymorphism demonstrated higher levels of measures of mental toughness, hardness, and other relevant positive psychological variables. Additionally, a statistically significant aging effect on measures of mental toughness was recorded.

Conclusions: The findings of this ongoing research are relevant to our understanding of the protective benefits of one particular form of polymorphism in the 5-HTT gene. Findings are discussed in terms of the effects of sample size, variables examined, and future research.

Category use in the construction of asylum seekers

S.D. GOODMAN, University of Manchester.

As asylum remains a key political issue, this article considers exactly what is meant by the term 'asylum seeker'. It is argued that categorisation is a very powerful rhetorical strategy that can be used to present asylum seekers as either deserving or undeserving of support and sympathy. Using a politically informed version of discourse analysis of public sphere data including newspapers, a televised debate a televised interview with the Prime Minister, a political speech and election campaign material, I show how categories are used in the asylum debate. It is shown that the categories used for asylum seekers are not just the researcher's concern but also something participants in the debate are attending to and, significantly, attempt to change. Three strategies are identified; firstly distinguishing between 'refugees' and 'economic migrants' which functions to present some asylum seekers as legitimate while others are not. This casts doubt, and therefore justifies harsher treatment, of all asylum seekers. Another strategy is to conflate the categories of 'refugee' and 'economic migrant', which again functions to present all asylum seekers as though they are economic migrants, and provides justification for their harsher treatment. Thirdly, I show that these two strategies can themselves be used interchangeably so that it is sometimes unclear whether asylum seekers are being separated into these categories or if the categories are confused. The overall effect is that all asylum seekers are doubted and the debate about asylum seekers becomes one about their legitimacy and therefore not about how they may be helped.

Retrieval-induced forgetting is inversely related to everyday cognitive failures

D. GROOME & N. GRANT, University of Westminster.

Objectives: The purpose of this study was to investigate the hypothesis that there would be a relationship between retrieval-induced forgetting (RIF) and scores obtained on the Cognitive Failures Questionnaire (CFQ). In addition, the relationship between RIF and depression was also investigated.

Design: This study involved the measurement of retrieval-induced forgetting (RIF) using a within-subjects design, based on that of Anderson *et al.* (1994). Correlations were calculated between RIF scores and CFQ scores, and also between RIF scores and scores on the Beck Depression Inventory (BDI).

Methods: Retrieval-induced forgetting (RIF) was measured in a group of 40 normal subjects, by asking them to study a list of words belonging to several different categories, some of which were subsequently practised whilst others were not. Scores for the recall of unpractised items from practised categories were used to measure the magnitude of the RIF effect. The RIF scores obtained for each subject were compared with their scores on the Cognitive Failures Questionnaire (CFQ), and also with their scores on the Beck Depression Inventory (BDI), by calculating correlations between these scores.

Results: A significant inverse correlation was found between RIF and CFQ scores, indicating that subjects showing a relatively strong retrieval-induced forgetting effect tend to report a lower rate of reported cognitive failures and forgetfulness in everyday life. No significant correlation was found between RIF and depression scores.

Conclusions: These findings were considered to support the hypothesis that RIF might play a role in facilitating memory function, by assisting in the selective retrieval of target items and the inhibition of non-target items.

Psychological well-being in a UK Fire Service: A preliminary study

K. GUNARATNA, Middlesex University & A. GUPPY, University College Chester.

Objectives: The aim of this study was to investigate psychological well-being and job satisfaction amongst staff working in the Fire Services. Design: Self-completion questionnaires were distributed to all staff in the Fire Service.

Methods: 200 participants completed the questionnaires. The questionnaires included measures of psychological well-being at work, sources of stress specific to the Fire Services, coping strategies, perceptions of control and general mental health.

Results: Reliability analysis indicated that most of the scales had satisfactory alpha values ranging from 0.65 to 0.81. Although job satisfaction levels were comparable to those seen in many studies of British employees, items relating to pay and industrial relations were quite low. This would seem to have reflected the recent picture of the fire services throughout the country. Further findings indicated poor levels of mental health in around 27 per cent of respondents. Significant associations between job satisfaction, general mental health and reported work performance were found.

Conclusions: This study provides a useful overview of the relationship between job stressors specific to the Fire Services and outcome measure in a Regional Fire Service at a unique time, in the midst of prolonged industrial difficulties.

Personality traits and sexual orientation

G.E. HAGGER-JOHNSON, University of Edinburgh.

Purpose: The aim of this review paper is to evaluate current knowledge about personality traits in relation to sexual orientation. A secondary aim is to summarise the psychometric quality of sexual orientation measures used in research. Associations reported between personality and sexuality are of high theoretical interest and have applied implications.

Background: Individual differences in personality are not well understood in relation to sexual orientation. Measures of sexual orientation are increasingly prevalent in personality trait research, but definitions of sexuality are not widely agreed. Commentators have voiced concerns about the individual differences approach and its consequences for lesbian and gay psychology. Since personality differences are associated with multiple outcomes (e.g. physical health status, health behaviours and mental health), research into their causes is valuable. Improving the validity of these studies should be an important goal for lesbian and gay psychology and personality trait research.

Methods/Key Points: Personality trait associations with sexual orientation are examined, based on a literature review of studies that included personality trait measures, or ratings of personality disorder by clinicians. Of particular interest is the finding that gay people are more likely to receive a personality disorder diagnosis. The various definitions and measures of sexual orientation used in the studies are evaluated with particular reference to their psychometric quality (reliability and validity).

Conclusions: Links between sexual orientation and personality traits are reported inconsistently in the literature and there are several explanations for the associations found. These include non-representative sampling methods, confounding factors (e.g. health behaviours) and potential bias in research designs. Many studies employed measures of sexual orientation, personality traits or personality disorder that are unreliable and/or poorly validated. Recommendations are made on how to improve research designs so that these limitations are addressed.

Relationships in older people with memory loss: The impact of diagnosis of dementia

J. HANCOCK, S. VOSS & R. BULLOCK, Kingshill Research Centre.

Objectives: If a patient should be told their diagnosis or not is a controversial issue and reactions to receiving a diagnosis differ between individuals. Dementia research to date has not explored the concept of 'illness behaviours'; a state resembling a self-fulfilling prophecy where once an individual is aware of their diagnosis, they behave in a certain way. This research asks 'Does the disclosure of a diagnosis of dementia affect symptoms of disease severity; in terms of the ability to carry out everyday tasks, confidence in these abilities, self-perceived illness and the impact on relationships?'

Design: The research currently being undertaken uses both qualitative and quantitative elements across two phases. This will provide valuable subjective and objective data to be collected from a patient and carer perspective.

Methods: Consecutive sampling will be adopted to recruit 15 patients and their carers. All newly referred patients who are accompanied by a carer will receive information about the study. Those willing to participate will complete a consent form and a convenient time to be interviewed will be arranged. The interview will be carried out either at Kingshill Research Centre or the patient's home depending on their preference and will last no more than 45 minutes. The same semi-structured interview will take place with the patient and carer separately. In addition, the carer will also complete the Bayer Activities of Daily Living scale (B-ADL) and Screen for Caregiver Burden (SCB). If the patient receives a diagnosis of dementia at their follow-up appointment they will be interviewed for a second time one month after diagnosis and the carer will complete the B-ADL and SCB for a second time.

Results: The qualitative data collected will be analysed using thematic analysis. The quantitative data will be analysed using a within-subjects ANOVA. The quantitative findings will be used to frame a discussion of the qualitative data.

Conclusion: The study hopes to benefit service users by health care professionals gaining a deeper understanding of the subjective effects of labelling illness symptoms on illness behaviour, disease severity, confidence and motivation. The findings will be used to add to current guidelines about imparting diagnosis and feed into counselling and psychological services.

'Mixed Race' and the 'Identity Crisis': A self-categorisation approach

S.V. HEDGER, Brunel University, Funded by the E.S.R.C.

Objectives: The phenomenon of 'Identity Crisis' has long been associated with people of 'Mixed Race' parentage. Identity Crisis was presented as an inevitable experience, due to the sufferer's inability to properly fit into static and pre-defined racial categories. Our approach is based on Emler and Reicher's extension of Self Categorisation Theory (1996), in which people seek validation for their identity claims. The objective of the paper is to present an inter-personal model of identity development, to recontextualise how category exclusion can be problematic for people of 'Mixed Race' parentage.

Design: 'A qualitative investigation of 'Mixed Race' experiences and Identity'. The design of the study was a qualitative measure of experiences of identity threat, validation and development. This study is the first of three, using a triangulation of procedures and a qualitative design was chosen as the primary method.

Methods: 33 semi-structured Interviews were conducted with Brunel University undergraduates (10 male, 23 female), aged between 18 and 26 years of age, who self-identified as being 'Mixed Race' or of 'Mixed Race' parentage. Participants were recruited locally via advertisements, word of mouth and snowballing. The semi-structured interview was designed based on Rockquemore and Brunsma's (2002) Survey of Biracial Experiences, and were conducted on a one-to-one basis.

Results: Experiences of identity threat, validation and development were explored using Inductively Data Driven Thematic Analysis. Results illustrate category fluidity and the processes of identity negotiation, where non-validation of identity claims is experienced as an identity threat. Results also illustrate the varied negotiation strategies to achieve identity validation, and thereby minimise threat.

Conclusions: The study further extends self-categorisation theory and presents an inter-personal model of identity development, within which the importance of validation for identity claims is highlighted. The negotiation strategies also highlight the active inter-personal (vs. intra-personal) processes that occur in the development and maintenance of identities.

The discursive and therapeutic limitations of psychotherapy: Obscuring power issues?

C. HEENAN, Bolton Institute.

Purpose: This paper highlights and explores the discursive and therapeutic limitations of psychotherapy in dealing with issues of power and difference. In order to do this I focus on the difficulty of exploring issues of race and sexuality in a feminist psychodynamic eating disorders therapy group.

Background: Despite feminists' critique of psychoanalytic constructions of gender, object relations has been combined with critical theory to further understanding of women's gendered relationship with their bodies and food. In addition, 'feminist' psychotherapy has been regarded as a means to implement personal and political change. However, in promoting this approach, feminist object relations theorists have failed to deconstruct their own ideas.

Methods/Key Points: In theorising eating disorders as both social produced and constructed, feminists' concentration on women's oppression has obscured differences between women. The result is a hegemonic notion of 'woman' and 'women's bodies' as white and heterosexual. In turn, psychodynamic psychotherapy's individualistic focus on personal emotions limits exploration of how salient aspects of subjectivity are constructed – in particular sexual orientation. Taking a discursive position in relation to material from an eating disorders group psychotherapy offers ways to think about these issues not usually available to clinical practitioners.

Conclusions: While feminism and psychoanalytic theory have provided insights about subjectivity and power, a failure to critique the assumptions underlying these modes of analysis functions to reproduce and maintain privilege. This has implications for clinical practice in making it difficult to satisfactorily address issues of difference as well as to question notions of normality.

When the dominant group becomes the perpetrating group: Avoiding intergroup conflict and encouraging reconciliation

A. ISPAS, University of Edinburgh & R. EGGINS, Australian National University.

Objectives: To investigate the effect of focus (self or victim) and level of self-categorisation on attitudes towards a victim group in a historical context when the harm was caused by the ingroup. Focus on the victims and a superordinate level of self-categorisation were expected to engender more positive evaluations of the victim group than focus on the ingroup's actions and a subordinate level of categorisation.

Design: The study used a 2 x 2 between-subject design in order to manipulate focus (on the ingroup vs. on the victims) and participants' level of self-categorisation ('white Australians' vs. 'fellow human beings').

Methods: 146 white Australian students read an article describing the consequences of an historical episode concerning the harm white Australians had done to Aboriginal people. The article contained a manipulation of the focus of the article and of the level of categorisation of the participants. Participants were subsequently asked to complete a questionnaire measuring the degree to which they were likely to derogate, avoid, compensate and politically support Aboriginal people.

Results: Focus on the ingroup's actions led to the highest levels of avoidance and outgroup derogation and to the lowest levels of willingness to compensate and politically support Aboriginal people. This was accentuated in the condition where participants were categorised as 'fellow human beings'.

Conclusions: Focusing historical descriptions on the perpetrating group is likely to lead to a negative reaction from this group and to an escalation of the intergroup conflict. Attempts at conflict resolution should therefore either avoid a direct focus on the role of the of the perpetrating group, or categorise the members of this group at the subordinate rather than the superordinate level.

Are eyes the gateway to the soul?

S. JACKSON, M. MORRIS & N. RUMSEY,
University of the West of England &
R.A. HARRAD, Bristol Eye Hospital.

Objectives: There is a body of general literature, ie books and plays, which seems to indicate that we use our eyes for communication, that we express like and dislike through this medium, that the eyes 'are the windows of the soul'. However, there is no research which specifically backs up these ideas. No-one has asked people how they feel about their eyes and what they mean to us.

Design: Individuals belonging to three different groups were identified: those who have an eye misalignment, those who have had an eye misalignment at some point in the past and those who have never had an eye misalignment at any time.

Methods: A grounded theory project, 19 people were interviewed using an unstructured format. The recorded interviews were transcribed. The transcripts were analysed by two researchers to maintain reflexivity and credibility.

Results: Both higher and lower codes were generated. Analysis suggests a theory related to eyes being gateways to our inner being (or soul). There seems to be no difference in how the three different groups talk about their eyes. For all of them function is paramount and appearance secondary. For all of them eyes are something that can be enhanced or not depending on the situation and whether you want to draw someone in or not. There seems to be a universal understanding that manipulating the appearance of eyes is related to fantasy and avoidance rather than everyday reality and honesty.

Conclusions: It is proposed to discuss the structure of the theory that has been generated about the importance and meaning of eyes with examples provided from the analysis relating to the relevance of the theory to everyday life.

The effect of changes to the organisational roles and responsibilities on the effectiveness of the information technology (IT) support team within an organisation

S. KANURI & A. HETHERINGTON, Dept H.R.M., Westminster Business School.

The Information Technology (IT) support team is an integral part of an organisation that relies extensively on IT solutions and services to conduct its day-to-day business. It plays a critical role in assuring the uninterrupted and cost effective flow of business, without which productivity would otherwise be significantly reduced.

The IT support team acts as an interface between the Information Technology division of the firm and the experienced end users of the IT systems. The complexities of the IT systems and the variety of specialised tasks that are required to maintain the systems have given rise to the need for a multitude of other teams specialising in various functions and technologies. Coordination between the support team and the specialist teams is crucial for timely service to the end users.

This paper explores the factors that influence the effectiveness of the IT support team in the bespoke environment. A high profile international investment bank will be used for the research.

The investment bank employs a variety of complex IT packages in the course of its business. The IT support team provides round the clock services to 500 experienced end users using IT programs.

Confirmatory factor analysis technique is used to determine the effect of dependency on specialist teams on the effectiveness of the IT support team. Further analysis of responses from clients shows that team effectiveness is a combination of five measures viz. innovation, learning-goal orientation, quality of outcome, timeliness and communication, with emphasis on learning-goal orientation and effective communication.

The study shows that effectiveness is found to be a function of the team's dependency on specialist teams, the organisational context and the team's outlook. This paper proposes changes to organisational procedures and practices as a broader solution for continuing improvement in the effectiveness of the IT support team.

The potential of the British soap opera to facilitate research with inaccessible groups

C.A. KIRKMAN, Bolton Institute.

This idiographic and essentially exploratory study examined the unique experiences of 20 women who had been victimised within the context of heterosexual relationships with a male partner who was rated as having the characteristics associated with psychopathy.

An integrated approach, using questionnaires, biographical and narrative data was utilised.

An innovative methodology was used to recruit the experimental group which consisted of 20 women who had partnered males rated by the women on the Hare P-SCAN as having many or most of the features of psychopathy. As this was the first reported use of the Hare P-SCAN to provide partner ratings, norms for scorings on this assessment tool were obtained from ratings provided by a control group of a random sample of 100 women who had completed the P-SCAN and provided ratings for their last male partner. Four two-tailed independent samples *t*-tests were conducted to test for significant differences in scorings between the two groups. Following screening, semi-structured interviews were conducted with the experimental group, i.e. 20 women who had partnered males with psychopathic traits. A co-researcher took notes.

The four independent samples *t*-tests demonstrated that significantly higher psychopathy scores were encountered amongst male partners of the experimental group. Narrative data, generated from written accounts and interviews with women in the experimental group, was successful in clarifying the manner in which males with the personality traits which define psychopathy managed the heterosexual relationship and the nature and patterns of the abusive behaviours which occurred in this context.

What is particularly interesting about the accounts given by female respondents regarding their experiences within their relationships is the striking similarities occurring between those accounts. It is proposed that those similarities cannot be dismissed as pure co-incidence; male partners did not only manifest extremely similar behavioural patterns, in many cases women who were unknown to ourselves and unknown to each other reported that they made the same utterances. Whilst there are some commonalities between the behaviours previously identified as occurring in 'bad and stressful' relationships and those encountered in the heterosexual relationship with a psychopathic male, several behaviours, for example 'Deception and talking the woman into victimisation', 'Multiple infidelities' and 'Parasitic Lifestyle' seem to be specific to the latter. This study is the first to be presented on the topic area of the heterosexual relationships of males who displayed the characteristics of the primary psychopath. No doubt it will not be the last and it is indeed likely that this work will represent no more than the gateway to the study of a group of people who have, until now, remained elusive.

'Q' – The Question and Answer – A preliminary investigation into the use of q-methodology within applied sports psychology workshops

M.E. LAFFERTY, University College Chester.

Objectives: Applied sports psychology practitioners have a tendency to rely on psychometric questionnaires and semi-structured interviews as a means of exploring clients' experiences. Within group settings both of these techniques might be problematic, however, little evidence is available as to the applicability of alternative research methods. The purpose of this paper is to present the findings of a pilot study which used q-methodology to allow junior dressage riders to express thoughts and feelings of the competitive environment.

Method: Seven female junior dressage riders (age range 11 to 17 years) who were participating in sports psychology workshops agreed to take part in the pilot study. All riders had previously competed at inter-regional level and had attended four workshops. Each rider was asked to rank-order 40 opinion statements relating to competition thoughts and feelings using a fixed quasi-normal distribution with anchors of -5 and +5. Sorts were

then interpreted using q-methodology techniques. **Results:** Principal component analysis with varimax rotation identified three distinct factors (eigenvalues >1), which together explained 70 per cent of the total variance. Preliminary interpretive analysis of these distinct typologies identified riders within the group who were, confident riders who enjoyed the competitive environment (sub-group 1), planners but prone to loss of attentional control (sub-group 2) and confident riders influenced by specific events and judging (sub-group 3).

Conclusions: Q-methodology allowed quantifiable differences and sub-groups to emerge which indicated a diverse range of views on prevalent performance and competition issues, this could be useful to the sports psychologist trying to cater for the needs of individuals within group settings. The flexibility and creativity of opinion statement development means that items can be specifically orientated to the sport or population making the process client-centred and needs specific. This is likely to develop more in-depth and rich data than the application of standard psychometric measures and may facilitate the client-practitioner relationship within group settings. These factors warrant further investigation into q-methodology's application with the applied field.

Frustrations and provocations: Sex, aggression and Big Five personality dimensions

C. LAWRENCE, University of Nottingham.

Objectives: This study examines whether the relationships between individuals' triggers of aggression, can predict trait aggression for male and female samples, and whether this effect can be explained by simply accounting for broad-based personality. Recent research examining individual differences in the triggers of aggressive responses, has shown no sex differences in type of events that males and females report as having made them feel aggressive (Lawrence, in press). Furthermore, using the new Situational Triggers of Aggressive Response (STAR) scale, Lawrence (in press) has indicated that whilst direct provocations from other people (Provocations) tend to be linked with the overt expression of aggression, frustrating events (Frustrations) are linked more with hostility and anger responses. As a result, the current study examines:

- Whether the link between STAR scale factors and trait aggression can be explained in terms of broad-based personality dimensions.
- Whether the patterns of associations between STAR scale precipitating factors, trait aggression and broad-based personality are different for male and female samples.

Methods: The sample comprised 141 undergraduate students (69 males) who completed the STAR scale, the Aggression Questionnaire (Buss & Perry, 1992) and a measure of Big Five personality dimensions.

Results: Hierarchical linear regression analyses were conducted for the sample as a whole and then for male and female sub-samples with trait aggression measures as the DVs. The findings reveal that across the whole sample, physical aggression was predicted by sex, and Big Five personality dimensions Agreeableness (A) and Emotional Stability (ES). However, when STAR scale factors were entered at the final step, only sex, A, and a propensity to be triggered by direct provocations from others predicted trait physical aggression. This relationship was very different for males and females. For males, an initial influence of A was eliminated when STAR scale factors were entered at the final step. Specifically, the propensity to be triggered by direct provocations was the sole predictor of trait physical aggression, over and above the influence of broad-based personality dimensions. For females, only ES predicted trait physical aggression, and triggering factors did not play any additional predictive role. For the sample as a whole, sex, ES and the propensity to be triggered by Frustrations predicted trait hostility. However, again, different pattern emerged for male and female samples. For males, STAR scale factors did not explain any additional variance beyond the initial significant influence of ES. For females, however, whilst ES predicted trait hostility, there was an additional influence of individual propensity to be triggered by frustrations.

Conclusions: The study highlights the importance of examining individual differences in triggers of aggressive responses over and above broad-based personality, and need to look at sex differences in the pattern of relationships between aggression-related constructs.

The role of information in the acquisition of fear – interactions with associative learning

J. LAWSON & A.P. FIELD, University of Sussex.

Objectives: Conditioning, or CS-UCS (Conditioned Stimulus – Unconditioned Stimulus) learning, has long dominated theories of how fears and phobias are acquired: the previously neutral CS (e.g. a dog) becomes a focus of fear if it is associated with an unpleasant UCS (e.g. being bitten).

Rachman's three pathways model suggests that vicarious learning and informational learning should be added to CS-UCS learning as pathways to fear. Empirical work also finds that a combination of pathways is often implicated in the development of fear. The present experiment investigates whether negative and positive fear related information influences subsequent associative learning. It was hypothesised that negative information about the CS would accelerate learning to predict a negative UCS and retard learning to predict a positive UCS, and vice versa for positive information.

Design: Participants were assigned to one of four conditions: being given either positive or negative information about the CS (a new animal), followed by an associative learning task with either a congruent or incongruent +0.8 contingency (i.e. a positive or negative UCS on 80 per cent of trials, in this case a smiling or fearful face).

Methods: 120 children from schools in West Sussex, U.K (60 male, 60 female) between the ages of seven and nine years ($M=105.81$ months, $SD=7.627$) participated. Parental consent was obtained on an opt-out basis. The information about the novel animals was presented by a computer via headphones. The associative learning task involved predicting whether an encounter with a given animal would have a positive or negative outcome over 40 trials. The percentage of trials on which participants predicted positive or negative outcomes gave a measure of contingency learning.

Results: An ANOVA was initially used to check that the information had changed fear beliefs about the novel animals. A second repeated measures ANOVA compared associative learning in situations where prior information had and had not been given about the CS.

For the negatively described animal, the expectation of a negative outcome was high and quickly converged on the actual 0.8 contingency. In contrast, when the animal was not previously described, participants did not detect the 0.8 contingency even after 40 trials.

When the actual contingency was incongruent with the information – that is, the happy face followed the negatively described animal on 80 per cent of trials – the participants' responses did not reflect that contingency, even after 40 trials. Rather, the participants consistently overestimated the likelihood of a negative outcome, both in comparison to the actual contingency and in comparison to the responses when the animal had not previously been described.

Conclusions: Fear-relevant information can promote or retard acquisition of congruent or incongruent CS-UCS relationships respectively. The implications for the developments of real fears are that prior positive information can protect against the effects of potentially fear inducing events like being bitten by a dog. On the other hand, negative expectations induced by negative information appear to persist even in the absence of the predicted negative outcomes. Thus the role of 'conditioning' events in the aetiology of fears and phobias should be considered with reference to prior expectations about the outcome.

Proposal of a theoretical framework toward the prediction of adherence in sport injury rehabilitation programmes

A.R.L. LEVY, R.C.J. POLMAN & P. CLOUGH, University of Hull.

Purpose: The primary purpose of this paper is to

propose an integrated model to further understand the factors involved in the prediction of adherence to sport injury rehabilitation programmes.

Background: A consequence of engagement in sport and physical activity is the risk of sustaining injury. Within the European Union Petridou (2003) estimates that each year more than 10 million people have a sports injury requiring medical attention with over five million contacting the accident and emergency department of a hospital. Given this, adherence to prescribed rehabilitation protocols can be considered vital for achieving successful recovery from sport injury (Taylor & Taylor, 1997). Recent evidence by Brewer *et al.* (2004) supports this notion by finding a positive linear relationship between adherence and rehabilitation outcome.

Key Points: According to Brewer (1998) it would be useful to have a conceptual framework for organising the abundance of variables associated with adherence to sport injury rehabilitation programmes. In consideration of this, it is unlikely that the adoption of one theoretical position would adequately explain sufficient variance.

We, therefore, deemed it useful to maximise the strengths of different models, appreciating their conceptual convergence rather than attempting to support one theory and refute the other. Specifically, the proposed model utilises Maddux (1993) revised theory of planned behaviour as a vehicle for integration with other social-cognitive and motivational orientation frameworks.

The advantage of this approach is considered by Nigg, Allegrante and Ory (2002) who suggest that studying multiple theories allows for empirically driven integration of concepts and may lead to the construction of a more complete or holistic theory.

Conclusion: To date, within the sport injury rehabilitation adherence literature, there have only been two review papers published (Brewer, 1998; Spetch & Kolt, 2001), both strongly recommend the use of theoretical models to guide research. It is important to note that research underpinning our proposed framework is limited. Indeed, until empirical support has been established, over and above data supporting other theoretical constructs, within this topic area, it is unwise to narrow the conceptual field toward this theoretical perspective. However, in light of this we believe this framework would stimulate more theoretically orientated research within this topic area and ultimately towards the development of effective interventions, enhancing the quality of athletes' recovery from injury.

Self-efficacy and sensation seeking as predictors of risk taking in rock climbing

D.J. LLEWELLYN, University of Leeds.

Objectives: High risk sports such as rock climbing are becoming increasingly popular, yet present something of a motivational paradox. Few studies have considered how individual differences other than sensation seeking may be relevant, or why some rock climbers choose to take additional risks. The role of self-efficacy and sensation seeking in the prediction of risk taking in rock climbing was, therefore, investigated. Both self-efficacy and sensation seeking were hypothesised to be positively associated with the frequency and severity of risk taking behaviours.

Design: The study adopted a cross sectional correlational design.

Methods: 116 recreational rock climbers (88 male, 28 female) with a mean age of 31.0 years ($S.D. 12.43$) were recruited at outdoor climbing venues in the north of England. The frequency and severity of 'leading' (where the climber places protective equipment during the climb) and 'soloing' (climbing without a rope) were used as operational measures of risk taking. Severity of leading and soloing were based upon the British grading system where higher grades represent higher levels of performance. Self-efficacy was assessed using Slinger and Rudestam's Physical Self-Efficacy scale (PSE), and sensation seeking was measured using the Impulsive-Sensation Seeking scale (ImpSS) of the Zuckerman-Kuhlman Personality Questionnaire.

Results: For leading, self-efficacy ($\beta=0.48$, $p<0.01$) and sensation seeking ($\beta=-0.19$, $p<0.05$) were each able to explain unique variance in the frequency of participation ($adjR^2=0.28$). Unlike sensation seeking ($\beta=-0.13$, $p>0.05$), self-efficacy ($\beta=0.39$, $p<0.01$)

was also able to predict unique variance in the frequency of soloing ($adjR^2=0.17$). Neither self-efficacy nor sensation seeking were able to predict variance in leading or soloing severity, which may be explained by the subjective nature of the grading system.

Conclusions: Consistent with previous research, the results suggest that self-efficacy may be an important predictor of risk taking in rock climbing. However, the results also suggest that sensation seeking may be negatively associated with risk taking in certain contexts, and this constitutes an important area for future research.

Voicing the inanimate: Body fat monitors and the Malvern benches

S. LOVIE, University of Liverpool.

The purpose of this paper is to extend my recent work on the psychology of things or inanimate objects. In particular, I want to point to the various ways in which people's interests and culture are instantiated in their (mutually created) inanimate objects, thus generating objects which voice the needs and knowledge of their creators. Most of the paper will be given over to two case studies, the first being the analysis of the operation and epistemological context of a widely available water and body fat monitor. The second deals with the memorial messages that are attached to the great majority of the wooden benches laid out in the Malvern Hills in the UK county of Worcestershire. The major conclusion is that these objects and the messages that they convey can only be understood as joint products of the animate and the inanimate.

Physical fatigue influences the effectiveness of attentional focusing strategies during dynamic balance

D. MARCHANT, P. CLOUGH, M. CRAWSHAW & M. GREIG, University of Hull.

Objectives: The type of attentional focus used during motor skill execution can affect quality of movement. Specifically, directing attention towards an intended outcome or goal of a movement (an external focus) has been shown to benefit performers, whereas an awareness of the actual movements being produced and their associated sensations (an internal focus) has been found to be detrimental. Research has not, however, addressed the effects of attentional focus on movements carried out under more naturally occurring conditions. One such condition associated with movement is physical fatigue, which is linked to impaired motor performance. This study assessed the effectiveness of Internal and External attentional focusing strategies on maintaining stable balance in a fatigued state.

Design: After familiarisation with the balance task, participants performed the first experimental trial with no attentional focus instructions. This was followed by external and internal focus instruction trials, which were counterbalanced on separate days.

Methods: For each of the three experimental conditions, 24 participants (mean age 21.33) performed the balance task before and immediately after a 30-second adapted Wingate test on a cycle ergometer. Balance task performance was defined as an index of stability during a 30-second single-legged balance task on a BioDex stabilometer.

Results: Two one-way within-subjects ANOVAs were performed on balance performance before and after fatigue in each condition. No significant difference was found between attentional focusing strategies at rest. A significant effect of attentional focusing strategy on balance performance whilst fatigued was revealed. Post hoc analysis revealed that whilst fatigued, balance performance in the External Focus condition was significantly worse than in the Internal Focus condition. The No Instruction condition did not significantly differ from the Internal or External conditions. Further analysis revealed that balance significantly deteriorated with fatigue in the External and No-Instruction conditions, but did not in the Internal condition.

Conclusions: Support for an external focusing strategy improving performance at rest was not found. Interestingly, when compared to an external focus results suggest that an internal (awareness and active control of movements) focusing strategy

may be beneficial to motor performance by offsetting the detrimental effects of a general fatigued state. Knowledge of effective cognitive strategies will be of particular interest to athletes and others who must perform motor skills whilst physically fatigued.

Relationships in older people with memory loss: The impact of Alzheimer's disease on relationships and social networks

A. MARRIOTT, Kingshill Research Centre, A. WARREN, Brunel University & R. BULLOCK, Kingshill Research Centre.

Objectives: To explore, through interviews with patients and carers, the impact on relationships and socialisation of:

- living with Alzheimer's disease (AD);
- receiving pharmacological treatment for AD.

Design: A qualitative longitudinal study using semi-structured interviews.

Methods: Five patients and their carers were recruited through the prescribing clinic and were interviewed separately using before treatment commenced and were subsequently interviewed five more times over the first 12 months of treatment. The interviews were recorded, transcribed and qualitatively analysed.

Results: The data was analysed and coded for themes by a psychologist and an occupational therapist using an interpretative phenomenological approach. The interviews with the patients revealed that they were able to articulate various ways in which AD impacted upon their social interaction with others. Examples of this ranged from loss of confidence in conversation due to word-finding difficulties, to enforced retirement from a voluntary secretarial role. One patient made numerous references to his embarrassment in social situations where he felt his behaviour might be misconstrued as rudeness. The interviews with the carers verified these social difficulties but it appears they may attribute less significance to the problems than the patients do themselves.

Conclusions: This study supports previous research by demonstrating that social activities are one of the first domains to be affected in AD and it also highlights the significance of this to patients in particular. The impact of AD and treatment options for AD on social networks is an area largely neglected by clinicians and researchers when setting goals yet seems to be a priority for patients and carers. Ultimately if we are to determine if treatments are effective then there must be improvements in the areas that matter to those involved.

Effective clinical supervision:

Celebrating and sorting the evidence

D. MILNE, University of Newcastle & C. LECK, Sunderland University.

Purpose: Summarise the evidence-based methods of effective supervision, combining them into an introductory, manualised workshop for novice supervisors.

Background: Popular texts propose that 'supervision, like love, cannot be taught' (Hawkins & Shohet, 2004). Similar views appear to be held by many psychologists, who rely on lessons from their own supervision and their general clinical skills for inspiration, when it comes to supervision. **Methods:** Three recent and local systematic reviews of the theoretical and empirical bases for effective supervision are used to specify the relevant knowledge-base. The results indicate that a dependable and useful guide to supervision exists, which, tempered by consensus work with experienced supervisors, forms the basis of a manualised approach, called the 'tandem' model.

Conclusions: On this reasoning, supervision can enter the realms of evidence-based practice and be packaged and researched as per a therapy. Illustrations will be provided, including two measurement tools and local ($N=1$) analyses.

Perceptions of parenting style among ecstasy users

C.A. MONTGOMERY, J.E. FISK & R.D. NEWCOMBE, Liverpool John Moores University.

Objectives: Research has indicated that parental control and parental warmth are important factors in the 'deviant' adolescent behaviour associated with drug use (Lamborn *et al.*, 1991). The present study investigated parenting style in a group of MDMA poly-drug users. It was predicted that MDMA users would be raised by parents they perceived as 'indulgent' (low control, high warmth) or 'neglectful' (low control, low warmth).

Design: A multivariate design was used with MDMA user group as the between participants variable, and scores on the two parenting style dimensions (acceptance/involvement and strictness/supervision) as the independent variables.

Method: Participants were recruited via the snowball technique (Solowij, 1992). 50 MDMA users and 76 non-MDMA user controls completed the parenting style questionnaire (Lamborn *et al.*, 1991). Participants were asked details about their education and schooling. In addition, fluid and pre-morbid intelligence tests and indices of the frequency and intensity of MDMA and other drug use were collected.

Results: MANOVA was used to analyse the results. MDMA users scored significantly lower than non-users on both dimensions of the parenting style questionnaire. This indicates a perceived 'neglectful' parenting style.

Conclusions: The results of the present study support previous research indicating that drug-taking 'deviant' behaviour is associated with low parental control. The present study also indicates that low parental warmth is an important factor in MDMA use. It was concluded that children raised in households they perceived as neglectful are at particular risk from MDMA use. The results could be used to educate parents and carers of children.

The effects of mood and exercise on different forms of risky decisions

J. MORRISON & A.J. McLACHLAN, University of Ballarat, Australia.

Objectives: Despite considerable effort, research into the impact of mood on decision making involving risk has not revealed a consistent pattern of results, some work suggesting positive mood leads to greater risk, other research suggesting the reverse. In contrast, little or no research has examined the effect of exercise on decision making, though the tendency for physical activity to elicit positive affect is well documented. The current study sought to clarify some of the effects of mood on decisions involving risk, while at the same time exploring the impact of acute physical activity on those decisions.

Design: 72 undergraduate students were randomly assigned to one of four experimental conditions in a 2 (positive or negative mood) x 2 (exercise or no exercise) between-subject design.

Methods: Mood was induced using short film clips during which moderate exercise on an exercise bicycle was either present or absent. Following mood induction, participants completed The Profile of Mood States (POMS) and The Choice Dilemmas Procedure. The latter comprised six decisions involving risk in three types of hypothetical situations concerned with everyday actions, such as parking illegally, sporting decisions, such as last minute playing strategies, and more significant, life altering choices concerned with careers. Relative riskiness was determined on a four point scale of recommendation strength for either the cautious or risky alternatives in each of the six decisions.

Analyses: The results indicated that positive and negative mood was induced effectively by the two film clips, and that mood was enhanced by physical activity. There was no evidence that the films, which significantly altered mood, had any effect on risk, while exercise, which had less impact on mood, significantly increased riskiness, particularly in sports-related decisions. Despite these results, a significant correlation between positive mood and riskiness ($r=0.42$) was observed.

Conclusions: These findings demonstrate the complex relationship between decision making involving risk and mood, while revealing an additional factor that can affect those decisions,

namely exercise. Given the capacity of exercise to increase riskiness in decisions involving sport, there remains the possibility that the overall impact of diffuse mood on risky decisions is low and that the effect is mediated by the relationship between the nature of the mood manipulation and the nature of the decision.

Helping the toothless tiger develop its teeth: Involving local communities in the evaluation of health and social care services.

J. NICKELS, North Glamorgan NHS Trust & L. EVANS, University of Glamorgan.

Objectives: To move towards the 'fully engaged scenario' as outlined by the Review of Health and Social Care in Wales advised by Derek Wanless (July, 2003). Three strategic pathways were developed to this end. This project aims to empower a different quality of patient feedback to inform the continuous improvement of health services and strengthen the engagement of the local population in the evaluation of service delivery.

Methods: An Introductory Facilitation Skills training course was developed for members of the community to enable them to facilitate patient experience focus groups. A group ($N=8$) undertook the training which was delivered by two experienced facilitators employed in the NHS and further education. Each course participant was assigned a mentor/coach from within the organisation to provide pastoral, professional and structural support. A coach/mentor workshop was held to prepare them to undertake this role. Each participant then led a focus group supported by their coach/mentor.

Results: There were three outcome measures as follows:

- The course participants took part in a focus group to assess their satisfaction with the course and confidence levels to undertake focus groups;
- Five months on a further focus group with participants was held to assess confidence, success levels and whether participants wished to continue undertaking focus group work;
- A workshop was convened to discuss the course content and whether, following a number of focus groups, the group participants felt the material prepared them adequately to undertake the facilitator role. Agreed changes were then incorporated into the material for the next cohort.

The full data-set is currently being analysed (completion December 2004).

Conclusions: Clearly more empirical research is required to more fully evaluate the impact of community member led focus groups on the effective evaluation of the patient experience, particularly in terms of improvements made to services as a result of the interventions in mind. This research paper address some of these issues. We highlight how involving local communities in the planning and evaluation of health and social care services is a significant step in moving to the 'fully engaged scenario' integral to the strategy of NHS Wales. This project illustrates one way of 'helping the toothless tiger develop its teeth' by pushing the boundaries of involvement to a higher level by supporting members of the public to champion and lead on what they know best

Why do patient's renege on their psychological contract for their operation? The main predictor variables and interactions from a National Health Service Trust

J.A. NICKELS, North Glamorgan NHS Trust, M. SMITH, North Glamorgan NHS Trust & A. UNITT, North Glamorgan NHS Trust.

Objectives: This paper explores the nature of the patient 'psychological contract' and why it is that a significant proportion of patients do not attend (DNA) their specified and pre-booked appointment date for an operation.

Design: A retrospective sample was taken from six months of patients ($N=139$) (January-June, 2004) that did not attend their operation date. We were only concerned with those patients that did not attend on the day of their operation, and thus those patients that cancelled their operation more than 24 hours prior to their given date were

omitted from this analysis. A telephone interview was conducted with 22-items selected from a literature review. There was also free text available for factors which may have been missed. A mixed analysis of variance (MANOVA) test will be undertaken. The main predictor variables and interactions will then be observed.

Results: This study is currently 'work in progress' with the data analysis completion date anticipated during December, 2004. (There are two significant main effects, and three interactions which are being explored further.)

Conclusions: (As above.) The hypothesised results will question whether predictive patient DNA's can be operationally useful and cost effective. It is hypothesised that such an approach could thus reduce the current 'waste' which is generated from patient DNA's. The main current policy driver: the 'Review of Health & Social Care' (Derek Wanless, 2003) will be discussed in light of the notion of the 'sustainability' of the NHS. Thus the importance and relevance that this empirical study adds to the emergent evidence-base will be discussed also.

Zero-sum rhetorical devices: It's all a game of chess!

J.A. NICKELS, North Glamorgan NHS Trust.

Objectives: This paper address some of the tensions experienced by organisations that seek to strategically align or work in 'partnership' with one another. This is achieved by analysing the practicalities of 'everyday' conversations with and between the social actors contained within. Currently, 'whole system' approaches are being advocated across the social and health care spectrum, particularly where there is a purchaser-provider split.

Methods: This paper analyses the rhetorical devices (Billing, 1998) used in discussing, debating and negotiating strategic outcome(s) which can be likened to aspirational 'non zero-sum games'. As such, the Nash Equilibrium (NE) has found favour with the author in attempting to track such strategic conversations and the rhetorical devices underpinning the same. The data is generated from the following sources:

- Formal business meetings of a 'committee' style;
- Formal one-to-one business conversations;
- Informal one-to-one business conversations;
- E-mails;
- 'Grey' organisational literature from within the 'whole system'; and lastly
- Strategic papers or documents.

Results: Firstly, this paper analyses four zero-sum rhetorical devices which have been compared to a classic zero-sum game, namely chess. Thus, the 'pin', 'skew', 'sacrifice' and 'castle' are discussed in this light. The paper then goes on to compare and contrast these four rhetorical devices with three systemic or non zero-sum rhetorical devices. There are three rhetorical devices to this end, which have been metaphorically compared with ecological factors. Thus, we have the 'wind', 'birds flocking' and lastly, the 'wave'.

Conclusions: The results and conceptual framework offered have practical use to organisations that are seeking to address some of the 'messiness' of inter-organisational strategic alignment. The systemic rhetorical devices can add value to the ways by which organisational social actors can discuss, debate and negotiate non zero-sum strategic outcomes. Evidently, for those working within 'whole system' change being 'mindful' of the choices which we make, in the ways by which we talk or converse with others, is of considerable significance.

Visual search and decision making in elite level Football Association referees

J. PAGE, M.E. LAFFERTY, University College Chester & T. HOLDER, University College Chichester.

Objectives: To investigate differences in mean percentage fixation duration on non-action areas surrounding the display between successful and unsuccessful decisions for Level 3 and above Football Association referees.

Design: Laboratory-based within subject design. **Methods:** Referees ($N=16$) viewed 14 football decision-making scenarios whilst wearing an ASL 501 eye tracker system designed to measure visual fixation characteristics. Participants were required

to watch each scenario and state whether or not a foul had been committed. The required responses were previously agreed upon by three expert referees. The visual search variable used to investigate differences between successful and unsuccessful decisions was mean percentage time fixated on non-action areas surrounding the display.

Results: Mann Whitney U statistical test showed a significant difference between mean percentage times spent fixating on non-action areas surrounding the display between successful and unsuccessful decisions ($p<0.05$). In scenarios where the experimental group of referees decisions matched the experts the mean percentage fixation duration on non-action areas surrounding the display was 44.38 per cent compared to 36.40 per cent.

Conclusions: When making correct decisions expert referees spent more time fixating on non-action areas surrounding the display rather than directly upon the action. This suggests that these peripheral unclassified areas may provide an area where performers can anchor their foveal vision close to key locations whilst still picking up relevant cues. In support, it has been proposed that the cues within the action are less important than relative movement between areas, this is supported by the finding that the unclassified areas are often oriented at the intersection of different cues in interactive sporting situations.

Students' perceptions of discrimination in the job market

A. PETERSON, S. TAYLOR, J.P. CHARLTON & R. RANYARD, Bolton Institute.

Purpose: To examine methodologies which have been used to assess perceptions of discrimination in job markets and ethnic differences in perceptions of jobs and careers. To review the literature resulting from the use of these methodologies, with a particular emphasis upon the nature of perceived discrimination in the post-higher education job market, the reasons for these perceptions, and the ways in which coping strategies (such as avoidance/confrontation, increased group identification, external attribution and psychological disengagement) may affect job-seeking behaviour.

Background: Despite Equal Opportunities legislation, disadvantage is still experienced by minority ethnic groups in the labour market relative to the white ethnic majority. This is evidenced by levels of unemployment and positions occupied within the hierarchy of the workplace. Graduate first destination statistics for 2000/2001 published by the Higher Education Statistics Agency showed 11.4 per cent of ethnic minority graduates as still seeking work six months after graduation compared with 6.5 per cent of white graduates. Demography, socialisation processes and mechanisms of indirect exclusion are factors which may be responsible for maintaining the ethnic minority disadvantage. Additionally, perceptions of the inevitability of discrimination in certain occupations may serve to work against those entering the job market by influencing career choice and job-seeking behaviour.

Methods: Electronic searches of databases, including PsycInfo, located literature on previous research into perceptions of job market discrimination.

Conclusions: The vast majority of research has been conducted in the US and the extent to which this generalises to the UK, with its different ethnic mix, is unclear. Instruments to explore perceptions of discrimination appropriate for the contemporary UK situation need to be developed. These instruments could then be used to remedy the deficit in UK research in this area, by investigating how ethnic minority students' perceptions of job market discrimination affect their job-seeking behaviour, and the extent to which these perceptions and behaviours perpetuate ethnic minority disadvantages in the job market.

Sub-elite netball players and their flow experiences

R. POLMAN & J. FRENCH, University of Hull.

Objectives: The aim of this study was to compare the flow experiences of sub-elite netball players with reports of flow experiences from elite athletes

in existing literature. Secondly, the study also investigated the role of intrinsic motivation (self-determination theory) on the experience of flow. **Method:** Six netball players of sub-elite standard, playing for two different premier ladies netball teams, participated in the study. Participants first completed the Sport Motivation Scale (SMS) to assess their motivational orientation for netball. This was followed by an in-depth, semi-structured interview based on the players motivational orientation for participation and the nine characteristics of the flow experience. Thematic content analysis was used to analyse the qualitative data.

Results: The participants were predominantly intrinsically motivated as indexed by high scores on the three subscales intrinsic motivation to know, accomplish and to experience stimulation. Moreover, they scored higher on the more self-determined forms of extrinsic motivation. The results from the inventory were corroborated in the interviews. Reasons for participation being mainly self-determined (enjoyment, socialising, fitness). This orientation, according to self-determination theory, would be a good precursor to experience flow. The participants in this study, on the whole, do experience flow in similar forms as elite performers, with the participants citing all the nine dimensions of flow. Individual differences were evident, illustrating the synergistic nature of the nine flow dimensions and the uniqueness of the flow experience to the individual. For example, one participant did not experience flow. This participant was also the least intrinsically motivated.

Differences emerged between experiences of elite and sub-elite performers in the number of sub-elite players citing certain dimensions and in the factors considered to facilitate flow. For example, the major flow facilitators were playing well as a team and positive team interactions, with some athletes stating that they could experience flow without a good individual performance as long as the team played well together. Another facilitator was whether participants experienced a good day in general. These facilitators appear to be different from those reported by elite athletes and also point to differences between team and individual athletes in facilitating flow.

Conclusion: This study provided insight into the flow experience of sub-elite athletes. Differences were apparent between the team athletes in the current study and the experiences of those reported by mainly elite individual athletes in the literature. In particular, the facilitators appear to be different. This study also supported the idea that intrinsic motivation may have a significant impact on the flow experience, although there is in need of further study in both elite and sub-elite performers to corroborate this.

Effect of a single bout of aqua/studio exercise or a parentcraft class on mood of pregnant women

R. POLMAN & M. KAISLER, University of Hull.

Objectives: Despite several physiological and body composition changes during pregnancy, this period in a women's life is no longer viewed as a phase in which they are expected to be inactive. Few studies have been conducted investigating the psychological benefits of exercise during pregnancy. The main aim of the present study was to investigate whether a bout of aqua or studio exercise or a parentcraft class resulted in a change in mood in women who were in their second or third trimester of pregnancy.

Design: 76 pregnant women completed the POMS before and after participation in a 45- to 50-minute studio exercise class ($N=25$), aqua exercise class ($N=21$), parentcraft class ($N=13$) or a control condition ($N=18$). The participants in the exercise classes also rated how hard they worked on a scale from 1 to 10 (rate of perceived exertion (RPE)). **Results:** One way-analysis of variance did not show any initial differences between the four conditions (aqua and studio exercise, parentcraft, control condition) before exercise or activity participation. The two-way analysis of variance (3 (conditions: aqua, studio, parentcraft) by 2 (test session (pre-, post-)) and follow-up post-hoc comparisons showed that participation in the aqua and studio condition resulted in an increase in the overall mood score on the POMS and an increase in the vigour subscale ($p<0.05$). Also, a decrease in the

depression sub-scale of the POMS was found in the aqua condition. The parentcraft classes did not alter the women's mood state.

Conclusion: The results indicate that both modes of exercise (aqua and studio), despite difference in physiological reactions, are equally beneficial for pregnant women to engage in in order to improve mood. Secondly, the results are conform to the notion that moderate exercise of approximately 45 to 60 minutes is required to obtain optimal benefits. Finally, the pregnant women who participated in this study appeared to have a favourable mood state which was reminiscent of that of elite athletes (so-called iceberg profile).

Academic self-concepts, reading attitudes and approaches to learning of pupils with dyslexia: Do they differ from their peers?

F. POLYCHRONI, I. ANAGNOSTOU & P. KOUKOURA, University of Athens.

This research aimed at exploring the academic self perceptions, the reading attitudes and approaches to learning of primary school pupils diagnosed with dyslexia and compare those to their average peers.

Design: In order to test the hypothesis, 32 pupils diagnosed with dyslexia in the previous two years were selected. A comparison group was formed by 210 students in the same class and these were divided into three groups according to teacher ratings of pupils' performance in reading accuracy, reading speed and spelling (high – medium – low). All children attended the last two grades of primary school (ages ranged from 11 to 12 years). Twenty-five schools participated in the study. The Students' Perception of Ability Scale for Children, the Reading Attitudes Scale and the Approaches to Learning Inventory were administered to the total sample. Information on pupils' reading habits, homework habits, learning support and school attendance was also provided.

Methods: Factor analyses was used to test the structure of the questionnaires used with Greek population. The original structure was partly confirmed for the questionnaires. Apart from the descriptive statistics, ANOVA was performed with group as an independent variable (dyslexic vs low, average, high ability) and the emerged factors as dependent variables. Regression analyses was carried out to show whether the academic self concept, the reading attitudes and the approaches to learning could be predicted by pupils' reading habits, homework habits and levels of learning support.

Conclusions: This study is still in progress. It is expected that the results will lead to an increased understanding and awareness of dyslexic pupils' approaches to self and learning, especially in the critical stage of the transition to high school. The implications of the findings for the practice of teachers and psychologists are significant, given that the ultimate goal is to provide a classroom environment and educational experiences that encourage all students to enjoy learning and be deep and achieving learners.

Assessing the Individual Learning Profile: The association between HE students' confidence in their academic abilities, personality and academic performance

B.D. PULFORD, University of Leicester & H. SOHAL, University of Wolverhampton.

Student attrition and academic failure are posing a major concern to Universities today. Early identification of those students who may be at risk can enable tutors to target help. The University of Wolverhampton introduced a questionnaire called the Individual Learning Profile (ILP) in 2001 in an attempt to identify students at risk of failure, enhance the personal tutoring practices in HE and prevent student withdrawal. The aim of the ILP was to help tutors to identify the most vulnerable students and the areas in which they need remedial work, to build their confidence and motivation. The current study was designed to evaluate the Individual Learning Profile as an instrument to measure students' confidence and perceived academic strengths and weaknesses. Students' confidence in their academic abilities was then examined in relation to their personality traits and

their actual academic performance, grades on 16 modules and grade point average, over the first two years of a psychology degree. Factor analysis of the ILP with 3003 first-year undergraduate students extracted six factors (Reading & Writing, Hard IT, Numeracy, Time Management, Speaking, and Easy IT). One-hundred-and-thirty students then completed the ILP and a battery of personality trait measures (the Big Five, perfectionism, self-esteem and shyness). Personality clearly has an influence on how much confidence students have in their academic strengths and weakness. Between nine and 37 per cent of the variance in ILP scores could be predicted by different personality traits for four of the ILP factors, but not IT skills. The ILP explained some of the variance in grades achieved in some first but not second year modules, with Time Management being the only predictor of GPA. As a tool for predicting which students need most attention to avoid failure and high attrition rates the ILP seems to be less useful, as it's predictive ability for the Level 1 GPA is limited to the Time Management section. The ILP could, we believe, be helpful to students in the personal development planning (PDP) process, as their perceptions of their abilities are recorded and thus can be evaluated by the tutor in relation to more objective evidence. Skill deficits may be perceived accurately or inaccurately by students, hence the tutor plays an important role in determining where the student's confidence is misplaced and whether help is really needed or not, and the ILP may be a useful tool to facilitate discussion.

Testing the confidence heuristic: Are confident communicators more persuasive?

B.D. PULFORD & A.M. COLMAN, University of Leicester.

According to the *confidence heuristic* proposed by Thomas and McFadyen (1995), when people communicate beliefs to one another, they tend to express degrees of confidence proportional to the certainty with which they hold those beliefs. Further, recipients tend to judge the reliability of the communicated information according to the confidence with which it is expressed. Thomas and McFadyen also showed theoretically that the confidence heuristic permits efficient exchange of information between decision makers with common interests, and that it reliably implements optimal solutions to pure co-ordination games of incomplete information – games in which the players' interests coincide, so that they are motivated to coordinate their actions, but they have incomplete information about the payoffs associated with the possible outcomes. Our research focused on such games in an attempt to empirically test if there is evidence to support this theory. Working in dyads on the 'Police and Suspects Problem', 56 participants attempted to determine which face, from an array of nine photos, looked most like the suspect portrayed in an E-fit. On each trial, one participant was given a very good e-fit likeness of one of the faces, designed to induce high confidence and high accuracy, while the other participant was given a weak e-fit likeness of one or more of the other faces in the array. Participants were not allowed to see each other's e-fits but were allowed two minutes to discuss each e-fit and which suspect they wanted to choose. The strong evidence was given to one player on eight of the trials and to the other player on another eight of the trials; the same e-fits were used twice, shown once to player 1 and later on in the session to player 2. By this method the same e-fit faces were shown to both partners, so the number of times that the strong evidence player won the argument could be determined. On each trial, if both players chose the correct face they were paid 40p each. If they both chose the same, but incorrect, face they received 20p each. If they chose two different faces, then they each were paid nothing, even if one chose the right face. The players also indicated on a 0–100 scale how confident they felt that they had selected the correct person. The gender of the player and their partner's gender was investigated, as were individual differences such as assertiveness, need for cognition, need for closure and overconfidence.

Results: Players disagreed with each other less

than eight per cent of the time, and half of the pairs never failed to reach agreement with each other, indicating that they understood the parameters of the game. The number of times that the person with the strong evidence persuaded the other to agree on the correct face was significantly higher than the number of times the person with the weak evidence persuaded the one with the strong evidence to agree on the incorrect face. This is evidence for the operation of the confidence heuristic, but since the person with weak evidence quite frequently was persuasive, the communication of confidence is obviously not simple, and other factors mediate the use of the heuristic in some decisions.

An investigation on occupational stress and coping strategies in Higher Education – the UK perspective

P. RAMACHANDRAN, N. PAYNE, Middlesex University & A. GUPPY, University College Chester.

Objectives: The principal objective of this study was to investigate the relationships between the factors that comprise occupational stress and coping strategies among staff working in higher education.

Design: This study was part of a large on-going comparative study employing a repeated measures design. In the present study only the Phase 1 results will be presented.

Method: 198 participants employed in UK higher education institutions completed the mailed out questionnaire. The scales used in the questionnaire were measures of job satisfaction, lifestyle at work, sources of pressure, coping strategies, psychological well-being and general mental health. The scales have all been validated and used widely.

Results: The reliability scores of most of the scales were satisfactory with alpha values ranging from 0.62 to 0.91. Correlation analysis showed that psychological well – being was positively related to job satisfaction. Regression analysis was employed to reveal the predictors of job satisfaction and general mental health.

Conclusion: This study provides a general overview of the relationship between job stressors and the outcome measures in the higher education setting.

Developmentalism and the rhetoric of 'best interests of the child': Implications for lesbian and gay foster parents

D.W. RIGGS, University of Adelaide.

In these times of the increased bureaucratisation of state welfare services, the use of psychological models continues to heavily influence the decisions made in relation to foster care placements and the removal of children. In particular, government foster care service providers often rely upon psychological frameworks to justify removal orders, and to gain court approval for the continuation of existing orders. As individuals caught up within this system, lesbian and gay foster carers are often required (and indeed encouraged) to take on board psychological language in order to justify their suitability as carers, and thus prove their ability to provide for the 'best interests of the child'. In this light, this paper first argues that such models rely upon a set of developmentalist assumptions about the category 'child', the majority of which privilege the values and knowledges of heterosexual, adult focused institutions. Second, it examines some of the ways in which a reliance upon the rhetoric of 'best interests of the child' works to recentre a heteronormative model of child/parent relations. Through an elaboration of these two factors, this paper thus demonstrates some of the oppressive practices that are promoted through the use of such purportedly 'child focused' strategies, and the implications of these for lesbian and gay parents within the foster care system. On the whole, it is suggested that rather than continuing to privilege psychological accounts of foster care, and more specifically, psychological accounts of lesbian and gay foster parents, it is important to develop frameworks of relationality that challenge normative models of 'the family', and which prioritise the radical challenges that lesbian and gay parents may present to heteropatriarchy.

An evaluation of the effects of acute exercise on the mood of adults diagnosed with Panic Disorder (with or without agoraphobia)

G. ROBINSON, P. CALCOTT, P. CROMARTY & M. FREESTON, Newcastle Cognitive and Behavioural Therapies Centre.

Objectives: The objective of the study was to examine changes in positive feeling states in adults, meeting DSM-IV criteria for Panic Disorder, with or without agoraphobia, following a bout of acute exercise.

Design: A 2 x 3 mixed-model analysis of variance (ANOVA) was used. Exercise session served as a between-subjects factor (i.e. week 1, week 2, week 3) and time served as a within-subjects factor (pre- and post-exercise).

Methods: Participants were two males (mean age = 45.00, SD = 4.24) and 12 females (mean age = 39.42, SD = 9.29) who met DSM-IV criteria for Panic Disorder, with or without agoraphobia.

Measures: The Exercise-Induced Feeling Inventory was employed to assess the participants' feelings states immediately before and following an acute bout of exercise (EFI; Gauvin & Rejeski, 1993).

Procedure: Participants were asked to complete a copy of the EFI immediately before and after one of three acute bouts of exercise.

Results: Results indicate that a single bout of acute exercise is related to significant increases in feelings of positive engagement, revitalisation, and tranquillity. In order to assess the magnitude of differences in feeling states before and after exercise an estimate of effect size (Cohen's *d*) was calculated for each of the EFI's sub-scales (NB: The mean pre- and post-feeling state scores across all three sessions were used to compute Cohen's *d*). The data showed a medium effect for physical exhaustion ($d=0.44$), and larger effect sizes for revitalisation ($d=1.29$), tranquillity ($d=1.15$), and positive engagement ($d=1.07$).

Conclusions: Results suggest that a bout of acute exercise is related to significant improvements in the feeling states of adults with panic disorder. An acute session of exercise may, therefore, represent a useful non-pharmacological short-term strategy for the self-regulation of feeling states in adults with panic disorder, as well as an effective anxiolytic (O'Connor *et al.*, 2000).

Investigation into the relationship between perceived athletic ability, frequency of 'thinking errors' and anxiety in members of a county archery squad

G. ROBINSON, County Hospital, Durham.

Objectives: The main objectives of the study are to: (1) provide initial empirical evidence for the utility of applying Fennell's model of low self esteem to sport; and (2) provide initial empirical evidence for the utility of using the Thinking Errors Questionnaire (Stallard, 2004) in sport. According to Fennell the presence of 'thinking errors' (i.e. negative biases in perception) maintain and strengthen an individual's negative beliefs about themselves (i.e. their 'Bottom Line'. For example, 'I am not good enough'). Activation of an individual's 'Bottom Line', in response to a challenging situation, affects thinking (i.e. negative predictions about what might happen), emotional state (i.e. anxiety), and body sensations (i.e. tension, fatigue, and low energy). Evidence for the presence of 'thinking errors' and an association with perceived athletic ability could provide a target for specific cognitive techniques designed to correct faulty cognitive appraisals.

It was, therefore, hypothesised that:

1. Low perceived athletic ability would be associated with the presence and greater frequency of 'thinking errors'.
2. Low perceived athletic ability would be associated with the experience of greater cognitive and somatic anxiety.

Design: Single group correlation design. Hypotheses tested with Spearman's correlation coefficient.

Methods: Participants: Members of a county archery squad (female = nine, male = 14). Mean age was 40.00 years (SD = 11.85).

Materials:

1. Thinking Error Questionnaire (Stallard, 2004) adapted for use in sport.

2. Self-Confidence Scale of the Sport Related Psychological Skills Questionnaire (Nelson & Hardy, 1990).
3. Somatic Anxiety Scale and Worry Scale of the Sport Anxiety Scale (Smith *et al.*, 1990).

Procedure: Participants were volunteers and completed the questionnaires at the end of a training session.

Results: As hypothesised, low perceived athletic ability was found to be associated with a greater presence and frequency of 'thinking errors' ($r=-0.595$, $p<0.01$). Low perceived athletic ability was also found to be associated with greater self-reported cognitive anxiety ($r=-0.699$, $p<0.001$) and somatic anxiety ($r=-0.482$, $p<0.05$).

Conclusions: Results are discussed in terms of the potential of employing both the Thinking Error Questionnaire, as well as Fennell's model in sport. Implications for future research and the potential to use specific cognitive therapy techniques to target and correct faulty cognitive appraisals in athletes are also discussed.

Coping with fear of failure:

An examination of young elite athletes

S.S. SAGAR, D. LAVALLEE & C.M. SPRAY, Loughborough University.

Objectives: To investigate fear of failure (FF) in the sport domain and specifically among young elite athletes. The aims were to examine the effects that FF had on such athletes and, to find out how they coped with FF.

Design & Methods: A qualitative method of inquiry was selected in order to account for the phenomenological complexity of coping behaviour. In-depth semi-structured interviews were conducted with nine elite athletes (five males, four females; ages 14 to 18 years), involved in a range of sports and who reported two to five years' competitive experience at international level. All interviews were audio-tape recorded.

Analysis: All interviews were transcribed verbatim and inductively analysed using the principles of thematic analysis and some principles of grounded theory in order to identify themes and categories that represent effects of and coping with FF. Fear of failure affected the athletes' well-being, interpersonal relationships, schoolwork, and sporting performance. The majority of the athletes employed a combination of problem-focused (PFC), emotion-focused (EFC), and avoidance-focused (AFC) coping strategies, with AFC (total of 37 types; e.g. mental disengagement, not talking about FF) being the most used. This was followed by EFC (total of 33 types; e.g. positive self-talk, positive reinterpretation), and finally, PFC (total of 15 types; e.g. increase training to prevent failure, confronting the fears).

Conclusions: Coping with FF, as with other stresses and demands of sport, is an important element in effective functioning at elite level sports, and if athletes do not possess effective coping skills to deal with their fears of failure, they are likely to experience poor performance, negative affect, and may eventually drop out of sport. Therefore, we recommend that it is important to educate young elite athletes to employ appropriate coping strategies to deal with their fears of failure as this can help them attain a positive emotional state, positive level of motivation, and can help with their sporting performance and social development.

A public silence: Conditions of (in)-visibility for men who have sex with men, who are clients of public mental health services in Aotearoa/New Zealand

D SEMP, University of Auckland.

How are issues of same-sex sexuality identified in public mental health services (pmhs)? How important might this be? Many have written about lesbian and gay affirmative approaches to mental health practice, yet often this literature assumes that clinicians know when they are working with clients with same-sex attraction. Is this necessarily so? What if this is not the case? In this paper I consider how lesbian and gay staff and men who have sex with men (msm) who are clients of pmhs negotiate these issues. The study from which this paper arises explores the ways in which pmhs in Aotearoa/New Zealand function for msm clients. Previous research has generally focussed on private

rather than public mental health services. Furthermore, previous research has typically adopted a positivist framework with individualistic, essentialist and decontextualising tendencies. This approach often overlooks systemic issues, differences and complexities. My research is based on interviews with 13 msm clients and 12 lesbian and gay staff about these issues. In this paper I use Foucauldian discourse analysis to explore the discursive power relations involved and the various subject positions which construct the ways queer visibility for msm clients is negotiated between staff and clients. I consider the implications of these power relations for the ways pmhs serve msm clients. 'We wouldn't ask about sexuality, it would become obvious', or, 'They'll tell us if they need to', are quotes from lesbian and gay staff of pmhs that characterise how they talked about the processes by which msm clients are, or are not, identified. Generally staff talked of implicit rather than explicit ways of identifying queer clients in pmhs. In contrast, msm clients generally interpreted staff's behaviour around same-sex sexuality as creating a context of silence. For some msm this constructed a formidable barrier to effective service. I suggest this has implications for how clinicians assess whether issues of same-sex sexuality are relevant to clients' mental health issues. Furthermore, in order for clinicians to change their practice in this area, systemic changes such as in policy and training are likely to be necessary because of some of the discursive constraints outlined.

You think he's fit and we know it! Social desirability and perception of male beauty

C. SENIOR, G. EVANS & E. PEEL, Aston University.

Objectives: It is generally agreed that heterosexual male observers experience difficulty in deciding if another male is attractive. Female observers, on the other hand, experience no such difficulty and can regularly state that another female is beautiful. Previous work has indeed shown that male observers will work harder to increase the viewing time of an attractive female face and to decrease the viewing time of an attractive male face. As evolutionary theory suggests that beautiful faces signal genetic health – additional appraisal of attractive faces would thus be prudent to ensure correct recognition of this important social signal. The period of time taken to judge a face for its beauty is thus an excellent index of its assessment as genetic health. The aim of this study was to explore differences in the length of time male and female observers took to appraise attractive faces of men and women.

Design: All participants were free of any form of hormonal intervention; females indicated a standard 28 day menstrual cycle and were asked to participate during the luteal phase of the cycle. All participants completed the Sell questionnaire for sexual orientation prior to participation. This scale consists of a number of diverse items which are designed to give a percentage sexuality score across different factors of sexuality, and is thus a more valid measure than a single item self report.

Methods: 50 individuals (equal ratio of male and females) whose scores >85 per cent on the heterosexuality index of the measure were invited to participate further. They were asked to rate the physical attractiveness of a series of 200 facial portraits (on an eight-point scale). The stimuli consisted of equal numbers of attractive/unattractive male and female faces, all were matched for distinctiveness.

Results: Perhaps unsurprisingly, the male observers rated the attractive female faces as being more attractive than the unattractive items. This result was mirrored by the female observers who rated the attractive males higher than the unattractive faces. There was no difference between the any of the unattractive faces for either male or female observer. Analysis of the response times showed that both male and female observers took longer to appraise the attractive faces compared the unattractive items (all $p<0.01$). Of special interest is the finding that although the male participants judged the attractive male faces to be less attractive than the female ratings they did differ in the time taken to make this judgement.

Conclusions: This shows that when the sexuality of

male and female individual is matched and the menstrual phase in female participants is held constant both male and female observers take the same amount of time to appraise an attractive face. Given that the male observers were heterosexual, the lack of differences with the female observers in the appraisal time of the attractive male faces suggests dissociation between the adaptive response and that which is socially desired.

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Antecedents of approach and avoidance achievement goals in physical education

C.M. SPRAY, Loughborough University.

Objectives: The purpose of this investigation was to determine the relevant personal and situational underpinnings of achievement goals among school pupils participating in a progressive shuttle run test during a scheduled physical education (PE) lesson. It was hypothesised that different achievement goals would be associated with different antecedent profiles. Moreover, the adoption of mastery and performance approach-avoidance goals was expected to be influenced by the interactive effects of these antecedents, in line with theoretical tenets.

Design & Methods: Prior to completing a 20-metre progressive shuttle run test, participants ($N=241$; mean age = 13.17, $SD = 0.90$) responded to measures of the perceived prevailing motivational climate in their PE class, general fear of failure motive and competence expectancy regarding the upcoming activity. In addition, pupils reported the adoption of mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance goals with respect to the shuttle run test.

Results: Participants endorsed mastery-approach goals more strongly than other types of goals. Moreover, performance-avoidance goals were more salient than performance-approach goals. Hierarchical multiple regression analyses revealed that mastery-approach goals were positively predicted by perceived mastery climate in PE and high competence expectancy, whereas mastery-avoidance goals were underpinned by fear of failure. Performance-approach goals were predicted by a three-way interaction between perceived performance climate in PE, fear of failure and competence expectancy. High, rather than low, perceived performance climate was closely associated with the adoption of performance-approach goals when pupils experienced high fear of failure and low competence expectancy, and when low fear of failure was accompanied by high competence expectancy. With regard to performance-avoidance goals, results revealed a two-way interaction between performance climate and fear of failure. Specifically, the adoption of performance-avoidance goals was facilitated by high, rather than low, perceived performance climate when pupils experienced low fear of failure. **Conclusions:** Results suggest that achievement goals have multifaceted underpinnings that can operate in combination to determine goal adoption. Performance-approach goals, in particular, are motivationally complex and may be undergirded by factors which are likely to orient pupils to both success and failure. From an applied perspective, present findings point to the need for PE teachers to minimise performance-related situational cues and facilitate the perception of a mastery-related climate.

Beyond the school gates – educational psychology in the community

J. STARBUCK, West Sussex Youth Offending Team & V. WOOD, West Sussex Educational Psychology Service.

This paper describes the work of educational psychologists as they support a Children's Fund/Youth Offending Team (YOT)/Community Initiative. West Sussex Educational Psychology Service has seconded three educational psychologists (1.2 fte equivalent) to the Youth Offending Team through the Children's Fund. The project is managed by a senior educational psychologist, also seconded to the YOT, and has developed and supported a range of initiatives to meet identified Children's Fund objectives linked to social inclusion.

The paper will make reference to a number of initiatives including the 'Parenting Project', which is highly regarded in the County. There will be a particular focus on a social education initiative that targets young people who have been excluded from school and a programme that teaches young people the skills of peer mediation. These examples will be used to show how the principles and approaches of community psychology can be drawn upon to meet real needs and to provide a theoretical underpinning for applied work.

It will be shown that the educational psychologist can apply their core skills to successful work with community groups and that this can lead to more effective service delivery.

A key aim of the work was to support community groups so that they can maximise their effectiveness and for that effectiveness to be self-sustaining. The involvement of educational psychologists in the community brought a scientific approach and a scientific way of thinking to a group where it did not previously exist. Major paradigm shifts occurred. These will be explored, as will the many challenges and opportunities that the work brought about.

During the discussion it is hoped that others will be willing to share their experiences and hopes for this kind of work. The presenters would also like to consider developments for the future and whether this way of working will become a significant part of the role of the educational psychologist as we construct our identities as psychologists in the 21st century.

Task demands influence pronoun resolution

A.J. STEWART & J. HOLLER, University of Manchester.

The processing of ambiguous words has a long history in psycholinguistic research. In this paper we examine how readers interpret globally ambiguous pronouns in sentences such as Helena talked with Gemma as she walked to the train station. We tested whether the processes underlying the processing of ambiguous pronouns can best be characterised as a modular system, a constraint based system or as an unrestricted race system. A pre-test was conducted to ensure that both interpretations of the pronoun lead to equivalently plausible sentences. In two self-paced reading time experiments ($N=54$ for each study) we contrasted sentences containing ambiguous pronouns with sentences containing unambiguous pronouns and unambiguous repeated names. We also manipulated task demands by varying depth of processing as a between-participants factor. We found that, under shallow processing conditions, the ambiguous versions of our sentences were read as quickly as the unambiguous versions while under deep processing conditions we found that the ambiguous versions take longer to read than the unambiguous versions. A repeat-name penalty was found for both shallow and deep processing conditions. Processes based on the unrestricted race model of ambiguity resolution (van Gompel, Pickering & Traxler, 2001) best account for our reading time data in the shallow processing conditions while processes based on constraint based models of ambiguity resolution (MacDonald, Pearlmuter, & Seidenberg, 1994) best account for our data in the deep processing conditions. We propose that readers deploy reading processes strategically (cf. Ferreira, Bailey & Ferraro, 2002).

When hooligans loose their bottle: The value of the social identity approach to crowds at Euro 2004

C. STOTT, O. ADANG, M. SCHREIBER, University of Liverpool & A. LIVINGSTONE, University of Exeter.

Objectives: This paper will report upon a major study of 'public order' at the recent European football Championships in Portugal (Euro 2004). It will begin by outlining the role of social identity based crowd research in assisting the Portuguese police during their preparations for the tournament. In so doing the paper will highlight how for the first time identity-based social psychological theory and research positively affected the ways in which policing was conducted at a major international football tournament.

Design & Methods: The study involved ethnographic and structured observation using a team of four ethnographic observers and an additional team of 16 observers trained in structured observation. Interviews were conducted with Portuguese, English, Dutch and German police (including police commanders, foreign delegations, intelligence teams, and operational officers) and with over 200 fans before, during and after the tournament. Data was also gathered using web-based questionnaires and e-mail surveys.

Results: Both qualitative and quantitative data were analysed using a variety of techniques including thematic and path analysis. Data from the study will be summarised and its implications for understanding the role of intergroup relations, power and perceived legitimacy in the dynamics of social conflict will be discussed. Specifically, the paper will detail the social psychological processes through which cultural change in the social category 'England fan' have taken place that culminated in the maintenance of non-violent norms on match days during the tournament. Data of the incidents of 'hooliganism' in Albufeira involving 'England fans' will be also be outlined.

Conclusions: It will be argued that the data from the study supports the central claims and value of the Elaborated Social Identity Model of crowd behaviour as applied to the issue of football 'hooliganism'. The paper will conclude by highlighting the continuing need to understand the issues of football related 'disorder' from an identity based perspective and discuss the intimate relationship between public order policing, social identity and 'hooliganism'. In particular it will focus upon the value of forming a relationship between the science of social psychology and practices of public order policing. Specifically, it will be argued that for the first time Euro 2004 has provided concrete scientific evidence that forms of policing designed to concentrate on supporting rather than merely 'controlling' England fans are the most effective means of tackling 'hooliganism'. As such the paper will highlight how long term and international changes in the forms of public order policing used to control England fans are necessary in order to shift England fans as a whole away from the 'English disease'.

Running a resilience group for Year 7 High School pupils

R.S. TAYLOR, Salford Educational Psychology Service.

This workshop is an opportunity to learn about the running of a resilience group, from inception to outcomes. It will look at the theoretical background including attachment theory, field theory and resilience research and how these are relevant to the work.

Participants will be asked to consider why resilience is an important concept for schools. The resilience group in question was planned following an ecological framework (Bronfenbrenner, 1989). The workshop will demonstrate how the use of this framework makes it more likely that the group will have a lasting impact in the wider school.

The main focus of the workshop will be an exploration of the practicalities and processes involved. Aspects discussed will include:

- Contextual factors that influenced the setting up of the group;
- What makes effective group work?;
- Pupil selection, group size, adults involved;
- Ways of involving parents;
- Structure and types of activities used;
- The notion of 'wrap-around' support;
- Blocks and challenges in running the group;
- Mistakes and the learning that emerged from them.

The work aimed to be holistic and included attention to body awareness, movement and touch. Theoretical, practical and ethical considerations relating to this approach will be discussed briefly. The evaluation measures used will be described, along with the results.

This workshop will be experiential in nature. Participants will be expected to examine their own resilience as well as the factors that might affect them setting up a resilience group in their working practice. They will also have the chance to experience several of the activities used with the group. I hope to convey some of the excitement that I have felt whilst running this project.

Development and initial validation of an updated version for international use of the Falls Efficacy Scale: FES-I
 C. TODD, L. YARDLEY, N. BEYER, K. HAUER, G. KEMPEN & C.L. PIOT-ZIEGLER, on behalf of the Prevention of Falls Network Europe (ProFaNE) Group. Universities of Manchester, Southampton, Copenhagen, Heidelberg, Maastricht & Lausanne. Objectives: Fear of falling is one of the most common concerns of older people. The first scale developed to measure falls related fear was the Falls Efficacy Scale (FES). Whilst FES has good psychometric properties it has been criticised on a number of grounds, not least its overdependence on basic activities of daily living and cultural/linguistic specificity. We have developed a modified version of FES; the Falls Efficacy Scale – International (FES-I). Our objective is to develop and test the modified FES-I that assesses both easy and difficult physical activities and social activities and is suitable for use in a range of languages and cultural contexts. Methods: A cross-sectional survey of a community sample of people aged 60 to 95 recruited from sheltered accommodation, community groups, and by advertising in magazines and websites. We collected the following measurements: FES-I, sex, age, (previous) occupation, falls in the past year, falls risk factors (chronic illness, taking four or more medications, taking psychoactive medication, dizziness). The survey was administered in either postal self-completion format or by structured interview. Test-retest was assessed by repeat administration in a sub-sample seven days later. Results: 704 people (mean age = 74.5) completed the survey. The FES-I has excellent internal ($\alpha=0.96$) and test-retest reliability ($ICC=0.96$). Factor analysis reveals two factors explaining 69.5 per cent variance. Factor 1 loads on concern about less demanding physical activities (eg getting in and out of a chair) mainly in the home (36.8 per cent). Factor 2 loads on concern about more demanding physical activities (e.g. walking on slippery, sloping or uneven surface) mainly outside the home (32.7 per cent). FES-I results of participants who reported 0, 1 or >1 falls in the past year are compared. Responses to all but two items differ significantly between all groups ($p<0.05$). These two items cannot discriminate between those who have fallen once from never fallen, but do discriminate repeat fallers from these two groups. Total FES-I subgroup scores demonstrate that FES-I is sensitive to differences in demographic characteristics and falling risk factors. Scores are significantly higher in women, older participants, and those from lower occupational categories. People who report a risk factor for falling (fall in past year, chronic illness, dizziness, taking ≥ 4 medications, or taking psychoactive medication) have significantly higher total FES-I scores. After controlling for the effect of age (R^2 change = 0.52, $p<0.001$), the effect of method of administration (interview vs postal) has no effect at all on FES-I scores (R^2 change = 0.000, $p>0.05$). The FES-I has slightly better power than the original FES items alone to discriminate between-group differences (e.g. fall in previous year vs no fall groups, higher vs lower risk groups) in concern about falling (effect sizes all favour FES-I marginally (ratios range 1.0 to 1.5)). Conclusion: There is a need for a measure of fear of falling suitable for use in a wide range of contexts to permit direct comparison between studies and populations in different countries and settings. This study suggests that the FES-I may be suitable for this role, as it has close continuity with the best existing measure of fear of falling, excellent psychometric properties, and assesses concerns relating to basic and more demanding activities, both physical and social. Further research is required to confirm cross-cultural and predictive validity and this is underway.

Job strain in bus drivers: Well-being and predictor variables

J.L.M. TSE, R. FLIN & K. MEARNS, University of Aberdeen.

Objectives: The objective of the study was to identify levels of physical/psychological health in a sample of bus drivers, and to evaluate to what extent job strain can account for personal health habits and performance.

Design & Methods: Using cross-sectional methodology, data was collected using self-report

measures. A questionnaire battery was compiled to collect data on levels of job strain, physical and psychological health, and items regarding levels of accidents, work absence, passenger complaints, and intentions to quit. Further items related to weekly consumption of tobacco and alcohol. Data was collected via questionnaire survey because it principally offered the compilation of a large data set within a short-time frame and would be the best approach to gain a representative sample. The questionnaire was dispatched to all bus drivers located in seven participating bus depots in one company. An overall response rate of 20 per cent was achieved producing a sample size of 201 drivers.

Results: Descriptive statistics established that physical health was better than the norm, though psychological health was poorer than the population average. Using correlational statistics and *t*-tests, it was found that job strain did have an impact on intention to quit, passenger complaints, work absence and accident rates. Job strain was not found to predict personal health habits. Linear multiple regression established six predictor variables accounting for a substantial amount of variance in job strain ($R^2=0.60$).

Conclusion: Therefore, it is recommended that bus operators needs to focus on lowering psychological job demands, reducing levels of overcommitment, improving decision-making authority for bus drivers, and promoting co-worker support. This is likely to lead to a reduced level of job strain, which is anticipated to enhance a range of organisational performance indicators.

False start? UK sprint coaches and black/white stereotypes

D.J. TURNER, University of Luton.

UK sprint coaches' employment of common racial stereotypes in explaining the success of black and white sprinters was studied. It was hypothesised that the success of black individuals would be attributed to innate genetic factors; whereas the success of white individuals would be attributed to socio-economic advantages, intelligence, and hard work. Thirty-one sprint coaches voluntarily participated in success attribution exercises. A two-way between subjects design was used, with scaled item survey questionnaires, based upon photo elicitation, and subsequent statistical analysis via Mann-Whitney tests and Spearman's correlation. Qualitative data was collected, via a one-to-one interview design (open-ended and semi-structured), with subsequent inductive content analysis. Quantitative results reveal no significant difference between the scoring of black and white photograph conditions, and a positive correlation between the comparative scoring of eight stereotypical factors ($r=0.994$, $N=8$, $p=0.001$). The only statistically significant difference between individual factors is for longer limbs, with coaches scoring this as contributing more to the success of the pictured black athlete ($U=54.000$, $N1=16$, $N2=15$, $p=0.008$, two-tailed). Qualitative results indicate that most coaches adopt a biological determinist attitude, with genetic factors implicated as associated with success, to a greater extent than developmental factors. Several unprompted statements reveal direct racial stereotypes. Generally the hypotheses are not supported quantitatively. However, specific aspects do partly provide support, and there is a tendency to score the black athlete more highly across all stereotypes, possibly indicating that coaches believe black athletes to be more suited to sprinting. Qualitative results indicate that sprint coaches may be susceptible to the employment of natural ability stereotypes because of an over emphasis on biological determinism, and a lack of recognition for less immediately apparent developmental factors. Several comments evidencing the use of situated racial stereotypes in sprint coaching lend support to the hypotheses. Reassuring evidence has been gained that UK sprint coaches do not widely employ stereotypes in attributing differently the success of black and white athletes. However, there is sufficient evidence of susceptibility and replication, to necessitate continued vigilance. The interdisciplinary and multi-method approach used is deemed to have provided a broad and deep view of the problem, representing a contribution to a neglected area of study. A theoretical model of

stereotype influences in sprinting, and recommendations for both coaching and coach education are presented.

How do parents discuss with their children about drug use in post-war Serbia and Montenegro?

A. VUCEVIC, E. KALYVA, City Liberal Studies & C.G. BROOKER, University of Sheffield.

Objectives: To explore the parent-child communication style about drug use in post-war Serbia and Montenegro in an attempt to design the implementation of a family-based drug intervention.

Method: The participants were 18 parents (nine mothers and nine fathers) and 18 children (nine girls and nine boys) living in Belgrade who were interviewed at their homes. Content analysis was used to identify the basic characteristics of parent-child relations. Application of conceptual content analysis was the most appropriate way of analysis here in an attempt to determine the psychological and emotional state of both, parents and children. Selective reduction of interviews occurred through the process of coding of text into manageable content categories. By reducing the text to categories consisting of word, set of words and themes the researchers focused on specific words (punishment, stress, fear, trust) and patterns that are indicative for the research question.

Results: Content analysis revealed that communication and time constraints give rise to family conflicts and misunderstandings. Parents do find time to discuss with their children about sensitive issues, such as drug use. However, this is not sufficient to make them disclose emotionally to their parents, especially since parents use mainly punishment to improve communication.

Conclusions: It has been found that the war and isolation of the country affected behaviour of parents toward their children. Study showed that parents are aware how important it is to educate their children on sensitive issues such as drug use. However, due to their need to provide for the family in a difficult social circumstances caused by decades of war and devastation in the region, parents have not enough qualitative time to spend with their children. This results in a lack of discipline and misunderstanding in communication within the family. War-related stressful experiences reported mainly by children increased their vulnerability. These findings will be used as a basis for the adaptation of the Strengthening Families Programme (SFP) that will be implemented in an effort to prevent substance use in Serbia and Montenegro.

The effects of practice on interference in a switching task

T. WARD, Newman College.

Articulatory suppression has been shown to interfere with performance on switching tasks. In an experiment, eight groups of 20 participants performed either a switching task, or a blocked task. They had 10 practice sessions under four separate conditions, involving either no secondary task, or tapping, or articulatory suppression (using either 'the' or 'blah'). After practice, the effect of articulatory suppression on switching was significantly reduced, except where practice was concurrent with articulatory suppression. A second experiment with a different primary task confirmed this result. Thus the effects of articulatory suppression on switching seem to be rapidly diminished with pure practice, but not if articulatory suppression is also required during the practice. A number of theoretical views of these results are discussed.

Individual differences in the influence of confidence: The effects of Need for Closure and Need for Cognition

C.J. WESSON, University of Wolverhampton & B.D. PULFORD, University of Leicester.

Objectives: The influence of expressed confidence was investigated in relation to the choices people make and the confidence they have in those choices, to ascertain whether individuals use the confidence with which a person expresses their answers as a heuristic. To determine whether the confidence heuristic is a general cognitive heuristic

or is mediated by individual differences, the influence of Need for Closure and Need for Cognition was also considered.

Design: The experiment used a 3 ('speaker' confidence: high, medium, and low) x 2 (Need for Closure: High vs. Low) x 2 (Need for Cognition: High vs. Low) x 2 (condition: confidence cues vs. no confidence cues) mixed design, with repeated measures on the first variable.

Methods: 110 undergraduates took part in the experiment in which they were required to choose the correct/most likely answer to a series of questions belonging to three different task types, and to indicate their confidence in their chosen answer. Participants were given three alternative answers to each question to choose from. In the experimental group these were accompanied by high, medium or low confidence cues developed in a previous pilot study, whereas in the control group there were no cues as to the speaker's confidence. Participants also completed two personality questionnaires measuring Need for Closure and Need for Cognition.

Results: The addition of confidence cues to a speaker's answer resulted in a shift towards choosing answers expressed with high confidence and away from those expressed with low confidence. Regardless of a speaker's confidence level, the addition of confidence cues led to an increase in participants' confidence in their answers. However, the extent of these effects was dependent on task type. In relation to the personality measures used, Need for Closure had an effect on participants' choice of answer whereas Need for Cognition affected participants' confidence in their chosen answers. High (vs. low) Need for Closure participants showed a greater shift towards answers expressed with high confidence and away from those expressed with medium confidence. High (vs. low) Need for Cognition participants were more confident in their chosen answers.

Conclusions: People do appear to use a heuristic that uses the confidence of a person as an indicator of the validity of their information. People use the heuristic when they are uncertain as a means of making choices and having confidence in those choices. However, the extent to which the confidence heuristic is used, and the way in which it is used, is influenced by individual differences.

The evolution of intellect

N.E. WETHERICK, Formerly of University of Aberdeen.

Organisms depend for their survival on luck and on their capacity to extract from the environment relevant (i.e. predictive) information. This capacity I call 'intellect', which is, here, a technical term applicable to all organisms from single-celled to human. To complete the evolutionary project it will be as necessary to show how human Intellect evolved from that of lower animal species as to account for human bodily structure and function in the same terms.

The first task for intellect is to extract predictive rules from temporary law-like regularities (TLR's) in the organism's immediate perceptual environment (IPE). The content of the latter will be determined by the organism's sensory capacities. The former may reflect genuine laws of nature or be the result of purely chance associations of events but the TLR's extracted will appear to be, at least locally, valid – permitting the organism to make correct predictions here and now (which is all that concerns any but the human organism).

At the lowest level, only minor modifications of innate response tendencies are possible. Higher up the scale new response tendencies may be acquired by the organism, either from successful predictions only (sub-mammalian species) or from both successful and unsuccessful predictions (mammals). To learn from unsuccessful predictions requires an internal representation of what was predicted so as to be able to recognise its absence as well as its presence. From such representations may evolve conscious recognition of Identity and similarity in objects (permitting language), self-identity, and hypothetical reasoning. The vital first step in this process was from registration of stimulus adequacy (to evoke a given response) to the postulation of universals. Since then human knowledge has been the consequence of a perpetual conflict between what appears to be true now and what follows from what is already known.

A 'crisis of confidence': Self-estimation of academic ability in Scottish students

M.C. WHITEMAN, University of Edinburgh & E.R. PETERSON, University of Auckland.

Objectives: Cultural commentators have suggested that people who identify themselves as Scottish may have lower levels of self-confidence than people from other nations, but little psychological research has been carried out. Personality traits and self-esteem have been associated with individuals' self-estimation of their academic abilities. The aim of the present study was to investigate the relationships among self-estimation of academic ability, personality traits, self-concept and nationality in students attending a Scottish university.

Design: Cross-sectional survey of first-year psychology students. Ethical approval for the study was granted by the School of Philosophy, Psychology and Language Sciences Ethics Committee of the University of Edinburgh.

Methods: 174 students agreed to fill in a brief questionnaire assessing: the personality traits of Intellect, Agreeableness, Emotional Stability and Conscientiousness; overall self-esteem; academic self-concept; and self-estimation of IQ.

Results: 149 students (115 women and 34 men) returned complete data: 40.9 per cent said they were Scottish ($N=63$), 40.3 per cent said they were English ($N=62$) and the remaining 18.8 per cent were Welsh, Irish, American, mainland European or Asian. There were sex and national differences in IQ estimation: men rated their own IQ as higher than women (117.0 v. 112.8; $p=0.03$); and the Scots rated their own IQ as lower than the other nationalities (110.1 v. 114.9; $p=0.007$). Bivariate correlations showed significant associations between higher IQ estimation and: higher self-efficacy ($r=0.18$; $p<0.05$) and higher Intellect ($r=0.20$; $p<0.05$); but a negative association with Scottish nationality (point-biserial $r=-0.23$; $p<0.01$). Predictors of self-rated IQ in multiple regression models adjusting for sex were: Scottish nationality and Intellect, which together accounted for 11.8 per cent of the variance in self-rated IQ. Models run in just the women showed that the only significant predictor of self-rated IQ was Scottish nationality, which accounted for 11 per cent of the variance. The traits of Emotional Stability, Conscientiousness, self-esteem and academic self-concept were unrelated to self-rated IQ in regression models.

Conclusions: Results suggest that first-year Scottish psychology students may lack confidence in their academic abilities, which could affect their academic performance. A future wave of the study will compare the Scottish findings with results from the same survey carried out at the University of Auckland, New Zealand.

Statutory Regulation: Prospects for British applied psychology in light of the American experience

J.R. WILLIAMS, University of Wales, Aberystwyth & E.Y. DROGIN, University of Louisville School of Medicine.

Purpose: To analyse the effects of statutory regulation upon American applied psychologists and to consider how similar issues may soon be reflected in the work lives of their British counterparts.

Background: Professor Geoffrey Lindsay, Chair of the BPS Statutory Regulation Working Party, has observed that 'the Society has sought for over 30 years to persuade the government to regulate psychology'. The transfer to a scheme of statutory regulation may now be close at hand. The Health Professions Council (HPC), which will maintain a registry of applied psychologists, describes its function as 'to protect the health and well-being of people who use the services of the health professionals registered with us'. The evolving role of the HPC will substantially transform the integration of legal and professional considerations in the practice of applied psychology in Great Britain. The first author is Head of the Department of Law at the University of Wales, Aberystwyth, and author of the book *The Law of Mental Health*. The second author is a psychologist and attorney, and the Immediate Past Chair of the American Psychological Association (APA) Committee on Legal Issues, now chairing the American Bar

Association (ABA) Division of Life and Physical Sciences while serving in the role of Commissioner of the ABA Commission on Mental and Physical Disability Law. Our current paper describes the well established influence of statutory regulation upon psychological research, consultation, and clinical practice in the US, and discusses what the American experience may portend for British psychologists.

Key Points:

- (1) Statutory regulation has become inextricable from professional practice planning, decision making, and liability containment strategies for American applied psychologists.
 - (2) Statutory regulation will exercise a considerable impact upon similar considerations for British applied psychologists.
 - (3) Consideration of the American experience will assist British applied psychologists in anticipating both difficulties and opportunities in deriving optimal benefit from the transition to statutory regulation.
- Conclusions:** British applied psychologists have much to learn from a comparative analysis of the effects of statutory regulation upon practice in foreign jurisdictions.

The Dutch smartshop as a model for Europe in the sale of smart and eco drugs

A. ZANGARA, HCNU, University of Northumbria, F. ROVETTO, University of Parma, G. FORZA, University of Padua, J. GOFORD, CDR, Goring-on-Thames, F. SCHIFANO, St. George's Hospital Medical School & R. LIOTTA, University of Amsterdam.

Objectives: Smart (energy drinks, smart nutrients, nootropics) and eco (herbal ecstasy, herbs and herbal extracts, magic mushrooms, psychedelic herbs) drugs can be considered a single category of psychoactive substances sold within specific environments that are appearing all around Europe. The Netherlands was the first nation to tolerate the sale of such substances in 'smartshops' provided no adverse consequences were discovered, making it advantageous for shops to encourage the safe use of its potentially dangerous products.

Design & Methods: The hypothesis that this policy would be associated with high levels of safety-related knowledge in users of smart (SD) and eco drugs (ED) was supported by the administration of an exploratory questionnaire to 75 smartshop customers and 26 university students in Amsterdam.

Results: Amongst other significant findings about the characteristics of SD and ED users, it was discovered that they tended to prefer an average of two classes of substance (among the various SD and ED products). Their motivations tended to be guided by information, and preferences by the desire for mood enhancement. The main source of information was reported to be the smartshops, often inclusive of professional advice, and 84 per cent of participants reported being well-informed. These products are offered as alternatives to synthetic drugs, but significant links were found between the use of magic mushrooms and cocaine, smart nutrient, energy drinks and amphetamines and psychedelic herbs and LSD.

Conclusions: Smartshops provide advice, safety and other information about illegal drugs, therefore, these findings might have implications for the distribution of information to users of illegal drugs.

Elaboration likelihood and the effectiveness of gendered advertisements in Traditionals and Liberals

M. ZAWISZA & M. CINNIRELLA, University of London.

Objectives: The work presented here expands on Petty, Fleming and White's (1999) finding that non-prejudiced individuals elaborated the persuasive message from a minority source (Afroamericans or homosexuals) to a greater extent than prejudiced individuals when the background elaboration likelihood is moderate, thus confirming Devine's (1989) watchdog hypothesis. It is argued here that a counter-stereotypical female source of an advertising message shares some of the characteristics of the minority sources tested by

Petty *et al.* (1999), and thus it is predicted that: (1) the individuals who hold liberal attitudes to female gender roles should scrutinise the advertising message from such a counter-stereotypical source to a greater extent than the message from a stereotypical source; (2) Liberals should scrutinise the counter-stereotypical advertising message to a higher extent than Traditionalists; (3) greater scrutiny of the advertising message should translate into higher ad effectiveness (more so for highly convincing ads than for low convincing ones); and (4) previous findings that traditional ads should be more effective than non-traditional ones, should replicate.

Design: The study follows a 2 (source type: stereotypical vs counter-stereotypical) x 2 (quality of arguments: low vs high) within x 2 (gender attitude: Traditional vs Liberal) between groups mixed factorial design.

Methods: A thought positivity index and the manipulation of the strength of the arguments used in the ads tested are incorporated as means of capturing the among of message elaboration. Two scales are used to measure attitudes to female gender roles: AWS-B (Parry, 1983) and ASI (Glick & Fiske, 1996). Ad effectiveness is analysed here in terms of three types of responses: cognitive, affective and behavioural, as measured using various Likert type and semantic differential scales (e.g. Judgements and Feelings Scales by Burke & Edell, 1989). The ads tested are printed ads created for the study. The advertised products are unisex and low-involving products of unknown brands.

Results: Study in progress.

Conclusions: Apart from expanding on the Petty *et al.* (1999) studies and thus potentially providing additional support for the watch-dog hypothesis, this study, being the third in a series of studies on the effectiveness of gendered ads, provides further suggestions as to the potential effects of gendered appeals for temporal and long-term ad effectiveness.

Joachim of fiore and apocalyptic immanence

M.P. ZIOLO, University of Liverpool.

Chilastic envisionings of the historical process, whether expressed through philosophical or pseudo-scientific systems or incarnated in the form of political movements, have always been and in all likelihood will continue to be, an integral part of Euroamerican culture. Through an appeal to relevant psychoanalytic theory, core studies and historical sources, this presentation begins with general observations on the genesis and psychodynamic profile of apocalyptic movements and then traces the psychological roots of Euroamerican apocalyptic thought as expressed in the trinitarian-dualist formulations of Christian dogma defined by the Sixth Ecumenical Council held at Constantinople in 680 CE. Utilising primary source material, the presentation then briefly examines the life of the medieval Calabrian mystic and Cistercian abbot Joachim of Fiore (1135–1202 CE) and shows how his work succeeded in creating a synthesis of dynamic trinitarianism and existential dualism within a framework of historical immanence. A meta-analysis of relevant historical studies shows how the subsequent dissemination of the 'Joachimite programme' throughout medieval Europe and its inevitable deformation over time in the context of Euroamerican psychospeciation exercised a profound influence on the development of European philosophies of history, on the inspiration and organising principles of the major totalitarian systems of the 20th century, and ultimately, on the American concept of 'manifest destiny'.

Improving provision for disabled psychology students

L. ZINKIEWICZ, N. HAMMOND, University of York, J. COLLINS, P. REDDY, Aston University, A. NIYAZI & N. FOREMAN, Middlesex University.

Objectives: This poster presents an overview of the Improving Provision for Disabled Psychology Students project. This two-year, HEFCE-funded project aims to develop evidence-based reports and guides to help UK university psychology departments provide a better teaching and learning

experience for disabled psychology students, and to help these students in decision making concerning the study of psychology. The project builds upon existing work in the HE arena, but focuses on the particular requirements for the study of psychology, including BPS and QAA requirements, practical and project work, discipline-specific use of technology and ethical issues.

Design & Method: To assess the needs of potential and current disabled psychology students, and the issues faced by departments, the project has conducted a number of confidential surveys, focus groups and interviews with disabled psychology students and graduates, and those who teach and support them. Detailed statistical information about disabled psychology students currently in UK HE has also been obtained from the Higher Education Statistics Agency. Based on these data, a number of reports and guides (for potential and current students, and for departments and disability advisers) are currently being developed.

Results: Detailed data were obtained from over 110 students and graduates across the UK, who possessed the full range of disabilities, a significant proportion of which were not disclosed to institutional staff. Responses were also obtained from over 50 staff in psychology departments and institutional disability advisers. HESA data show a slightly higher proportion of disabled students in psychology than in the HE student population as a whole, with this difference being particularly evident in relation to students who have disclosed mental health problems. Data obtained reveals that disabled students experience a variety of difficulties when studying psychology, arising from an interaction between inaccurate expectations of psychology courses and staff, teaching and assessment methods utilised, and the subject matter and skills requirements of the course. However, respondents also offered a range of strategies that have proved useful in assisting students' progress in psychology study.

Conclusions: Findings show that improving provision for disabled psychology students requires an improved understanding of how the attributes of the psychology discipline and its staff and student bodies affect this process.

POSTERS

Themes: Social, Individual Differences, Sport & Exercise, and Occupational

Gender and age differences in job satisfaction and coping strategies among Greek primary and secondary school teachers

A.S. ANTONIOU, University of Athens, A.N. VLACHAKIS, Panteion University of Social and Political Sciences, Athens & F. POLYCHRONI, University of Athens.

Grumpy old men or calm elderly gents? Sex and age differences in the self-reported experience of anger

J. BARNETT, M. COULSON & N. FOREMAN, Middlesex University.

The right to kill? Links between attitudes towards the death penalty and beliefs in justice: A work in progress

J.A. BLACKWELL YOUNG, Newman College of Higher Education, Birmingham & C.A. COOKE, University of Leicester.

Effects of internet administration and supervision on responses to psychological inventories

T. BUCHANAN, University of Westminster.

Worry: Exploring associations with locus of control, emotional intelligence and metacognition

K. CLAYTON, D. PURVES, London Metropolitan University & P. ERWIN, Edge Hill College.

The relationship between humour, teaching style, gender and student evaluations of university lecturers

L. CLEVE & A.J. McLACHLAN, University of Ballarat, Australia.

Sun, fun, rum and graduate selection in the 21st century

P.A. CRUISE, City University.

Perceptions of the sexual abuse of children in a cyberexploitation case

M. DAVIES & P. ROGERS, University of Central Lancashire.

Is age kinder to the initially more able?: The relationship between IQ and age-related verbal memory decline

R. EDWARDS, A. MARRIOTT & R. BULLOCK, Kingshill Research Centre.

Teen and the trials of old age: The impact of the old on the young

R. EDWARDS, S. VOSS, A. MARRIOTT & R. BULLOCK, Kingshill Research Centre.

Crossing the wanless rubicon: Moving towards the fully engaged scenario

L. EVANS, University of Glamorgan & J.A. NICKELS, North Glamorgan NHS Trust.

Do you see what I see?: The invisible hand of sexism

T. FINCH-LEES, The Global Effectiveness Group.

The impact of dementia on romantic couples using different methodologies

L. FOSTER, K. RODHAM, University of Bath & R. BULLOCK, Kingshill Research Centre.

Daily hassles, daily uplifts, sleep loss and stress: A two-wave analysis

R.L. GERVAIS, Manchester Business School & G.R.J. HOCKEY, University of Sheffield.

An examination of the psychometric properties of the behavioural regulation in exercise questionnaire-2 (BREQ-2) within an adolescent population

F.B. GILLISON & M. STANDAGE, University of Bath.

Building a consensus of the challenges and solutions facing parents/carers training as clinical psychologists

R. GOLDWYN, University of Leeds.

Psychological well-being in a UK fire service: A preliminary study

K. GUNARATNA, Middlesex University & A. GUPPY, University College Chester.

The impact of diagnosis of dementia

J. HANCOCK, S. VOSS & R. BULLOCK, Kingshill Research Centre.

Mixed race and the 'identity crisis': A self-categorisation approach

S.V. HEDGER, Brunel University. Funded by ESRC.

The effect of change of roles of IT personnel on organisational performance

S. KANURI & A. HETHERINGTON, Westminster Business School.

Q' The question and answer – A preliminary investigation into the use of q-methodology within applied sports psychology workshops

M.E. LAFFERTY, University College, Chester.

The role of information in the acquisition of fear – interaction with associate learning

J. LAWSON & A.P. FIELD, University of Sussex.

Proposal of a theoretical framework toward the prediction of adherence in sport injury rehabilitation programmes

A.R.L. LEVY, R.C.J. POLMAN & P. CLOUGH, University of Hull.

Self-efficacy and sensation seeking as predictors of risk taking in rock climbing

D.J. LLEWELLYN, University of Leeds.

Physical fatigue influences the effectiveness of attentional focusing strategies during dynamic balance

D. MARCHANT, P. CLOUGH, M. CRAWSHAW & M. GREIG, University of Hull.

The impact of Alzheimer's disease on relationships and social networks

A. MARRIOTT, R. BULLOCK, Kingshill Research Centre & A. WARREN, Brunel University.

The effects of mood and exercise on different forms of risky decisions

J. MORRISON & A.J. McLACHLAN, University of Ballarat, Australia.

Why do patients renege on their psychological contract for their operation? The main predictor variables and interactions from National Health Service Trust

J.A. NICKELS, M. SMITH & A. UNIT, North Glamorgan NHS Trust.

Visual search and decision making in elite level Football Association referees

J. PAGE, M.E. LAFFERTY, University College Chester & T. HOLDER, University College Chichester.

Students' perceptions of discrimination in the job market

A. PETERSON, S. TAYLOR, J.P. CHARLTON & R. RANYARD, Bolton Institute.

Effect of a single bout of aqua/studio exercise or parentcraft class on mood of pregnant women

R. POLMAN & M. KAISELER, University of Hull.

Sub-elite netball players and their flow experiences

R. POLMAN & J. FRENCH, University of Hull.

An investigation on occupational stress and coping strategies in higher education: The UK perspective

P. RAMACHANDRAN, N. PAYNE, Middlesex University London & A. GUPPY, University College Chester.

Investigation into the relationship between perceived athletic ability, frequency of 'thinking errors' and anxiety in members of a county archery squad

G. ROBINSON, County Hospital, Durham.

An evaluation of the effects of acute exercise on the mood of adults diagnosed with Panic Disorder (with or without agoraphobia)

G. ROBINSON, P. CALCOTT, P. CROMARTY & M. FREESTON, Newcastle Cognitive and Behavioural Therapies Centre.

You think he's fit and we know it! Social desirability and perception of male beauty

C. SENIOR, G. EVANS & E. PEEL, Aston University.

Task demands influence pronoun resolution

A.J. STEWART & J. HOLLER, University of Manchester.

Job strain in bus drivers: Well-being and predictor variables

J.L.M. TSE, R. FLIN & K. MEARNES, University of Aberdeen.

False start? UK sprint coaches and black/white stereotypes

D.J. TURNER, University of Luton.

How do parents discuss with their children about drug use in post-war Serbia and Montenegro?

A. VUCEVIC, E. KALYVA, City Liberal Studies & C.G. BROOKER, University of Sheffield.

Individual differences in the influence of confidence: The effects of need for closure and need for cognition

C.J. WESSON, University of Wolverhampton & B.D. PULFORD, University of Leicester.

A 'crisis of confidence': self-estimation of academic ability in Scottish students

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FRIDAY 1 APRIL

KEYNOTE SPEAKERS

PRESIDENTIAL ADDRESS

The enemy within – threats to the Society and the discipline of psychology

K. BROWN, Queen's University Belfast.

Threats to the British Psychological Society and the discipline of psychology are normally viewed as being external in origin. However, threats to the Society may also arise through either the activities of the Society and its members or via the structure of the Society and its many subsystems. It is also possible that there are threats to the discipline of psychology which are internal in origin. Some of these threats to both the Society and the discipline will be discussed and hopefully suggestions made as to how such threats may be transformed into opportunities.

Knowing me, knowing you: Exploring the social brain

C.N. MACRAE, University of Aberdeen.

Humans are set apart from other animals by a number of behaviours and the cognitive faculties

that give rise to them. For example, Homo sapiens is the only species that has harnessed arbitrary symbols into languages capable of expressing an infinite number of ideas; that routinely develops and improves upon tools for augmenting natural abilities; and that can suppress immediate desires or prepotent tendencies indefinitely in pursuit of abstract goals in the distant future. These faculties have no doubt contributed critically to the enormous global changes wrought by humans. This list can safely be expanded to include another special feature of human behaviour, namely, social behaviour. Although a measure of sociability marks other animals throughout the phylogenetic tree – from our closest primate relatives to social insects such as bees and ants – the scale and complexity of human social abilities far outstrips those of even our closest primate relatives. Moreover, many of these abilities – such as recognising oneself as a mental agent and inferring the psychological states of other such agents (even when their beliefs conflict with one's own) – do not appear to have ready homologues among other animals, suggesting that humans may have a unique adaptation for particular aspects of social cognition. Recently, researchers in the neurosciences have turned their attention to understanding the ways in which the brain gives rise to these remarkable social abilities. Of particular interest to social cognitive

neuroscientists is the issue of whether the processes that give rise to social cognition are a subset of more general cognitive processes, or whether there are unique operations that guide social cognition. In the current talk, consideration will be given to this issue. In particular, discussion will centre on the neural operations that support basic components of social cognition, notably the ability to understand self and others.

INVITED SPEAKERS

DIVISION OF COUNSELLING PSYCHOLOGY

Hot Topics: Your profession, your future, your opinions needed

A. BELLAMY, Division of Counselling Psychology Committee.

An opportunity to discuss and debate the 'hot' issues in the profession with the Divisional committee. In particular the moves towards Statutory Registration under the Health Professions Council, the Agenda for Change, the Doctoral qualification policy, National Occupational Standards and other matters of concern will be explored in a workshop format. Members of the Division Committee involved in and/or

knowledgeable about these topics will facilitate small discussion groups.

DIVISION OF SPORT & EXERCISE PSYCHOLOGY

Social context and physical activity

A.V. CARRON & S.M. BURKE, University of Western Ontario.

Objectives: Physical activity is undertaken in some variation of either of two fundamental contexts: alone or with others. The purposes of our presentation are to provide an overview of research that has examined physical activity context from three perspectives: (a) individual preferences; (b) a tendency to meet the Centers for Disease Control/American College of Sports Medicine (CDC/ACSM) Guidelines recommended to achieve health benefits; and (c) individual adherence behaviour.

Design: Pertaining to the first purpose, the preferences of older and younger adults for specific physical activity contexts have been examined in our own research and that of others; an overview of the salient findings is provided. Pertaining to the second purpose, our research on the propensity of university students to meet CDC/ACSM Guidelines in four specific exercise contexts is discussed. Finally, the results from three meta-analyses undertaken to statistically summarise the relationship between physical activity context and individual adherence behaviour are summarised.

Results: The analyses associated with each purpose are narrative overviews.

Conclusions: Older adults express the strongest preference for being alone for physical activity; younger adults, for being with others but outside a structured class setting. Physical activity context does not appear to play a large role in university student's propensity to meet the CDC/ACSM Guidelines. In fact, students who meet the Guidelines appear to favour variety in contexts. Finally, individual adherence is optimal in cohesive classes and worst in home-based programs with no contact. Home-based programs with contact from experimenters are slightly superior to standard exercise classes.

DIVISION OF NEUROPSYCHOLOGY

Sexual Changes Associated with Traumatic Brain Injury

J. PONSFORD, Director, Monash-Epworth Rehabilitation Research Centre, Epworth Hospital, Associate Professor, Monash University, Melbourne.

Findings from numerous outcome studies have shown that people with moderate to severe traumatic brain injuries (TBI) experience relationship difficulties and changes in sexuality. However, there have been few investigations of these problems, which are also inadequately addressed. Over the past five years, a study of sexuality following TBI has been conducted by the Monash-Epworth Rehabilitation Research Centre, aiming to identify changes in sexual behaviour, affect, self-esteem and relationship quality, their interrelationships and causes. To date 330 individuals with moderate-severe TBI have completed a sexuality questionnaire one to five years post-injury and their responses compared with a group of 143 controls, of similar age and gender. Approximately 10 per cent of TBI participants reported an increase in the frequency and quality of their sexual relationships. These tended to be those with more severe injuries involving the frontal lobes. More than 40 per cent of TBI individuals have reported a decline in the importance and frequency of sexual activity, sex drive, and a reduced ability to satisfy their partner, engage in sexual intercourse, enjoy sexual activity, stay aroused and climax. The frequencies of such negative changes were significantly higher than those reported by controls. A significant proportion of TBI individuals also reported decreased self-confidence, sex appeal, higher levels of depression, and decreased communication levels and relationship quality with their sexual partner. There were relatively few differences between males and

females. There was also little change over time. Factors associated with negative sexual changes, include age >35, use of antidepressant medication, anxiety, depression, self-esteem, fatigue and physical limitations, low self-confidence, difficulty communicating, behaviour problems and limited access to social contact. There is a need to make assessment and management of sexual changes a routine part of the rehabilitation process.

DIVISION OF COUNSELLING PSYCHOLOGY

From counselling psychology to social justice: Rupture, responsibility, relationship

A. SAMUELS, University of Essex.

The capacity of counselling and psychotherapy to help refresh the moribund politics of Western societies is being explored in our times. We need to discuss openly the possibilities and the limitations of this endeavour. It is not enough to assert that the boundary between 'internal' and 'external' is illusory (even if it is). We have to expose our ideas and practices to life in the trenches of a suffering world in which agony is the norm, before moving on to attempt an analysis of the situation, and then, perhaps, to action.

AWARDS AND MEMORIAL LECTURES

BOOK AWARD LECTURE

Madness (almost) explained

R. BENTALL, University of Manchester.

It is generally accepted that severe mental illness is difficult to explain. Numerous theories have been advanced, implicating just about every variable known to influence human behaviour. Some investigators have even gone so far as to suggest that madness is 'un-understandable' in the technical sense that it is beyond empathy, and hence not explicable in terms of the patient's personality or experiences. Hence, theories of madness rarely make reference to what has happened to patients, or their own understanding of the world and their experiences. In 'Madness explained' I suggested that the apparent difficulty in accounting for severe mental illness arises more from the attitude of the observer than the patient him or herself. When we ask patients about their actual experiences, and try to relate them to ordinary psychological processes, hallucinations, bizarre beliefs and even mania become relatively easily explicable. By weaving together these kinds of explanatory accounts it is possible to construct an explanation of severe mental illness that is satisfactory from both the scientific and ethical viewpoints, and which dispenses for the need for diagnostic categories such as 'schizophrenia'.

M B SHAPIRO AWARD LECTURE

The role of theory in the evolution of Cognitive Behaviour Therapy

C. BREWIN, University College London.

Modern psychological practice is rooted in learning theory and in the cognitive revolution of the 1960s. Cognitive therapy, despite its manifest successes, is based on numerous assumptions that date back to this period. For example, it was commonly suggested that in depression there is a generalised negative self-schema that summarises past experience, and that schema contents are consciously accessible and able to be changed by therapy. This model of mind now looks outdated. Recent research emphasises that knowledge about ourselves is represented in the form of episodic as well as semantic memory, and in hypothetical models that may not correspond to reality but reflect our hopes and fears. Consistent with this, research on numerous disorders has identified a wide variety of highly accessible mental contents, including multiple models of the self, autobiographical memories, images, and hypothetical scenarios. In the past psychological theory has tended to lag behind and justify clinical

practice, rather than driving it from the front. Clinicians have been great innovators and their observations have contributed to theoretical development. At the same time treatments for many disorders have only been of moderate effectiveness, leaving plenty of room for improvement. We are now reaching a point where theoretical knowledge can offer new explanations for our treatments and suggest new interventions. The rationalist philosophy of traditional cognitive therapy is yielding ground to a more constructivist approach that offers exciting opportunities for innovative treatment grounded in up-to-date theory.

SPEARMAN MEDAL

The path of peripherals

J. JETTEN, University of Exeter.

Social psychologists have made important advances in understanding group behaviour, particularly that of 'prototypical' or central group members. Though less often investigated, peripheral or 'non-prototypical' group members are potentially more intriguing because their behaviours have proven to be more difficult to predict compared to that of prototypical members. People can be peripheral within a group for a range of reasons. For instance, their peripheral intragroup position may be self-selected (e.g. employees close to retirement), they may be in the process of becoming more accepted (e.g. newcomers), or they may be peripheral because they face rejection by others in the group. Peripheral group members display a variety of group behaviours, ranging from high involvement and group commitment to inaction or even disloyalty and deviance. I will present a range of studies examining the diversity of peripheral group members' group loyalty expressions: (a) as a function of perceiving the context as offering hope (or not) for acceptance and inclusion in the future; (b) by examining the idea that peripheral group members are more sensitive to what the social context affords in determining the utility and costs of expressing group loyalty than are prototypical group members; and (c) by providing evidence for strategic motivations underlying peripheral group members' self-reports of group influence. I propose that examining peripheral states in a more dynamic way, taking into account anticipated changes over time and changes in socio-structural conditions, allows for a better understanding and integrated picture of the peripheral experience within groups.

AWARD FOR OUTSTANDING DOCTORAL RESEARCH CONTRIBUTIONS TO PSYCHOLOGY

On your marks, get set, search! On the temporal dynamics of attention

C. OLIVERS, Vrije Universiteit, Amsterdam.

We live in a dynamic visual world in which objects continuously appear and disappear. Previous research has shown that dynamic information such as abrupt appearances may capture our attention automatically in a relatively passive fashion. For instance, think of a blinking traffic light. Research during my PhD and thereafter has focused on the hypothesis that observers can also actively anticipate and make use of temporal differences between objects, in order to select task-relevant, and ignore task-irrelevant, information. Using a visual search task I have shown that such active use of dynamic new visual information involves limited attentional resources, involves the suppression of old information (a process referred to as marking), and involves specific brain areas.

PRESIDENT'S AWARD FOR DISTINGUISHED CONTRIBUTIONS TO PSYCHOLOGICAL KNOWLEDGE II

Memories of attention: Retrieval of attention processes from memory

S.P. TIPPER, University of Wales, Bangor. Inhibitory mechanisms can guide search through complex environments by preventing attention

from returning to already examined objects. I will review evidence that this inhibition can be associated both with locations that have been previously attended and with objects, and that these two frames-of-reference have different properties. It is also argued that the inhibition associated with objects can leave a relatively long-term trace. Thus, when an inhibited object is presented several minutes and dozens of trials after initial encoding, the original inhibitory processes may become reactivated. Further studies will be reviewed that show that attention can also be influenced by social cues, such as observation of another person's gaze shift. These gaze shifts can have similar properties to other attention cues, and in some circumstances they can also be retrieved from memory. That memory systems can encode and later retrieve prior attentional states might be one means of guiding behaviour across different processing episodes.

MAY DAVIDSON AWARD LECTURE

Adaptive and maladaptive rumination: The importance of processing style when thinking about negative content

E. WATKINS, University of Exeter.

Rumination about the self, about mood, and about problems is an important factor in the maintenance and relapse of depression (Nolen-Hoeksema, 1991, 2000). People who dwell repeatedly on the self, mood and problems tend to have more onsets of depression and more prolonged depression. On the other hand, repeated thinking about self, upsetting events and problems can be helpful, for example when coming to terms with upsetting events or solving problems. My programme of research has focused on considering the mechanisms that may determine whether rumination is helpful or unhelpful and has demonstrated that there are distinct processing modes during rumination that have distinct functional effects on the consequences of rumination. This talk will review this research discussing a series of studies examining the distinction between adaptive and maladaptive rumination on a range of clinically-relevant cognitive processes: overgeneral autobiographical memory (Watkins & Teasdale, 2001, 2004), social problem solving (Watkins & Baracaia, 2002; Watkins & Moulds, submitted), emotional processing (Watkins, 2004) and global self-judgments (Rimes & Watkins, submitted). These studies all suggest the hypothesis that the mode of processing adopted during focus on self, mood or problems determines whether the rumination is pathological or adaptive. In particular, based on the current research, it is proposed that a processing mode characterised by evaluative-analytical 'Why' thinking during thinking about negative content will produce longer and less helpful rumination than a more concrete process-focused 'How' processing mode. Such research has important applied clinical implications by indicating how treatment may rapidly shift patients from a harmful to a beneficial form of thinking about negative material. Based on the experimental work, a new treatment for depression, Rumination-focused Cognitive Therapy has been developed. Details of the therapy will be presented including preliminary evidence from an extended case series that the treatment is efficacious.

SYMPOSIA

Group dynamics in sport and exercise

M.R. BEAUCHAMP, University of Leeds.

A considerable amount of human behaviour in sport and exercise settings is embedded within groups. Not surprisingly contemporary sport and exercise psychologists have sought to understand how group members' cognitions, emotions, and behaviours, influence and are influenced by the group environment in which members reside. The overall purpose of this symposium is to provide a series of research papers that consider group dynamics factors associated with member and group functioning in sport and exercise. The first paper presents findings from a meta-analysis designed to investigate the impact of social and

group contexts on exercise adherence behaviours. The authors also reflect on the need to consider the disparate preferences of both older and younger exercisers. In the second paper, communication processes within sports teams are examined in relation to team members' perceptions of role ambiguity. Both communication processes and role ambiguity perceptions are conceptualised as multidimensional constructs, and differential relationships between the various dimensions are presented. The third paper presents research designed to examine group-level perceptions of clarity within sports teams. Specifically, a conceptual model for collective clarity within interdependent teams is presented and tested. The fourth paper outlines two studies that focus on collective efficacy in sport. Empirical evidence is provided to support the contention that collective efficacy beliefs comprise both individual as well as team components. The final paper investigates the extent to which group-referent attributions in sports teams may impact upon the emotional states of team members. Within the five papers that constitute this symposium implications for theory development, future research, and applied practice within group settings will be discussed.

Physical activity interventions: The role of social context

A.V. CARRON, S.M. BURKE, University of Western Ontario, M.A. EYS, Laurentian University & P.A. ESTABROOKS, Kaiser Permanente, Colorado.

Objectives: The presentation reports on a meta-analysis that compared the relative merits of four different contexts typically employed in physical activity interventions: home-based programs without contact from researchers (NO CONTACT), home-based programs with some contact (CONTACT), standard exercise classes (COLLECTIVE), and classes with group-dynamics principles used to increase cohesiveness (GROUP).

Design: In the 44 studies ($N=4578$ participants) that directly compared the relative effectiveness of at least two of the four contexts, 20 categories of dependent variables were examined: adherence, exercise duration, work output, flexibility, strength, objective functional ability, oxygen uptake, gas exchange, blood pressure, weight, lean body mass, cholesterol, general quality of life, physical quality of life, emotional quality of life, social quality of life, psychological quality of life, perceived benefits, efficacy, and group togetherness.

Results: It is important to note that: (a) none of the studies in the meta-analysis simultaneously compared the effectiveness of all four contexts; and (b) not all dependent variables were included in all studies. Within the constraints of these two limitations, the results showed that the GROUP condition represents the most effective intervention context, the NO CONTACT condition the least. Only minimal non-significant differences are present between the CONTACT and the COLLECTIVE conditions.

Conclusions: Health professionals ought to plan their physical activity interventions with the following generalisation in mind: The need to affiliate/to feel a sense of belonging is a fundamental human motive; physical activity programs that optimise an individual's sense of belonging have the greatest likelihood of producing behavioural change.

Role ambiguity and intra-team communication within interdependent sport teams

M.A. EYS & I.J. CUNNINGHAM, Laurentian University.

Objectives: Previous qualitative research has suggested that the degree to which members of a team communicate could be a factor in how well each athlete understands his/her role responsibilities. The aim of the present study was to determine if a relationship exists between perceptions of non-verbal and verbal interaction with fellow team members and role ambiguity.

Design: The participants ($N=97$, $M_{age} = 20.55 \pm 2.20$) consisted of male and female Canadian intercollegiate team sport athletes. Prior to a practice session participants completed two measures. The first assessed athletes' perceptions of how their team communicates with regard to four

dimensions: (a) Acceptance (the exchange of support and acceptance between team-mates); (b) Distinctiveness (the exchange of an inclusive, shared identity); (c) Positive Conflict (pro-active and non-emotionally charged attempts to deal with interpersonal differences); and (d) Negative Conflict (person-centred, destructive exchanges of differences). The second measure assessed perceptions of role ambiguity on offence and defence with regard to: (a) their scope of role responsibilities; (b) the behaviours necessary to fulfil those role responsibilities; (c) how their role performance is evaluated; and (d) the consequences of not fulfilling role responsibilities.

Results: Generally, intra-team communication predicted perceptions of role ambiguity. More specifically, the greater team members engaged in exchanges of support and acceptance the more likely they were to understand how they were to be evaluated with regard to their role responsibilities on offence and defence. Gender differences are also reported and discussed.

Conclusions: Support was found for the suggestion that intra-team communication patterns are related to understanding role responsibilities in a team environment. Team building interventions aimed at reducing role ambiguity should include methods to enhance member communication processes. Finally, additional support for the multidimensional models of role ambiguity and team communication was found.

Collective clarity within interdependent teams: Conceptual foundations and preliminary tests of theory

M.R. BEAUCHAMP, B. JACKSON & D. BROOKE, University of Leeds.

Objectives: Traditionally perceptions of clarity within teams have been examined at the individual-level (i.e. role clarity) despite the fact that members of interdependent teams combine to produce integrated team outcomes. The overall purpose of this presentation is to present a series of projects designed to examine COLLECTIVE CLARITY, defined as the degree to which a group is clear about its conjoint responsibilities.

Design: A qualitative (i.e. inductive) phase of research was employed to develop a conceptual model for examining group-level perceptions of clarity within interdependent sport teams. This phase included three projects that utilised: (a) an open-ended questionnaire format; (b) focus groups; and (c) a literature review. The conceptual model was subsequently operationalised in the form of a Collective Clarity Questionnaire (CCQ). The second phase of research was designed to assess the construct validity of the CCQ.

Results: Findings from both qualitative (i.e. inductive analyses) and quantitative (i.e. factor analysis) research phases provide support for distinct and discernable dimensions of collective clarity within sports teams (goals and objectives, strategy, leadership, consequences, evaluation). Results also suggest that collective clarity is empirically distinct from perceptions of role clarity, and may be an important group-level construct related to individual member and team functioning.

Conclusions: Collective clarity represents a new construct and so must be subject to the rigours of construct validation. Research outlined in this presentation represents a first step in this process. Implications for theory development and future group dynamics research are discussed.

Testing the validity of the collective efficacy inventory

N. CALLOW, L. HARDY, University of Wales, Bangor, D. SHEARER, University of Glamorgan & D. MARKLAND, University of Wales, Bangor.

Objectives: The primary objective of Study 1 was to examine the factorial validity of the/and team factors of the collective efficacy inventory (CEI). The secondary objective was to examine their construct validity with a focus on the individual. The objective of Study 2 was to examine the construct validity of the CEI factors with a focus on the team.

Design: A cross-sectional design was employed for both studies.

Methods: Study 1: An opportunistic sample of 233 British team sports athletes was recruited.

Participants completed the CEI, the Group Environment Questionnaire (GEQ) and a one-item collective efficacy measure (CE) at a training session. The following week, and one hour prior to a competitive match, the same participants completed the State Sport Confidence Inventory (SSCI).

Study 2: An opportunistic sample of 120 British team sports athletes was recruited. Participants completed the CEI and the Scale for Effective Communication in Team Sports-British (SECTS-B) at a training session.

Results: Study 1: Single-factor confirmatory factor analysis revealed that the factorial validity of the original five-item factors was not supported.

However, further analysis revealed an excellent fitting four-item model for the team factor and a good fitting four-item model for the I factor. To explore the construct validity of the four-item factors the results from standardised regression analyses with CE, GEQ and SSCI as the respective dependent variables were examined and interpreted. When there was a focus on the individual, the I factor had greater construct validity than the team factor.

Study 2: To explore the construct validity of the four-item factors with a focus on the team, the results from standardised regression analysis with SECTS-B as the dependent variable were examined and interpreted. In this situation, the team factor had greater construct validity than the I factor.

Conclusions: Taken together the present studies provide suggestions for the operationalisation of collective efficacy from either the individual or team perspective, and offer a valid measurement tool based on Bandura's (1997) conceptualisation of collective efficacy.

Affective consequences of team-referent attributions

I. GREENLEES, M. STOPFORTH & J. GRAYDON, University College Chichester.

Objectives: Researchers in sport psychology have provided support for proposals that self-referent attributions influence athletes' affective reactions to competitive outcomes, future expectations of success and future behaviours. Recently, researchers have proposed that team-referent attributions may have the same impacts as self-referent attributions. Therefore, in the present study, we sought to examine the extent to which team-referent attributions influence the affective reactions of individuals performing within a team.

Design: The study design was a quantitative survey. **Methods:** Data was collected from male ($N=84$) and female ($N=85$) interactive team sports players (mean age = 20.64 years; $SD = 4.27$ years) from local and university sports teams ($N=169$). Within three days of a team performance, participants completed a Causal Dimension Scale - Teams, a perception of success scale and measures of seven achievement related emotions. These emotions were satisfaction, pride, confidence, anger, surprise, shame and incompetence.

Results: Using stepwise multiple regressions we found that, following performances perceived as successful by the participants, internal attributions predicted feelings of satisfaction; stable attributions predicted feelings of satisfaction and pride, whilst attributions to factors controllable by the team predicted pride and a lack of anger. Following failures, externally controlled attributions were associated with low levels of confidence whilst attributions to factors controllable by the team were associated with surprise and low levels of gratitude.

Conclusions: The results indicated that certain affective reactions are predicted by team-referent attributions. This supports contentions that team-referent attributions have similar consequences to self-referent attributions. We recommend that researchers examine the full impacts of team-referent attributions on group and individual functioning.

Symposium: Alternative views of the self

Convenors: D. BIGGERSTAFF, Warwick Medical School & R. STEVENS, Open University.

Our sense of self and personality have, over time, been subjected to much scrutiny and discussion in disciplines such as psychology, philosophy, medicine

and neuroscience. Competing and converging theories have emerged concerning selfhood and its relation to consciousness. The presentations in the present symposium are a contribution to the ongoing debate. It is not possible or desirable, at this stage, to attempt a syncretistic model of selfhood and consciousness, however this paper attempts an overview of conversing and contesting models and their fluid relationships.

Malinowski's Buddhist perspective highlights the contemplative traditions and the ineffability of 'self', a position also attested in the *via negativa* of western spirituality. Steven's paper goes to the heart of the epistemological difficulties in conceptualising self and identity, proposing a nuanced model for their resolution. Apter's paper offers a novel analysis of identity in operation and contrasts with Sullivan's approach which extends the earlier work of Bakhtin. My own paper (CEP2004) suggests a further relational approach to self, namely that the self is, and is discovered in, negotiation with the other. The viewpoints taken in these papers both converge and contrast with each other and form the basis of the overview in this symposium.

Exploring the self-other boundary through imaginary conversations

P. SULLIVAN, University of Bradford.

Purpose: To examine the relationship between self and other in the context of imaginary conversations.

Background: The self is traditionally seen in terms of its relationships to other people and things (James, 1890; Dewey, 1934; Bakhtin, 1984, 1986, 1990, 1990; Shotter, 1993, 1996, 1999; Hermans, 2001a, 2001b, 2002). More particularly what defines self and other from moment to moment is seen as a fluid boundary, dependent on emotions and the particularities of the situation. A parent, for instance, may experience their child as closer to the self in the situation of that child misbehaving in a supermarket (i.e. public embarrassment) but further from the self in the situation of reprimanding that child (i.e. an other that is affected by the actions of the self).

Key Arguments: Self-other relations are expressed in a tripartite model of the self by Bakhtin (1984, 1990, 1993) which includes: 'I-for-other', 'other-for-me', and 'I-for-myself' relationships. These are seen as parallel and overlapping dialogues. However, although psychology has embraced the 'I-for-other' and 'other-for-me' relationships in its conceptualisations of the self-other boundary, it has underemphasised the 'I-for-myself' relationship. This is the relationship, evident in our everyday imaginary dialogues (i.e. 'replaying' a conversation, speaking to an imaginary audience, reflecting on who we are). To address this lacuna, this paper examines the I-for-myself relationship as Bakhtin (1984) describes it in his analysis of Dostoevsky's novels.

Conclusions: The implications of the 'I-for-myself' dialogue, it is argued, are central to how we understand ourselves in relationship to others. In particular, the I-for-myself relationship influences our relationships to others as well as being influenced by them.

Reversal theory and the sense of identity

M.J. APTER, Georgetown University.

Reversal theory is a 'structural phenomenological' theory of motivation, personality and emotions. The aim of the present paper is to use reversal theory to try to elucidate the manner in which the sense of identity might enter into conscious experience.

At the heart of reversal theory is the idea that there are four parallel domains of mental life which form an integral part of the very structure of consciousness itself. Each domain is grounded in some aspect of motivation. For example, we are always aware of our goals and what we are doing to attempt to progress towards them - this constitutes the 'means-ends domain'. Within each domain there is an opposition between alternative ways of organising experience, each representing contrasting values/motives. For example, in the domain just referred to, the goal can predominate (here the value is that of achievement), or the means can predominate with the end really being a

way of enhancing an enjoyable activity (here the value is that of immediate enjoyment). In the normal way of things, people reverse frequently between such binary opposites, even sometimes in the course of the same action, doing so under a variety of conditions identified in the theory. The sense of identity is also part of the structure of experience, and it can also be said to have four components: autonomy, agency, continuity and distinctiveness. On examination, these four components appear to map onto the four domains, and in particular onto one member of each of the domains. The present paper lays out the complete structure of relationships involved here. It goes on to suggest that each of these related values/components evolves from an original 'protofunction' in infancy, such as anticipation or rejection. And finally it shows how the classical symptoms of schizophrenia might relate to a breaking down of this structure of relationships, so that some aspect of identity does not fully enter into conscious awareness.

Trimodal theory as an integrative framework for conceptualising the self

R. STEVENS, The Open University.

Psychology encompasses various notions of self and identity which have little, if anything, in common. A key problem with such conceptions is that they rest on very different theoretical assumptions and concept languages. Each of the paradigms on which different concepts of self depend, focuses on particular aspects of being and identity. Thus, psychoanalytic paradigms emphasise unconscious motivations and the roots of self in early experience. In contrast, social constructionist approaches place firm emphasis on language, and frame identity as a function of relationships and immersion in socio-cultural discourses and practices. Conceptions of self and identity can also be derived from theoretical foundations very different to either of these. Buddhism, for example, provides a striking contrast in its mode of understanding the self as does, in a very different way, psychobiology. The effects of such one-sided foci on particular aspects of the source of self and identity is fragmentation in psychology.

Trimodal theory was developed as an integrated approach to psychology and provides a conceptual framework for inter-relating the very different bases (biological, social and reflexive) on which human action depend. It makes the important point that different epistemologies are required to effectively conceptualise each of these different bases. It presents a framework which elaborates on biological, symbolic and reflexive modes, their related epistemologies and the need to inter-relate these different modes for any effective understanding of self and identity. This paper will use trimodal theory to show how a more sophisticated and integrated understanding of self and identity is possible rather than restricting understanding to one or other of the mono-theoretical approaches on offer.

Selfhood and personality – a Buddhist perspective

P. MALINOWSKI, Liverpool John Moores University.

Purpose: Derived from Buddhist teachings about the nature of the self, this paper explores a theoretical framework for integrating seemingly disparate scientific conceptions of self and personality as they are found in current discussions of these topics.

Background: As the recent Eighth Annual Conference of the Consciousness and Experiential Psychology Section of the BPS on 'Science, Self & Meaning' showed, concepts of self and personality are discussed with rising interest within various areas of psychology and neuroscience. So far many of the ideas and models that have been put forward appear to be merely co-existing. Some of them are providing conflicting ideas while others relate to distinct aspects or levels of self and personality.

In Buddhist contemplative traditions all notions of self and personality have been rigorously scrutinised by introspective analysis and logical deduction for more than 2500 years. Ultimately these meticulous enquiries into the nature of self and personality subserve the goal of revealing to

the Buddhist practitioner that a real, unique, separate and unchanging core, we usually refer to as 'self', cannot be found (the absolute truth). By this realisation the clinging to the idea of self – the root of all suffering – is cut out. With the purpose of guiding students in their efforts of understanding their own mental structures, processes, habits and tendencies Buddhist teachings nevertheless provide precise descriptions of the various components and levels of self and personality (the relative truth).

Key Points: This relatively existing self is explained to consist of five main components or 'heaps' (Sanskrit: skhandas). I propose that various scientific conceptualisations of the self refer to one or several of these components and thus can be understood as a constituent part of the relatively existing self. Another important point that is made within the Buddhist teachings is that of distinguishing between the very fundamental and subtle separation between 'me' and 'others', which is said to be 'innate' and the cruder aspects of identification, which refer to our sense of personality. The former, more subtle aspect of self may relate to what often is referred to as 'numeric identity' or the experience of 'boundaries'.

Conclusions: Within the studies of self and personality a significant overlap of understanding within psychology/neuroscience and insights from Buddhist traditions becomes more and more evident. I suggest that the framework provided in Buddhist teachings about the relative truth of self and personality is an efficient tool for organising the arising scientific findings in a meaningful way.

Symposium: Psychosocial interventions with psychiatric in-patients

S.J. GREY, Institute of Psychiatry.

Over the past 20 years there has been an increased emphasis on providing mental health services in the community and a relative neglect of in-patient services provision. As more patients are treated at home, hospital in-patient units tend to be used mainly for short term treatment of the most unwell patients. This treatment is often confined to adjusting medication, allowing symptoms to stabilise and arranging future care in the community. This symposium reports on three initiatives designed to raise the standard of care of psychiatric in-patients by incorporating more psychosocial interventions into the ward routine and increasing the involvement of nursing staff in these approaches.

Paper 1 by Adam Duncan et al. describes a method of helping patients write their own account of their admission to hospital. Paper 2 by Sarah Jeffrey et al. describes a sports tournament held in the hospital gymnasium, and Paper 3 by Laura Fialko et al. reports on a system for ensuring that patients have weekly therapy plans that help them participate in a ward group programme.

The Maudsley Tournament: An initiative to raise activity levels in psychiatric in-patients

S. JEFFREY, Middlesex University & S.J. GREY, Maudsley Hospital and Institute of Psychiatry.

Objectives: To evaluate patients' response to the opportunity to participate in a sports tournament in the hospital gymnasium. To investigate whether participation has any benefit on well-being.

Design: Overall participation was recorded and for some patients, mood and commitment to take exercise was compared before and after the tournament. Patients also gave general feedback.

Method: The Maudsley Tournament took place over two weeks and was designed to introduce patients to the gym and the benefits of exercise. It was publicised using posters and through ward community meetings. There were four one-hour tournament sessions each week, with two or three events staged at each session. There were nine events (treadmill running, rowing, cycling, shoot-the-hoops, short-mat bowls, football, Uni-hoc, badminton, and tennis) of short duration and low intensity designed to sustain interest and participation, and points were awarded according to performance. Winners received prizes and all competitors received a personalised certificate with their photo.

Results: 34 patients participated and nearly half completed all events. Patients' ratings of future

intention to attend the gym (mean=8.36) were significantly higher than reported previous gym use (mean=3.64). Whilst initial anxiety and depression scores did not differ significantly from final scores overall, a significant anxiolytic although not anti-depressant effect was found in those who completed the Tournament. Completion of the Tournament was not predicted by initial affect. Alleviation of depression but not anxiety varied with reported enjoyment. Feedback was good for various aspects of the tournament, including taking exercise, being away from the ward, having a challenge, the social element, the fact it was competitive, and enjoyment of the refreshments. **Conclusions:** Although patients required prompting to participate, substantial numbers participated and nearly half completed all events. Three or four staff were needed to run each session. Patients who did not wish to participate enjoyed watching or helping scoring. Some patients continued to attend the gym after the tournament and some started using the local leisure centre. Although some investment of staff time was needed, the tournament can be easily repeated once established.

Helping patients to write their own account of their admission to hospital: How do patients respond and can nurses help?

A. DUNCAN, L. FIALKO, A. ROWE, G. SAMSON & S.J. GREY, Institute of Psychiatry & Maudsley Hospital.

Objectives: To investigate whether psychiatric inpatients make use of an opportunity to put their own written account of their hospital admission into their case notes. To investigate whether nursing staff can take this on and incorporate it into the ward routine. This initiative is in line with the NICE guidelines for psychosis

Design: An audit was carried out to determine how many patients were offered the opportunity to write an account, how many were completed, how early after admission this was achieved, how many accounts were produced with the involvement of nursing staff and whether there were differences between the men's ward and the women's ward.

Method: Details of all patients admitted to an acute psychiatric ward were recorded. A proforma was produced with a set of prompts to help patients think of what to cover in the account. Interviews were carried out initially by a clinical psychologist, then by a psychology assistant and with a ward nurse as observer. Accounts were written by either the patient or the staff member, in the patient's words as far as possible, and the final version approved by the patient before putting in the case notes. Once the procedure was established nursing staff were encouraged to carry out the exercise with other patients.

Results: Numbers of patients writing accounts are reported, together with details of the involvement of nursing staff and the type of content typically elicited.

Conclusions: A substantial proportion of psychiatric in-patients take up the opportunity to write their own account of their experience. About half-a-day in total is needed for each patient account, including two interview sessions and time spent typing up the account if required. This exercise goes some way to ensuring that the patient's perspective is heard and understood and that patients have help in reflecting on their experience. In some cases additional benefits include the identification of precipitating events and early warning signs, plus better planning for future crises. This exercise may be a useful means of helping ward nursing staff increase their clinical skills, provided it is incorporated into nursing management and supervision processes.

Improving provision and uptake of therapy activities on an inpatient ward: Procedures for regular monitoring and review

L. FIALKO, S. JABATI, R. GREGORY & S. GREY, Maudsley Hospital & Institute of Psychiatry.

Objectives: To investigate whether weekly written therapy programmes can enhance psychiatric inpatients participation in therapeutic activities. To examine organisational factors influencing

patients' attendance at therapy groups.

Design: Group attendance rates were monitored for all patients on a hospital ward after the establishment of new standards for nurse-led therapy activities and compared with historical control data. Attendance rates for patients who had regular meetings to discuss weekly therapy programmes were compared with those who did not.

Method: A copy of the ward activity programme was placed on a noticeboard so that all patients were aware of the scheduled activities, and a register was set up to record attendance at these activity groups. A group of patients were then selected (by catchment area within the Borough of Southwark) to complete weekly therapy programmes with a psychology assistant. In addition to planning other aspects of their week (receiving visitors, using leave from the ward, etc.) patients were individually talked through the ward activity programme and the patient selected activities for the forthcoming week. At each weekly meeting the patient's completion of planned activities over the previous week was discussed and recorded and a new plan made for the next week. **Results:** Overall attendance rates for ward activities are reported, together with a comparison of attendance rates between patients who have and have not completed weekly therapy programmes.

Conclusion: Based on overall attendance rates the utility of and potential problems associated with nurse-led ward activities are discussed. The success of weekly therapy programming as an intervention to increase attendance is also discussed.

Symposium: Widening participation and social exclusion: Exploring accounts of learning and teaching from non-traditional and minority students in UK psychology departments

I. HODGES, University of Westminster.

Increasing diversity among student populations in Higher Education has become a much discussed topic in recent years. In particular, the needs of socially and economically excluded groups – who traditionally have been less able to participate in higher education – have become a subject of concern, especially with respect to non-completion rates. Unfortunately, relatively little is known about the learning and teaching experience of such students in UK universities – and especially in relation to discipline specific concerns – with the consequence that policy and other interventions are difficult to concretely formulate and effectively implement.

Here we use qualitative and quantitative methods to map the experiences of a variety of non-traditional and minority groups who are studying or have studied Psychology within Higher Education. Sanjay Jobanputra deploys qualitative methods to explore the experiences of psychology students of Afro-Caribbean and South Asian origin. Paula Hixenbaugh and Hazel Dewart use survey data to compare the experiences of traditional and non-traditional psychology students including those who are the first members of their family to attend university. Ian Hodges and Carol Pearson use a grounded theory informed framework to explore the experiences of gay male students across several psychology departments and Sue Smith and Carol Pearson explore – again using grounded theory principles – the experiences of lesbian psychology students.

These studies variously explore the content of psychology syllabi, the impact of the immediate and wider departmental and institutional context, coping mechanisms that students deploy in the face of prejudice, discrimination and hardship, the roles of self-esteem, self-efficacy and academic ambition and the impact of minority staff in the provision of support for students. Finally, we go on to discuss the implications of our findings with respect to developing more inclusive teaching and learning practices and challenging traditionalist practices which contribute to the continued and routine exclusion of minority students' experiences.

Diversity in Higher Education: The non-traditional student

P. HIXENBAUGH, H. DEWART, D. DREES &

L. THORN, University of Westminster.

The Government continues to be committed to

widening and increasing participation in Higher Education to 50 per cent of 18- to 30-year-olds by 2010. Although institutions have made progress in recruiting additional students, the issue of student retention continues to be problematic for many. Despite the HEFCE (2001) evidence to the House of Commons Education sub-committee that there is no nationally or internationally recognised definition of non completion, the current literature suggests, and indeed government officials are explicit about the emphasis on a student centred approach. In order to develop student centred strategies for success more needs to be known about the relevant factors. There has been considerable progress in understanding the factors that lead to student non-completion. However, there is still substantial work to do on the identification and evaluation of those factors which lead to student success. The target groups in the widening participation agenda have been non-traditional student groups. This has resulted in a number of students who come from family backgrounds where they are the first person to attend university. Thomas (2002) has suggested that this changing student population is challenging traditional student-student and student-institution relationships. What might be the important factors to consider when devising programmes to encourage student success? How can this success be defined. This paper presents evidence from a survey of 110 first-year psychology students on measures of self-efficacy, self-esteem, academic ambition, satisfaction with the university, financial concerns, academic confidence, and academic social integration. The paper reports on the extent to which traditional and non-traditional students differ on these variables and discusses the implications for institutions.

Out from the margins: Exploring gay men's accounts of learning and teaching in UK psychology departments

I. HODGES & C. PEARSON, University of Westminster.

Objectives: This study explores the experiences of gay men who have studied/are studying psychology at university/HE level. There is a particular focus on psychology's treatment of sexuality within its subject matter and the experience of being gay in a university psychology department. Findings are used to inform discussion of policy recommendations and other intervention strategies.

Design: The study utilises a qualitative framework informed by grounded theory principles.

Methods: Semi-structured interviews were conducted with a sample of current and ex-students (from five different institutions) who had taken psychology as (at least) the major element of their undergraduate degree programme. Eighteen participants were recruited through informal contacts, ages range from 21 to 45. Data was coded according to accepted grounded theory procedures.

Results: Four key themes emerged: (1) student expectations were not significantly conditioned by sexual identity (this supports earlier research findings), although for many students application for a university place was a key element in their coming-out process; (2) participants reported feelings of exclusion and the curriculum was sometimes described as homophobic and heterocentric; (3) participants reported a strategic approach to relationships with staff and students, for example there was a high degree of selectivity when coming out to staff and peers within the department; and (4) various difficulties were identified in relation to the social milieu which resulted in a clear separation between university and domestic environments. This self-imposed segregation, for many, significantly affected the overall learning and teaching experience.

Conclusions: For these participants institutionalised homophobia has a detrimental impact upon the learning and teaching experience and given the following: (1) exclusion due to invisibility with respect to the curriculum; (2) exclusion from the teaching and learning environment; and (3) exclusion from the social/personal environment. We argue that while overt individual homophobia and discrimination was unusual, students suffered because of a ubiquitous heteronormative institutional milieu which by its very nature is difficult to concretely identify and challenge.

This milieu serves to marginalise and routinely silence gay identity and sexuality in Psychology. Such an institutional context can only serve to reinforce the oppression of sexual minorities even when universities claim to implement equal opportunities policies and other strategies of inclusion. These conclusions form the basis of a discussion of best practice with respect to more inclusive teaching and learning practices.

Diversity in Higher Education: Lesbian undergraduate's experiences of studying psychology

S. SMITH & C. PEARSON, University of Westminster.

Objectives: The study explored three major areas relating to interviewees' experience of studying psychology: firstly, personal expectations of psychology before commencing their degree course, secondly, subjective experiences of being a lesbian psychology undergraduate and thirdly, how the content of psychology as an academic discipline related to lesbian experiences.

Design: The study utilised a qualitative approach informed by grounded theory principles.

Methods: Semi-structured interviews were conducted with a sample of current or ex-students from three different institutions who had taken psychology as (at least) the major element of their undergraduate degree programme. To date six participants have been recruited and interviewed. Data was coded according to accepted grounded theory procedures.

Results: One of the most striking aspects of the women's discourse was they all switched back and forth between three distinct positionings – as a woman, as a lesbian and as an undergraduate. It was clear was that all the interviewees appeared to be politically aware, particularly when speaking from a woman's perspective. Overall findings indicated that personal expectations of psychology revolved around the understanding of the self and others, career development and personal achievement. In terms of participants' subjective experiences of being a psychology undergraduate however, the consensus was that the general atmosphere was not conducive to being lesbian; and finally there was a shared disillusionment with the content of psychology.

Conclusions: It was noted that regardless of the diversity of the women's experiences in terms of university, age and various stages of self-identification as a lesbian, there was great similarity in the types of issues they raised. The women clearly expressed levels of dissatisfaction with their experiences of studying psychology. It is clear that psychology as a discipline must ask itself questions about how it can encompass the sexual diversity of its student population into its social, teaching and learning practices.

Psychology and racism: A study of black students' experiences

S. JOBANPUTRA, University of Westminster.

While the existence of racism in psychology has long been recognised, its impact on black students has not received any attention. Consequently, this study was concerned with exploring the impact of psychology and racism on black students studying the subject. Students (of African-Caribbean and South Asian origin) from a number of psychology departments across the UK, took part in the research. Within the theoretical framework of standpoint science and using open-ended, semi-structured interviews, several major issues were explored, including the content of psychology, the quality of interactions with white staff and students, and coping mechanisms among black students. Qualitative analysis shed light on a number of factors, including the impact of racist content on black students, tense classroom dynamics between black and white students, and the importance of other black students and staff as a means of emotional comfort and support. A number of recommendations have been made to make psychology more inclusive, including greater emphasis on a representative curriculum, awareness of racism within psychology, and the need to attract more black staff and students. It is argued that failure to address these issues through institutional commitment will result in psychology being of disservice to black and other minority groups.

Symposium: Social identities and children's social lives

Convenors: P.J. LEMAN, Royal Holloway University of London & V.L. LAM, University of East London.

A growing body of work emphasises the important relationship between social identity, social context and psychological development. Many experimental studies have demonstrated consistent patterns in children's emerging knowledge about and attitudes towards their own and others' social groups. These studies point variously to the importance of knowledge about oneself, cognitive factors, the comparative context in which children's knowledge is formed, and the influence of broader social and cultural norms in influencing identity development. However, whilst this largely experimental work has generated important new knowledge about the development of social identity, less is known about the consequences of social identity for learning, development and a child's everyday interactions and life.

There are, however, good reasons for thinking that social identities have a profound significance and impact for children's everyday activities. For instance, differences in academic achievement have been consistently linked to key aspects of identity such as gender and ethnicity and a tradition of research in education has pointed to the importance of self-attributions and social identity in learning. Social identity has been linked to delinquency, friendship choices and peer interaction and can be seen to link with differences in the social environments that children grow up in. There remains, then, a need to ground the growing body of theoretical and experimental work on identity in the context of children's everyday lives and interactions.

This symposium brings together researchers working from a variety of perspectives, but all concerned with children's social identity and its relationship with psychological development. It focuses on the relationship between social identity and the social context of children's interactions.

Exploring the influences of gender and ethnicity on children's conversational dynamics

P.J. LEMAN, Royal Holloway University of London & V.L. LAM, University of East London.

Objectives: We examine how a child's ethnicity can influence their conversations with a peer when choosing a potential playmate. We also explore how ethnicity and gender may inter-relate to affect both conversations.

Design: We used an experimental design, dividing our sample of 430, seven- to eight-year-old children into two distinct sets for analyses.

A first analysis focused on the conversations and decisions made by Asian and white children in either same-ethnic or mixed-ethnic pairs. A second analysis compared a separate group of white and black children in same-ethnic and mixed-ethnic pairs. All pairs were same sex. For both analyses we used a statistical method correcting for non-independence to examine how a speaker's and partner's ethnicity might influence conversations. **Method:** Children were placed in pairs and asked to choose one from eight photographs of potential playmates. Conversations were recorded and coded using: (i) the Psychosocial Processes Rating Scheme (Leaper, 2000) which measures the extent of affiliation and assertiveness in children's interaction; and (ii) into three broad categories denoting conversation content and justification – physical appearance, shared social activities and personality traits or likely behaviour.

Results: In Asian-white pairings, white boys were more assertive than their Asian partner. White girls justified their choices more in terms of appearance and Asian girls more in terms of personality characteristics in these mixed-ethnic pairs. In same-ethnic pairs, pairs of black girls used more affiliation than white girls when discussing their preferences.

Conclusion: Results suggest that the effects of ethnicity differ for all-boy and all-girl pairs by the ethnic groups under consideration. Specifically, Asian-white pairs appear more influenced by status dynamics, whereas black and white conversations appear more influenced by different, 'socialised'

conversational styles. In everyday interactions, the relative impact of different aspects of a child's identity may be complex and reflect that children have at least some appreciation of this complexity.

Gender, peer interaction and cognitive development: Consistency as a behavioural style and its relation to cognitive progress

G. DUVEEN & C. PSALTIS, University of Cambridge.

Objectives: To examine how the gender of a child and their partner in a problem based interaction relates to consistency as a behavioural style and cognitive development.

Design: Both male and female children performing at a pre-operational level worked with a child performing at an operational level in either same or mixed-sex dyads, thus creating four different pair types. The pairs were asked to cooperate on solving a problem and agree upon a joint response. Post-tests (both immediate and delayed) with each child allowed for the evaluation of developmental outcomes. Control groups of both males and females for both the immediate and a delayed post-test were included in the design.

Method: 256 children aged 6.5 to 7.5 years were pre-tested on a Piagetian task of spatial perspective taking (see Doise, Mugny & Perret-Clermont, 1975). Subsequently, children were combined into pairs according to their pre-test response and their gender, and asked to work on the problem together. The interactions of the pairs were videotaped and analysed according to a coding frame which aimed to capture the dynamic unfolding of the task and the quality of the end-product. Measures of performance were also created based on the microhistory of the performances of the children throughout the experiment.

Results: Generally boys were more frequently observed to use a more consistent behavioural style than girls in mixed dyads, and this consistency was linked with pre- to post-test change. Boys originally performing at an operational level were more likely to stabilise their performance after working in the mixed-sex dyad, whereas girls originally performing at an operational level were likely to regress after participating in mixed-sex dyads. Boys originally performing at a non-operational level were more likely to make progress following participation in mixed-sex dyads than girls in the same position.

Conclusion: Results suggest that in some particular gender compositions consistency leads to progress for the subject whereas in other situations it leads to progress for the partner depending on the unfolding of the interaction and the end product of the discussion. The discussion considers the role of gender and identity in promoting these outcomes.

Adolescents explanations of paramilitary behaviour: Social identity justification

O. MULDOON, K. McLAUGHLIN, K. TREW, Queen's University Belfast & N. ROUGIER, University College Dublin.

Background: Identity in Northern Ireland has prime position in everyday life can be viewed as central to the social divisions. Despite Northern Ireland being relatively well researched however, a broad understanding of the nature and consequences of children's identity has yet to be reached.

Aims: This paper looks explores 14- to 16-year-old children's views of the relationship between identity and paramilitary involvement in young people.

Method: 180 children residing in the border region of Ireland, where social identity is likely to highly salient as well as contentious completed an essay writing task. These essays elicited children's views of social identities and factors that influence young people's engagement in paramilitary activity.

Results: The data suggest that children place much importance on their sense of national and religious identity. Paramilitary activity was often explained with reference to social identity being viewed as purposeful and/or reasoned by many respondents. Evaluations of those involved in paramilitary activity would also suggest that identity was central to the nature of these judgements.

Conclusions: These findings underline that

centrality of identity in young people's everyday lives as in their conceptualisations of themselves and others, particularly in conflicted societies.

Exploring the role of re-presentation in the construction of identity: Young people's resistance against racism

C. HOWARTH, London School of Economics.

Objectives: The central objective of the paper is to explore the role of social representation in young people's developing sense of identity, difference and community, in a racialised context.

Design: The research focussed on the ways in which young people represent themselves and how they react to the representations that others' have of them. In order to focus on this explicitly, the research was carried out in a stigmatised community, one where racist discourses enter into and delimit the social construction of community and identity.

Method: 44 young people living in South London from a mix of cultural groups were interviewed in a series of focus groups. Narratives developed in these settings were analysed in terms of young people's representations of community and racism and the consequences these had for their sense of identity.

Results: The data shows how young people are critically aware of the representation of their local neighbourhood, which they refer to as a 'label' or a 'stamp' that marks them as 'scum'. This has many consequences for the community - in terms of inter-personal relationships (making friends, joining sports teams), structural inequalities (experiences at school and employment opportunities) as well as for young people's sense of self, belonging and community.

Conclusion: This paper concludes with a discussion of the importance of resistance and critical engagement for understanding the social psychological processes of identification and representation. It also highlights the critical potential of social representations theory - particularly in terms of developing a critical social psychology of racism and resistant identities.

Symposium: Clinical Neuroscience: Highlights from Wales

Convenor: J. MARTIN, University of Wales, Bangor.

Strategic use of recollection during episodic retrieval tasks

E.L. WILDING & J.E. HERRON, Cardiff University.

In a typical recognition memory exclusion task participants initially encounter items in one of two contexts - for example, half of the items are seen and the remainder are heard. In a subsequent retrieval phase, participants are asked to endorse old words from one study context (targets), and to reject new test words as well as those from the second context (non-targets). The exclusion task comprises part of the process-dissociation procedure (PDP), which provides a means of estimating the relative contributions of two processes - recollection and familiarity - to performance on recognition memory tasks. One of the assumptions in the PDP is that both targets and non-targets are recollected during completion of the exclusion task. This assumption is called into question, however, by findings in a recent series of event-related potential (ERP) studies of memory retrieval in which the participants were young adults (ages 18 to 25).

In these studies, the left-parietal ERP old/new effect - the electrophysiological signature of recollection - was markedly larger for targets than for non-targets, consistent with the view that in these tasks participants adopted a strategy of depending upon recollection of target information to a greater extent than upon recollection of non-target information. In other apparently similar studies, however, parietal old/new effects for targets and for non-targets have been observed. This talk will comprise a description of these findings and one explanation for them, as well as some thoughts on the utility of this combination of paradigm and experimental measures as an assay for the degree to which control over recollection can be exerted in other participant populations, in particular school-age children and older participants.

Why are patients with right hemisphere lesions more likely to go to a nursing home? The consequences of processing without awareness

R. RAFAL, University of Wales, Bangor.

It is a sad and provocative fact that neurological patients with damage to the right temporal and parietal lobes are more likely to require residential care outside the family home than their more apparently disabled aphasic patients with comparable lesions of the left hemisphere. This talk will attempt a synthesis of the right hemisphere syndrome that explains why this is the case. It will consider several distinctive components of the syndrome that, conjointly, confound rehabilitation: loss of emotional communication, failure of global perceptual processing, spatial inattention, and degraded insight into disability and its impact on others.

I'll also consider the degree to which processing outside of awareness in patients with hemispatial neglect influences the feeling and behaviour of patients and contributes to social disability.

Proceeding from a simple bedside observation, that visual extinction is less when two competing items to be identified are different than when they are the same, I'll summarise experimental evidence suggesting that attention gates access to consciousness at the level of processing at which a stimulus is selected for action.

Impaired conditional task performance in a high schizotypy population: Relation to cognitive deficits

S. KILLCROSS, J.E. HADDON, D.N. GEORGE, L. GRAYSON, C. McGOWAN & R. HONEY, Cardiff University.

Cognitive impairments in schizophrenia have been characterised as reflecting a core deficit in the representation or use of task-setting or contextual cues to mediate appropriate ongoing behaviour. This analysis suggests that cognitive deficits in schizophrenia will be particularly evident when different task-setting cues dictate when different responses are required by the same stimuli. One simple task in which this is a requirement is a biconditional discrimination. In such a discrimination the presence of Context A indicates that Response 1 should be made to Stimulus X and Response 2 should be made to Stimulus Y, whereas the presence of Context B indicates that Response 2 should be made to Stimulus X and Response 1 should be made to Stimulus Y. Preliminary behavioural neuroscience experiments have indicated the selectivity of deficits in this task. Here we contrasted the performance of a population of participants who had completed the O-LIFE assessment of schizotypal traits (Mason *et al.*, 1995) on a biconditional discrimination with their performance on an otherwise equivalent, control discrimination that did not require use to be made of contextual cues. Participants scoring highly on the Introspective Anhedonia subscale, that has been allied to the negative and cognitive symptoms of schizophrenia, performed poorly on the biconditional, but not on the control discrimination. Recognition tests revealed that this deficit was associated with a failure to discriminate the items (context-stimulus combinations) that had been seen before from those that had not. These results suggest that the negative/cognitive symptoms of schizophrenia reflect a bias towards elemental, as opposed to configural, processing of context-stimulus conjunctions.

The modularity of visual working memory revisited

D.E.J. LINDEN, University of Wales, Bangor & H.M. MOHR, University of Frankfurt.

Objectives & Design: The manipulation of different kinds of content is fundamental to working memory. It has been suggested that the maintenance of colour and spatial information occur in parallel, but little is known about whether this holds true for manipulation as well. We tested the hypothesis that colour and spatial information are manipulated in parallel streams with behavioural and functional magnetic resonance imaging (fMRI) experiments.

Methods: We used a dual task delayed response

paradigm that required the maintenance or manipulation of colour and angles ($N=31$ for the behavioural study, $N=10$ for the fMRI imaging study on a 1.5 Tesla tomograph).

Results: Interference in the dual task condition occurred when both components tapped into the spatial system, but not for the conjunction of colour and spatial information. A concurrent phonological task did not interfere with either maintenance or manipulation, whereas a task requiring central executive processes interfered with manipulation only. In the fMRI experiment, we show that the segregation of frontal activation is content-specific, with dorsal premotor areas supporting maintenance and manipulation of spatial features and more ventral areas supporting maintenance and manipulation of colour. The comparison between maintenance and manipulation of colour and spatial information yielded no such dorso-ventral segregation of frontal activity.

Conclusions: Colour and spatial information are manipulated in parallel. We speculate that the ventral-dorsal dissociation of the cortical system for visual processing is conserved both for maintenance and manipulation processes.

Neurobiological and neuropsychological deficits in children with severely disruptive behaviour

S. VAN GOOZEN, Cardiff University.

Children who show persistent noncompliant antisocial and aggressive behaviour receive a psychiatric diagnosis of disruptive behaviour disorder (DBD). Research shows that, in the absence of effective interventions, the prognosis for children and young adolescents with DBD is relatively unfavourable: their behaviour can extend into adolescence, manifest itself in delinquency, and convert into other psychiatric symptoms, such as addiction. Studies on the neurobiology of DBD in young children are important, because antisocial and criminal adults are often characterised by childhood onset of deviant behaviour. There is increasing evidence that aggressive children, and especially those who persist with antisocial behaviour as they grow older, are characterised by neurobiological and neuropsychological problems. I will argue that stress-regulating mechanisms, including the hypothalamic-pituitary-adrenal axis and the autonomic nervous system, are important in explaining individual differences in antisocial behaviour. Low fear of punishment and physiological underactivity may predispose aggressive individuals to seek out stimulation or take risks, and may explain poor (social) conditioning and socialisation. Findings supporting this hypothesis are presented. Because DBD children are known to be impulsive we also investigated their executive functioning, and examined whether any existing inhibitory deficits are motivational rather than executive in nature. In the light of the findings from our studies it is our firm belief that that an investigation of the neurobiological and neuropsychological factors involved in antisocial behaviour disorder will ultimately indicate which types of interventions are likely to be most beneficial.

Hemispheric dissociation for verbal and non-verbal conceptual processing in the human brain

G. THIERRY & C. PRICE, University of Wales, Bangor.

A central question in the study of the human brain is how we manipulate the meaning of information that is not coded in words. There is accumulating evidence for a functional dissociation of verbal and non-verbal processing, but neither patient nor neuroimaging studies have yet established whether this dissociation is modality specific (limited to the perceptual level or extending into the conceptual level) and what brain regions are crucially involved. I will report results from two neuroimaging experiments establishing a dissociation between the left temporal cortex and the right temporal cortex for processing the meaning of verbal and non-verbal information, respectively. Remarkably, the dissociation is observed whether the modality is auditory (speech versus environmental sounds) or visual (text versus video clips). Although conceptual operations common to verbal and non-verbal

processing activate a left-sided perisylvian network, the left anterior temporal cortex is selectively more involved in comprehending words – heard or read – and the right mid-fusiform cortex is selectively more involved in making sense of environmental sounds and images. Critically, changing attentional and working memory task demands does not affect the dissociation. Nevertheless, none of the regions more activated for speech than non-speech stimuli appear to be selective to speech. The importance of functional connectivity in the emergence of functional specificity in the brain is stressed in closing.

Symposium: New directions in facial cognition

Convenor: V. MOORE, Goldsmiths College, University of London.

Chair & Discussant: T. VALENTINE, Goldsmiths College, University of London.

Twenty years ago face perception was a fringe topic in cognitive psychology, studied by a small group of researchers. Now face perception is central to current developments in cognitive psychology and cognitive neuroscience. Face processing is studied within the context of cognitive development, developmental disorders such as autism and Williams syndrome, learning and memory, visual perception, emotion, speech production and naming, social cognition and evolutionary psychology. Our understanding of the localisation and processing of faces in the brain has been informed by neuroimaging techniques, neuropsychological study of impairment of function following brain injury, computational modelling, as well as experimental studies of normal function.

The advances made in our theoretical understanding of face processing come at a time when faces have never been of more practical significance in our everyday lives. Use of facial images is currently being evaluated for use in biometric passports. One fifth of the world's CCTV cameras are in the UK. CCTV evidence is being used with increasing frequency to establish identity in courts. Some cameras are linked to automatic face recognition software.

This symposium will showcase some of the most important current trends in theoretical and applied aspects of face processing. Dr Olivier Pascalis (University of Sheffield) will review development of face processing. Recent work has shown that infants are capable of rather more sophisticated face processing than previously believed.

Dr Pascalis will discuss how differences in the nature of the tasks and stimuli used between different studies affect the results obtained.

Dr Anna Stone (Goldsmiths College) will describe recent work on unconscious perception. This is a long-standing issue in cognitive psychology that has generated considerable controversy. Carefully designed studies demonstrate the influence of affect on unconscious processing of famous faces. Prof. Tim Perfect (University of Plymouth) will demonstrate how a simple cognitive intervention based on naming the global shape in Navon letters can substantially enhance people's ability to identify somebody from a lineup. (Navon letters consist of a large, global letter [e.g. H] comprised of many small letters [e.g. s]).

Prof. Tim Valentine (Goldsmiths College) will discuss recent changes to the method used by the police to obtain formal identification evidence based on use of new video and information technology. The potential of recent innovations in the literature to enhance the reliability of the identification evidence will be discussed.

Time for discussion at the end of the symposium will allow an opportunity to explore current trends and debates with all of speakers.

On the development of face recognition

O. PASCALIS, University of Sheffield.

There is a general agreement on the existence of a developmental progression in the ability to recognise faces during infancy and childhood. It has been proposed that children recognise individuals on the basis of individual facial features, whereas adults recognise individuals by processing the relationships between the features of the face (configural processing). It is claimed that configural processing emerges only late in

childhood. However, the infant's literature presents evidence of 'configural processing'. I will review the literature to illustrate how the heterogeneity of the tasks and of the stimuli used has clouded our picture of the development of face processing.

Affective modulation of responses to famous faces perceived without awareness

A. STONE, Goldsmiths College, London.

There has been little investigation of the recognition of famous faces without awareness by normal participants. Recent work using masked 17ms exposures has shown that faces can be recognised as specific individuals without awareness of facial familiarity. Responses to famous faces depended on the participant's affective attitude towards the target person. For example, explicit familiarity detection was at chance overall, illustrating the absence of awareness, but more accurate if the famous person was evaluated positively than if they were evaluated negatively. There were also effects on attention orientation and the strength of the (vague and insubstantial) visual percept.

Processing bias effects in face recognition

T.J. PERFECT, University of Plymouth.

A wide literature has shown that face processing involves both featural and configural processing – with superior performance in face identification most often associated with greater configural processing of faces. Recent work in identification by eyewitnesses has shown that featural or configural bias, induced by a cognitive intervention before the lineup, can impact upon subsequent face identification accuracy, with configural bias leading to superior performance, and featural bias to impaired performance, relative to control. A series of studies will be presented that explore the theoretical and practical implications of the processing bias effect in face recognition. These studies, involving both eyewitness studies conducted in the field and laboratory-based studies, have started to reveal the conditions under which the effect is present, those in which it is not, and conditions under which the effect can be reversed. The theoretical implications of these data for the understanding of face recognition will be discussed.

Enhancing the effectiveness of video for eyewitness identification

T. VALENTINE, Goldsmiths College, University of London.

Over the last year there has been a major change in the UK, from extensive use of live identity parades to widespread use of video identification. This policy was informed by research on the fairness of the procedures. Research will be reported which evaluated innovative ideas for further enhancing the quality of eyewitness identification evidence. Strict sequential line-up instructions were found not to be effective in the context of video identification. However, presentation of moving images rather than a single still image, as used for eyewitness identification throughout the US, did provide protection against mistaken identification.

Symposium: Celebrating different relationships in the 21st century

Convenors: E. PEEL, Aston University & V. CLARKE, University of the West of England.

Chair: E. PEEL.

Discussant: V. CLARKE.

In the 21st century, psychology's understandings of relationships embrace, investigate and celebrate a multitude of relationship forms which move beyond – and indeed challenge – traditional heterosexual relationship patterns. The nuclear family is no longer normative, and contemporary Western societies reflect diverse intimate relationship forms – both actual and virtual. This symposium showcases a variety of current research addressing 'different' intimate relationships: including lesbian, gay and bisexual relationships, polyamorous relationships, heterosexual virtual online dating, and representations of 'breaking up'

in the self-help literature. Together these papers explore different facets of 'non-traditional' intimate relationships and provide a thoroughgoing critique of widely held psychological (and cultural) assumptions surrounding the process of relationship formation, development, recognition, and disintegration. Moreover, 'Celebrating different relationships in the 21st century' provides a methodological overview of cutting-edge relationships research spanning large-scale survey data, in-depth interviews and analyses of cultural texts. Thus, via these five contributions, we chart the diversity of psychology's methods on the relationships map.

Money talks? Same-sex partners discuss civil partnership, marriage and financial decision making

V. CLARKE, University of West England, M.L. BURNS & C.B. BURGOYNE, University of Exeter.

Objectives: This paper offers a qualitative analysis of data drawn from in-depth interviews with lesbian and gay couples about civil partnership, same-sex marriage and financial equality.

Design: The data are drawn from a broader study of money management in same-sex partnerships. Partners were interviewed at the same time but separately and asked for their views on the UK Government Bill on civil partnership, same-sex marriage and money management and financial equality in relationships.

Methods: The semi-structured interview data were coded and analysed using thematic analysis.

Results: The analysis shows that most participants were (broadly) in favour of civil partnership, but more ambivalent about same-sex marriage. We identify some of the reasons participants offered for their support and opposition to civil partnership and marriage both in general terms and in relation to their current relationship.

Conclusions: Although financial equality was obviously salient for the participants, many identified equality, and financial equality in particular, as their main reason for supporting civil partnership, and for wanting legal recognition of their current relationship.

Legislating relationship equality? Results of a large-scale survey with lesbians and gay men

E. PEEL, Aston University & R. HARDING, University of Kent.

Objectives: This paper provides an analysis of perceptions about the legal recognition of same-sex relationships ($N=1538$).

Design: An online survey was developed to assess perceptions regarding same-sex marriage and civil partnership, using statements rated on a forced-choice Likert-type scale with space for qualitative comments and collection of demographic information. Statements included 'lesbian and gay couples should be treated the same as heterosexual couples in law'.

Methods: Strategic opportunistic sampling and snowball sampling were used to achieve a large sample, derived from 27 different countries. Most respondents identified as lesbian or gay (69.4 per cent, 1050) and were currently in a same-sex relationship (67.2 per cent, 1014).

Results: Analysis indicates that the legal recognition of same-sex relationships is perceived as an important equality issue for lesbians and gay men, and more support is evident for marriage than for civil partnership (particularly from those residing in North America). Heterosexuals were more likely to support civil partnership than lesbians and gay men, and lesbians are as positive about legal relationship recognition as gay men. Liberal formal equality arguments are better understood and more accepted than substantive or radical equality arguments.

Conclusions: Our findings highlight that whilst lesbians and gay men strongly support the legal recognition of same-sex relationships they are particularly in favour of same-sex marriage, and that all individuals (regardless of sexuality) should have access to the same relationship choices/statuses.

Prescriptions/descriptions: Examining relationship 'norms' and the 'othering' of relationships within self-help texts

K.E. NICHOLLS, City University.

Objectives: This paper seeks to examine personal relationship self-help texts; texts specifically pertaining to personal relationship 'break-ups', issues of 'monogamy' and 'infidelity' within relationships. It is important to investigate and interrogate such sites of information because they are prevalent within society; they provide an accessible and public form of guidance and are usually framed as coming from a psychological perspective. In this instance the texts are examined in terms of the 'norms' they present as to relationship 'styles', sexuality and personal goals (in terms of personal relationships). By implication, these texts also describe 'other' relationships and personal preferences, which are constructed as less or completely undesirable. This research forms part of a larger research project examining the social constructions of 'infidelity', 'monogamy' and relationship 'break-ups'.

Design: Self-help texts were sampled from a variety of Internet searches for popular texts discussing personal relationship issues. Texts were selected for their relevance and coverage of infidelity, monogamy and relationship break-ups and for their publication date – the majority of texts sampled being published within 2003–2004.

Methods: The texts were analysed using a form of discourse analysis and were examined for their presentation and construction of infidelity, monogamy and relationship break-ups. They were also examined for the approach and 'status' of the knowledge contained within the self-help text (for example, in terms of adopting a hierarchical or non-hierarchical approach to the knowledge contained within the text).

Results: Within this paper the focus will be on three components of the overall findings of this research project. Firstly, the finding that the majority of the texts examined contained heterosexist norms, which often went unchallenged yet were implicit in the advice/discussions present within the texts. Thus othering sexualities that do not adhere to heterosex practices. Secondly, this paper will examine the 'coupledom' focus inherent within the majority of texts analysed, which often works to construct a privileged position for monogamous relationships between two people of opposite sex. Finally, the particular language techniques utilised to normalise and 'other' relationships styles, sexualities etc are also explored.

Conclusions: This research highlights the importance of examining prevalent cultural texts as they are a prime example of a mass communication of advice. Inherent assumptions present within such material need to be explicated because such texts inevitably present normalised ways of being and, therefore, also 'other' 'alternative' ways of being – which has various implications for individual subjectivity upon reading such material.

Metamours, frubbling and ethical sluts: Constructing a new language of relationships for polyamory

M. BARKER, London South Bank University & A. RITCHIE, Southampton Institute.

Objectives: 'Polyamory' describes the idea that it is possible to form multiple loving relationships. Polyamorous communities have grown since the advent of the internet, challenging conventional relationship 'rules' around monogamy and partner choice. This study explored ways in which polyamorous people drew on, and challenged, the dominant language of relationships in their constructions of their own identities and set-ups.

Design & Methods: The way in which polyamorous people negotiate their identities using both the conventional language of relationships and alternative languages was explored using real-life and on-line discussions as well as analysis of polyamorous literature and websites.

Constructionist discourse analytic techniques were employed.

Results & Conclusions: The possibilities opened up by polyamory appear to be somewhat limited by the conventional language of partnerships, infidelities and jealousy. However, alternative languages are emerging which offer potential for

new identities and relationship patterns, for example reclaiming of the word 'slut', and words for a positive 'opposite' to jealousy.

Searching for love on the net

M. WHITTY, Queen's University Belfast.

Objectives: While studies that have investigated the progression of romantic relationships via Chat Rooms, MUDS and newsgroups have highlighted some important findings in respect to how serious, 'real', and successful these online relationships can be, this study was interested in whether results found in these previous studies generalise to meeting people via online dating services. In particular, it was interested in theories on presentation of self and the progression of relationships from online to offline.

Design: This study interviewed 30 men and 30 women about their experiences with using an Australian online dating service. These participants were randomly selected by the online dating company and were sent an e-mail invitation to participate in the study. A content analysis was performed on the data which was also re-coded to check on re-coder reliability.

Methods: Given that a sample from across Australia was desirable and that those without great e-mailing or instant messaging skills (and indeed many of the participants were not particularly internet savvy) might be excluded from the study it was elected to carry out telephone interviews.

Results: The results revealed that the progression of these relationships was markedly different to relationships developed via other spaces online. For example, most participants moved from communication from e-mail to phone to face-to-face at a much quicker pace than romantic relationships formed in other spaces online. These individuals also established trust in different ways to how previous research has found that trust is established in relationships developed in Chat Rooms. Moreover, how people strategically presented them 'selves' was also different to previous studies on developing relationships via newsgroups.

Conclusions: In conclusion, it is important that we do not consider the internet as one generic space, especially when it comes to relationship development. Furthermore, that successful relationships developed in online dating sites, contrary to previous studies on newsgroups, might have more to do with presenting an 'actual' self rather than an 'ideal' self.

Symposium: New research in sexual health/HIV

E. SHAW, DCP Faculty of HIV/Sexual Health, Barnet, Enfield & Haringey Mental Health Trust, St. Ann's Hospital.

This symposium is a product of the DCP Faculty of HIV and Sexual Health commitment to encouraging research in the field, and reflects recent service trends.

The first paper looks at the relationship between shame and sexual assault, finding significant associations and proposing useful clinical implications.

The second paper examines an innovative and challenging psychology service for commercial sex workers. The clients' needs are mapped and adaptations to working practice suggested.

The third papers researchers have approached the problem of the increasing prevalence of sexually transmitted infections by enhancing staff confidence in applying health promotion in an HIV clinic using Motivational Interviewing. They found the psychological technique useful in increasing health promotion knowledge and confidence in front line staff.

As sexual health/HIV psychologists are increasingly working with refugees and asylum seekers who have been raped and tortured, the fourth researcher has looked at the impact on psychologists providing help. In particular they stress the need to examine social and political factors in the aetiology of distress, and the training and support needed to be able to provide help to these individuals.

The fifth paper shows high levels of vicarious traumatisation in overseas aid workers and makes recommendations for services that employ them.

Increasingly sexual health/HIV psychologists are working in countries requiring aid, especially in relation to HIV, and have much to offer in this area.

The experience of shame for female survivors of adult sexual assault: A quantitative and qualitative investigation

M.E. VIDAL, University of East London & J. PETRAK, Barts and the London NHS Trust.

Objectives: This study aimed to investigate the extent to which women sexually assaulted as adults reported shame and whether any aspects of the assault experience were more likely to lead to a shame response. The study also aimed to explore in detail how shame was experienced, described and understood by women.

Design: This cross-sectional study used both quantitative and qualitative methods to investigate shame and adult sexual assault.

Methods: Part 1 used quantitative methodology. In this part, 25 women recruited from a sexual health clinic and from newspaper advertisements completed a questionnaire that included questions about the sexual assault (SA) and rating scales on shame (ESS) and trauma (IES-R). Part 2 used qualitative methodology. Semi-structured interviews were conducted with six women, recruited via Part 1.

Results: The results yielded from descriptive and non-parametric statistics for Part 1 revealed how shame was a significant psychological response for women following an adult sexual assault (88 per cent of women reported feeling shame about the SA). A history of previous sexual victimisation, physical consequences, self-blame, concealing the assault and being assaulted by a known assailant were found to significantly ($p < 0.05$) influence the extent to which shame was reported. Results also indicated a significant relationship between shame and trauma. For Part 2, transcripts were analysed using a material-discursive approach. A number of themes were identified which enabled a greater understanding of the shame response following sexual assault identified in Part 1. These included the role of responsibility and lack of validation from others (influenced by dominant social constructions of rape) on the development of a shamed identity. Other themes included not telling others in order to manage a shamed identity and the importance of solidarity and validation in the fight to resist shame.

Conclusions: Shame is a significant psychological response following adult sexual assault that is influenced and maintained by rape supportive culture. Clinical implications of the role of shame and trauma will be discussed.

Setting up a clinical psychology service for commercial sex workers

C. STEVENSON, K. LEVERETT, H. WHEELER & J. PETRAK, Barts and the London NHS Trust.

Objectives: This paper will identify challenges in setting up a clinical psychology service for commercial sex workers (CSWs).

Background: There is a paucity of literature on providing psychological services for CSWs. 'Open Doors' is a sexual health project for CSWs in East London providing services within clinic and community settings. A need to address HIV/STI prevention issues within the broader psychological and social needs of women who sell sex has been identified. There is evidence of high levels of psychological distress among CSWs (Baker *et al.*, 2003) amongst other psychosocial stressors, e.g. safety and fear of violence (Church *et al.*, 2001). Low rates of access to both medical and psychological services are, however, prevalent within this population.

Method: Clinical psychology established an 'open access' brief intervention clinic for CSWs. Issues of establishing trust within this population suggested the need to provide a 'named' female psychologist. The psychologist accompanies 'Open Doors' workers on outreach to familiarise local CSWs of the availability of the service. Evaluation of the service, including uptake, client satisfaction, psychological distress and outcome, is ongoing using quantitative and qualitative methods. Data is presented on key themes identified in providing psychological services to CSWs.

Results: Key themes identified included: 1. Service

development: establishing trust, ensuring confidentiality, close MDT working, attendance on outreach, flexibility, crisis management, safety, establishing links with other agencies; 2. Complex psychological and social needs: exiting (leaving the profession), domestic and sexual violence, difficulties maintaining safer sex at work and with regular partners, immigration/legal issues, debt, sexual and general health issues, depression, self esteem, CSA, trauma, substance misuse. **Conclusions:** CSWs present with a range of complex psychological and social needs. While this population may have reservations about accessing 'standard' mental health services, a flexible psychology service working in close liaison with outreach workers may be effective in addressing these needs.

Training nursing staff to prevent sexually transmitted infections in people living with HIV and AIDS: The use of Motivational Interviewing

A. BYRNE, R. WATSON, C. BUTLER & A. ACCORONI, The Mortimer Market Centre, Camden Primary Care Trust.

Objectives: Recent reports indicate increased prevalence of STI's among people living with HIV/AIDS (PLHA) in the UK. Nursing staff in a central London HIV clinic identified lack of confidence in raising sensitive sexual health issues among PLHA as a factor contributing to reluctance to address sexual health with clients. Motivational Interviewing (MI) provides a framework to discuss in a non-confrontational manner sensitive and potentially conflictual issues to do with personal behaviours. MI has demonstrated efficacy in other settings, such as drug and alcohol services, and smoking cessation programmes. The authors evaluated the applicability of MI in addressing the training needs identified in discussion with nursing staff in a central London HIV clinic.

Design: The participants were ten nursing staff of the HIV clinic. The intervention comprised three stages. Stage 1: Needs Assessment. Stage 2: Delivery of training. Stage 3: Six-month follow-up. A training package was developed in consultation between nursing staff and the authors (clinical psychologists). It comprised didactic teaching, group work and role plays based on common challenging scenarios (e.g. clients who are well informed about STI transmission but attend with repeat infections). The training was evaluated by self-report measures collecting qualitative and quantitative data. The measures, together with a group discussion, were repeated six months after the training session.

Results: Motivational Interviewing was experienced by participants as a useful and constructive approach in discussing Sexual Health issues with PLHA. Participants reported increased knowledge and confidence in addressing these issues with their clients.

Conclusions: It appears that frontline staff, who are most likely to come into contact with people at risk of sexually transmitted infections (STIs), can be trained with relative ease to engage in discussions regarding STI prevention using this psychological technique. Training programmes, however, must be tailored to the particular needs and contexts of participants.

Clinical psychologists' experiences of working with survivors of torture

S.J. KAPP, University of East London.

Torture has been very little researched within clinical psychology, although a substantial number of clients from refugee and asylum-seeking populations have been subjected to torture experiences. Psychologists working with these client groups face various challenges, including bridging cultural and language barriers, establishing therapeutic relationships with very vulnerable people, and managing the emotional impact of hearing horrifying stories of atrocities. Moreover, the nature of torture as a tool of oppression demands an explicit recognition of the role of social and political factors in human distress, which are often given little weight in traditional psychological theory and formulation. The aspirations of the profession towards political 'neutrality' as scientist-practitioners may thus conflict with strongly held ethical and moral

positions taken by psychologists who work with survivors of human rights' violations. To investigate the lived experience of practitioners, eight clinical psychologists working in this field were interviewed about their experiences of doing such work, their ways of managing the emotional and conceptual challenges, and their view of their role as a psychologist working in a highly politicised context. The data were analysed using Interpretative Phenomenological Analysis, and themes are discussed which relate to the impact of this work on clinicians, its effect on their personal and professional identity, and the development of politically-aware clinical practice.

The findings suggest that traditional psychological theoretical models fail to take sufficient account of political and social factors in the aetiology of distress (including UK domestic policies on Immigration and welfare); that training and support for clinicians dealing with torture survivors are inadequate in many NHS services; and that the practice of psychology, where it strives for 'objectivity', may actually be collusive with the systems which allow torture and political repression to be perpetrated. This paper calls for a review of the 'neutral' stance of the BPS as a professional body, for greater awareness of the social and political factors impacting on clients, and for us to address our responsibilities as a profession in light of this.

Clinical and sub-clinical post-traumatic stress responses and the humanitarian aid worker: An exploration

A.J. QUAITE, University of Hertfordshire.

There is a substantial body of research surrounding the development of Post-Traumatic Stress Disorder (PTSD) in emergency personnel and other professional groups. Despite the risk of direct and indirect exposure to traumatic events being greatly increased by undertaking work in the field of humanitarian aid, there is little research aimed at investigating PTSD and stress related responses amongst International Relief and Development personnel. This is of concern not only because much of this work is increasingly centred around the impact of HIV-AIDS on local populations, but also because of the likely deleterious effects this work may have on those who are attempting to support these populations.

The present study investigated the frequency of direct & vicarious trauma related stress reactions in this group of workers and explored a range of possible factors associated with the differential development of these reactions. This involved an analysis of the degree of elaboration of personal constructs and a hypothesised failure amongst symptomatic individuals to elaborate their traumatic experiences. A cross sectional approach was adopted that utilised: (1) A self report screening tool based on DSM-IV criterion to identify caseness and allow for exploratory and comparative analyses of: demographic, employment, exposure variables and degree of stress reaction (clinical and sub-clinical degree of PTSD); and (2) A repertory grid technique to elicit and explore differences in degree of elaboration in personal construing between sub-groups (exposed and symptomatic cf exposed and asymptomatic). A sample of 44 respondents was identified from a targeted population of 127 aid workers in order to allow comparisons of those individuals who had gone on to develop PTSD symptoms with those who had remained asymptomatic.

Results, based on preliminary analysis of a partial data set, showed that exposure to trauma in the sample was high. Some 59.4 per cent of respondents ($N=37$) reported that they had directly experienced at least one traumatic event as a result of their work. Of these, 24.3 per cent reported that they had been exposed to five or more events. These numbers increased significantly when indirect exposure was taken into account. 78.4 per cent of the sample reported that they had been exposed indirectly to at least one work related trauma (through listening to accounts affecting colleagues and overseas Partners, viewing photographic material, etc.). When taken together, analysis showed that 97.3 per cent had been exposed either directly or indirectly to at least one of the 17 DSM-IV traumatic events categories. 86.5 per cent of those Workers who had been exposed were symptomatic at some level, with 40.5 per cent

meeting DSM-IV diagnostic criteria (A to E) for PTSD. Analyses showed that respondents who met DSM-IV criterion for PTSD were also reporting significantly higher levels of Vicarious Traumatization ($t=3.206$; $df\ 34$; $p=0.003$) as well as Job Burnout ($t=3.205$; $df\ 34$; $p=0.003$). Interestingly however, there was no significant difference in the levels of reported Compassion Fatigue between the two groups. Whilst there appears to be evidence of some interesting gender differences, thus far, analysis of available grid data has failed to reveal significant group differences in the personal construing of traumatic experiences. However, it is anticipated that the inclusion of additional data will demonstrate at least a trend towards significant differences in this respect. The preliminary findings suggest that significant numbers of aid workers in this particular sample were experiencing stress reactions that ranged from Compassion 'burn out', through sub-clinical, to full blown PTSD. If these findings are generalised to other populations of Aid Workers, then Aid Agencies will be challenged to implement widespread psychological support 'as a matter of course' given the apparent potential for vicarious traumatization highlighted in the study. Clearly, an improved understanding of the issues surrounding occupational exposure to trauma; adverse stress reactions and a consideration of factors related to risk and resiliency, not only advance the theoretical knowledge base, but have direct, practical implications for this important and unique group of individuals, the organisations they work for and the individual they are seeking to help.

Symposium: Cognition, symptoms and emotion

Convenor: S. TAI, University of Manchester.

Predisposition to hallucinations and delusions: The influence of trauma and interpretation in predicting emotional and behavioural responses to psychotic-like experiences

M.L.C. CAMPBELL & A. Morrison, University of Manchester.

Objectives: The primary objective of the study is to extend the current literature examining non-pathological forms of hallucinations and delusions. The present study takes a symptom-orientated approach in examining the role of traumatic life experiences and interpretation in predicting emotional and behavioural responses to unusual experiences and beliefs in non-patients. It is predicted that there will be a positive association between experiences of childhood trauma and psychosis-like experiences and that experiences of childhood trauma will be associated with negative beliefs about psychosis-like experiences. In addition negative beliefs about hallucinations and delusions are expected to be associated with distress whereas positive beliefs are predicted to correlate with the occurrence of these psychosis-like symptoms. In relation to behaviours it is anticipated that negative thought control strategies and avoidant safety behaviours will be associated with predisposition to hallucinatory experiences and delusional ideation.

Design: This survey was conducted via the Internet using a web-based questionnaire. Such a method allows the recruitment of a larger number of participants; consequently the power of the study is increased. Furthermore, social desirability effects are minimised in web-based questionnaires; this is an important advantage when examining the sensitive area of mental health.

Method: All students from the University of Manchester were sent an e-mail inviting them to take part in the study. Five-hundred-and-forty-four students volunteered to take part; the male to female ratio of the sample was 175:369 respectively. The questionnaires employed included: Launay-Slade Hallucination Scale, Peter's Delusions Inventory, Childhood Trauma Questionnaire, Interpretations of Voices Inventory, Beliefs About Paranoia Scale, author-devised Safety Behaviours Questionnaire, Thought Control Questionnaire and the General Health Questionnaire.

Results: Correlational and regression analyses were performed on the data gathered and it was found that trauma, most subscales relating to thought control and avoidance and internal safety

behaviours all significantly predicted predisposition to both hallucinations and delusions. The distraction subscale on the thought control questionnaire did not gain significance in its relation to other variables; however it was significantly and negatively associated with delusional distress. Childhood trauma also predicted negative beliefs about these psychotic-like experiences. Positive beliefs about hallucinations and delusions predicted predisposition to these experiences whereas negative beliefs about hallucinations and delusions predicted distress. **Conclusions:** The present research findings strongly support the notion of a continuum of psychosis; evidence of non-pathological hallucinations and delusions in a non-clinical population were discovered, indicating that there is no clear dividing line between schizophrenia and normal functioning. The clinical implications of the findings of this investigation must be considered cautiously as the participants were from a non-clinical population. However, if similar processes exist in the development and maintenance of hallucinations and delusions in psychotic patients as are present in the general population then interpretations regarding patients hallucinations and delusions should be assessed because the modification of negative appraisals of psychotic phenomena may reduce the distress experienced by patients. In addition, positive interpretations of hallucinations and delusions should also be considered in a clinical setting, particularly in preventative therapy for ultra high-risk individuals, as positive interpretations of some psychosis-like phenomena are associated with the occurrence of the phenomena. It is also advised that clinicians should routinely ask about a patient's trauma history; this will aid understanding of some of the negative beliefs that a patient may hold in relation to their psychotic experiences and certainly with respect to Cognitive Behaviour Therapy (CBT) will facilitate belief change and alleviate distress to some degree.

Understanding persecutory delusions

R. CORCORAN, S. CUMMINS, R. KNOWLES, M. CAMPBELL, R. BENTALL, University of Manchester, R. MOORE, N. BLACKWOOD, R. HOWARD, Institute of Psychiatry, G. ROWSE, University of Sheffield, J. FELLOWS & P. KINDERMAN, University of Liverpool.

Background: There is a well-established literature exploring the psychology of persecutory delusions that focuses on explanations in terms of data gathering biases, attributional style, attention to threat and theory of mind. What is not well understood at this time is how these individual models relate to each other. This paper will report the findings of a study that aimed to clarify the relationship between the various cognitive anomalies that have been proposed to account for persecutory delusions in the previous literature.

Design: Measures of attributional style, probabilistic reasoning, need for closure and theory of mind have been collected along with measures of more basic cognitive functions in groups of 20 to 30 patients with persecutory delusions, remitted delusions, depression and in a normal control group. **Results:** Multivariate Analyses of Variance explored the cognitive characteristics of the groups while regression analysis identified the cognitive models that predicted group membership most effectively.

Conclusions: These findings will enable a more detailed and sophisticated exploration of alternative explanatory models of persecutory delusions at the cognitive level.

Can a neuropsychological intervention improve insight in schizophrenia? A randomised, controlled trial

S.L. KAISER, R. CORCORAN, M. ASLAM, S. LEWIS & R.J. DRAKE, University of Manchester.

Objectives: To improve insight in schizophrenia through cognitive therapy with an emphasis on metacognition. Because lack of insight has been linked to neuropsychological impairment, especially in frontal regions, insight may improve if these deficits are remediated. More subtly, awareness of illness may be associated with participants' ratings of accuracy of self-performance on a set-shifting task (Koren *et al.*, 2001). Thus, metacognition may

provide a link between neuropsychological function and insight in schizophrenia. We hypothesise that a programme of cognitive remediation therapy (CRT; Wykes *et al.*, 1999) with an emphasis on metacognition will improve deficits in insight, especially in relabelling of symptoms, and also improve attitudes towards medication and compliance.

Design: This ongoing study uses a single centre, randomised, blind-rated controlled trial with repeated measures to detect differences between the experimental and control groups and any improvement within subjects.

Methods: Participants have been diagnosed with schizophrenia or a schizophrenia-spectrum disorder, are under the age of 50, and have a global insight score below an empirically established maximum (Drake & Lewis, 2003). Participants are also assessed for drug attitudes, social functioning, metacognition, neuropsychological function, intelligence, symptoms, self-esteem, and depression. Participants randomised to the CRT group complete 15 hours of increasingly complex cognitive tasks targeting attention, memory, planning, and self-monitoring while continually evaluating both their performance and strategies used to complete the tasks. During the next seven hours, individually tailored strategies are created and continually assessed to address each participant's most problematic everyday cognitive failures. Participants randomised to the befriending control group engage in 22 hours of neutral, positive social interaction, which may independently affect self-esteem and mood during CRT. At the end of the intervention, all participants are reassessed.

Results: Preliminary results will be presented.

Dynamics of persecutory delusions: Two empirical studies exploring the 'poor me' vs. 'bad me' paranoid fluctuations

S.S. MELO, University of Manchester.

Objectives: To investigate whether there are two types of paranoia, 'poor me' and 'bad me', as described by Trower and Chadwick (1995), and whether fluctuations on the beliefs about the deservedness of persecution are associated with psychological measures.

Design: Trower and Chadwick's (1995) distinction of two types of paranoia raised the unsolved and controversial issue of how to account for a 'Bad me' paranoia (where the patient believes his or her persecution to be justified). Bentall *et al.* (2001) have recently proposed a dynamic account for paranoia that can be extended for this paranoid presentation. Two studies have been carried out to examine the instability of paranoia, looking at changes in the patients' perception of persecutory ideation in relation to a number of psychological variables, self-esteem fluctuations, attributional processes and life events across time. Both studies were conducted in two phases: baseline and follow-up (fortnightly in the first study and daily in the second) to assess possible fluctuations in the measures.

Methods: Both studies had 45 inpatients experiencing persecutory delusions each assigned either to 'poor me' (PM) or 'bad me' (BM) groups, according to their rating of a perceived deservedness scale and on a five-questions questionnaire on deservedness of persecution. In the first study, participants were assessed for depression (BDI); construction of the self (Self to Others Scale); autonomy and sociotropy (PSI); perceived parental behaviour (PBI); attributional style (ASQ) and meaningful daily events (DEI, devised for the study). In the second study, we measured participants' self-esteem (RSRQ); self-discrepancies (HSDQ) and significant daily and weekly events as well as their correspondent attributions (SDEI and WHUI, both devised for the study). A healthy control group was also assessed in both studies.

Results: Work is still in progress. However, the main result from our first study was that many patients' perceived deservedness of persecution varied across time, so that some patients were PM at one point in time but BM at another.

Conclusions: Though it was proved the existence of two different types of paranoia, the findings gathered until now suggest that the two types of paranoia may reflect different stages of the same dynamic paranoid process.

Emotion and psychosis: A review and integration

S. TAI, University of Manchester & P. KINDERMAN, University of Liverpool.

Background: A number of recent psychological models of psychosis (Bentall, Kinderman & Kaney, 1994; Peters, Day & Garety, 1997; Dudley, John, Young & Over, 1997; Garety & Freeman, 1999) have been proposed. Although different psychological processes are implicated by different researchers for different psychotic experiences, a common feature is the suggestion that these processes are influenced by emotional factors.

Design: This paper attempts to review and integrate the research findings in this area to generate a generic model. The concept of 'emotion' is discussed as a conjunction of affect and cognition. It is proposed that both affective and cognitive abnormalities are important in psychosis. It is further proposed that positive and negative affect is a suitable theoretical framework.

Results: Causal psychological mechanisms in mania, thought disorder, delusions and hallucinations are discussed – covering self-regulation, emotional defence, intermingling, causal attribution, theory-of-mind, social cognition and source monitoring. Finally, it is suggested that biases and deficits in both affective and cognitive elements of emotion may have specific interactions with each of these processes.

Conclusions: By examining the available research evidence in favour of such a model (and by specifying the gaps in the available literature), affective biases, cognitive biases and cognitive deficits are mapped onto the available research on psychological processes in psychosis.

Symposium: Spirituality, counselling and psychotherapy

Convenor: N. TEHRANI, Assessment & Rehabilitation Consultants, Twickenham.

Chair: W.J. ALLADIN, University of Hull/Humber Mental Health Services NHS Trust & Centre for Work Stress Management.

Purpose: To increase the participants awareness of the impact that spiritual experiences and beliefs have on the counselling process and outcomes.

This symposium by two speakers, each with unique rich spiritual and psychotherapy traditions, seeks to illuminate the missing dimension in much of mainstream contemporary counselling and psychotherapy. Many professionals seem to confuse spirituality with a narrow view of religion and some prefer to focus on the science of psychotherapy from which the art has been exorcised. At the heart of spirituality is the essence of what it means to be human. Only by embracing a more robust and sound spirituality (which does not require a belief in religion) and integrating it into counselling and psychotherapy can we claim to be empowering, enhancing and enabling both of ourselves and our clients. Finally, no symposium is complete without dialogue, discussion and debate by the audience who will be welcomed to participate in the discussion session at the end.

Background: Counselling, psychology, and psychotherapy have a problem with religion and spirituality that goes back to their modern origins within the Victorian era when they aligned themselves with modern science and developed along secular lines. Any practitioner respecting their clients' spirituality may find this creates difficulties with their supervisor and that there is a gap in their training around being present to their clients' spirituality.

Key Points:

- Spirituality matters;
- Comparing curing with healing;
- What is healing?;
- Who are the healers?;
- What are the dangers of healing for the healer?;
- Experiences of counsellors working with traumatised clients;
- The injured healer;
- Building a resilient spirit;
- The Bolletino model of spirituality in psychotherapy.

Conclusions: Working with distressed and traumatised clients can endanger the health of the counsellor or other carer. These injuries may go unnoticed. There is a need to improve the training of counsellors and supervisors to deal with injuries

that attack the essence of what it means to be human. It is concluded that only by embracing a more robust and sound spirituality and integrating it into counselling and psychotherapy can we claim to be empowering, enhancing and enabling both of ourselves and our clients

Integrating spirituality and psychotherapy: Beyond mindfulness

W.J. ALLADIN, University of Hull/Humber Mental Health Services NHS Trust & Centre for Work Stress Management

There is much that is good and much that is questionable in new age spirituality. What is needed is a model of spirituality for psychotherapy and mind-body medicine which allows practitioners to include spirituality in their work in an sound, integrated and meaningful way. One such approach is the Bolletino (2001) model which is used as a framework for this paper since it applies equally to believers, atheists and agnostics. In this model, spirituality involves far more than just believing something: it is a way of looking at the world that is expressed in the way we live and the way we experience our lives. The one fundamental principle that informs it is that life is sacred. The implications that flow from this premise for professional practice are discussed. This approach is also compatible with humanistic and existential approaches to counselling and psychotherapy as it is with the newer forms of cognitive behavioural therapies such as acceptance and commitment therapy and mindfulness based approaches. Ultimately, there are three existential questions we all are concerned about : Why am I here? What am doing with my life? Where am I going? But we rarely ask these questions until calamity such as death or adversity strikes those close to us which then leads us to ask: Why me? Why now? Why this? It is concluded that only by embracing a more robust and sound spirituality and integrating it into counselling and psychotherapy can we claim to be empowering, enhancing and enabling both ourselves and our clients.

Healing the healers

N. TEHRANI, Assessment & Rehabilitation Consultants, Twickenham.

This paper aims to show how counsellors and others involved in providing support and care to clients who have experienced a personal tragedy or other distressing event can suffer injuries to their emotional and spiritual well-being. Although there has been some work on the impact of working with traumatised and distressed people (Figley, 1995) this has tended to emphasise the damage to the physical and psychological well-being. Some traumatic incidents are so horrifying that they have the power to challenge the very essence of what it is to be human. This paper presents the arguments that there is a need to do more to understand the spiritual dimensions of dealing with highly distressed and traumatised clients. It is concluded that working with distressed and traumatised clients can endanger the health of the counsellor or other carer. These injuries may go unnoticed. There is a need to improve the training of counsellors and supervisors to deal with injuries that attack the essence of what it means to be human.

Symposium: Effects of brain injury on survivors' partners and families

Convenor: W.H. WILLIAMS, University of Exeter.

Brain injury can lead to a range of neuro-behavioural deficits that may often lead to difficulties in relationships. This symposium includes studies exploring brain areas associated with skills that appear necessary of effective relating, consequences of injury on the quality of spousal relationships, the coping styles of parents who have children who have had brain injury, and case studies in neuro-rehabilitation.

Factors affecting quality of spousal relationships in brain injury compared to chronic pain and healthy controls

A. BURRIDGE & W.H. WILLIAMS, Exeter University.

Previous research has established spousal relationships following brain injury are particularly vulnerable to strain and breakdown. Changes in personality, including reductions in insight, and changes in socio-emotional processing and behaviour have been implicated but have not been systematically investigated. We examined spousal relationship satisfaction following an acquired brain injury to one partner, maintaining a focus on socio-emotional skill and insight. Couples affected by chronic pain and a group of healthy couples were used for comparison and control. Compared to healthy controls current satisfaction was poorer in the brain injury couples, and satisfaction with the relationship had reduced from pre to post injury. Skills in cognitive, behavioural and emotional domains and specific socio-emotional skill were poorer in the brain injury group than in controls. Significant correlations were found between socio-emotional skills and insight therein, and partners' ratings of relationship satisfaction. Results suggest an especially important role for empathy, which differentiated between the groups in terms of functioning and insight. Links to previous research and implications for rehabilitation services are discussed.

Anger and violence in families after Acquired Brain Injury (ABI): Working systemically within neurorehabilitation

G.N. YATES & S. MOHAMED, Oliver Zangwill Centre, Cambridgeshire.

The conceptualisation and treatment of anger and violence after acquired brain injury has traditionally been founded upon an individualist perspective. Anger management approaches have been for the most part on neuropsychiatric, neurobehavioural and cognitive-behavioural frameworks. An alternative approach to anger and violence after ABI in post-acute community settings is presented, drawn from the systemic family therapy literature on domestic violence. This approach is characterised by a focus, during both assessment and intervention, on the relational and wider psychosocial context in which anger and violence occurs. It is suggested that this focus provides a significant contribution to this area of work, both in terms of complementing existing approaches and in terms of wider neurorehabilitative aims in general. This discussion is illustrated and support by a case study.

Caregiver stress and coping in paediatric brain injury

C. CHUAKIA & W.H. WILLIAMS, Exeter University.

We examined the coping styles of parents of 50 children with brain injury. Regression analyses revealed that self-blame and denial were related to depression and anxiety. Parenting styles were also related to outcome. With use of Logic and Reasoning related to better mood. Dysexecutive problems were particularly related to greater distress. Coping styles that included seeking instrumental support had a moderating effect on this relationship. These findings support the development of services to enable parents of children with brain injury to develop adaptive coping styles in response to the particular sets of issues they may be challenged by.

Pre-frontal and temporal cortex injuries and empathic awareness

J. BRAMHAM, P. SHAW, A. DAVID & R. MORRIS, Institute of Psychiatry, King's College London.

Alterations in social and emotional functioning following brain damage can have a major impact on relationships, even in the absence of cognitive impairment. These changes have been attributed to a range of dysfunctional mechanisms including impaired theory of mind, diminished capacity for empathy and a lack of insight regarding social and emotional behaviour. This presentation will examine the typical changes occurring following

prefrontal cortex and temporal lobectomy neurosurgery, focusing on clusters of symptoms and localisation. Issues regarding cognitive and emotional empathy will be presented, introducing standard and newly developed measures. Relationship difficulties may arise due to difficulties with perspective taking (cognitive empathy) or emotionally resonating in response to another's experience (emotional empathy). Differences between these abilities with regard to social behaviour will be highlighted for patients with prefrontal and temporal cortex lesions, and those with focal amygdala lesions. Finally, research regarding insight into social and empathic functioning will be presented.

MAY DAVIDSON SYMPOSIUM

Brain Injury Rehabilitation since 1984

B. WILSON, MRC Cognition & Brain Sciences Unit.

Since receiving the May Davidson Award in 1984 I have remained in Brain Injury Rehabilitation and seen some important changes. The most important of these include: (a) rehabilitation is now regarded as a partnership between patients, families and health care staff; (b) goal setting is well established as a means of planning rehabilitation programmes; (c) there is a general recognition that cognition, emotion, social functioning and behaviour are interlinked and should be all be addressed in the rehabilitation process; (d) there has been an increase in the use of technology to help people compensate for their difficulties; (e) it is generally agreed that rehabilitation should begin in the first days after brain injury when people may still be in coma or the vegetative state; and (f) there is a greater acknowledgement that rehabilitation requires a broad theoretical base and that no single theory, model or framework is sufficient to address all the problems faced by people with neuropsychological deficits. The talk will conclude with a description of the creation of The Oliver Zangwill Centre for Neuropsychological Rehabilitation, which incorporates most of these changes. The setting up of the Oliver Zangwill Centre is possibly my major professional achievement since winning the award in 1984 and demonstrates that clinical psychologists can encourage and influence new developments in the National Health Service.

Mindfulness for people with distressing psychosis

P. CHADWICK, Royal South Hants Hospital & University of Southampton.

I shall first describe our understanding of Mindfulness, and the conceptual framework that guides our use of Mindfulness with people with distressing psychosis. I shall then describe the adaptations we have made when introducing Mindfulness to clients, and present some initial data from the first 11 people to pass through our groups. Finally, I shall describe some research looking at the psychological process of learning to respond mindfully to voices, paranoid thoughts, and images.

Causal attributions in paranoia and bipolar disorder

P. KINDERMAN, University of Liverpool.

This presentation will outline the current status of research into the role of causal attributions in both paranoia and bipolar disorder. In both cases, it is suggested that the ways in which we explain personally significant events in our lives serve distinctive and self-enhancing functions. The talk will review the state of the literature related to the clinical significance in 2000 (the date of the author's receipt of the May Davidson Award) and the progress made since that date. In particular, links between causal attributions and other causal theories of paranoia such as 'jumping to conclusions' will be discussed. Finally, an attempt will be made to integrate these models of psychological distress into a novel reconceptualisation of the biopsychosocial model of mental disorder.

INDIVIDUAL PAPERS & WORKSHOPS

Investigating the relationship between Type A behaviour and coping strategies among Greek hospital doctors: Gender and age differences

A.S. ANTONIOU, University of Athens & A.N. VLACHAKIS, Panteion University of Social and Political Sciences, Athens.

Type A personality has been defined as a personality trait characterised by a set of behaviours that reflect an individual's intensive need for achievement, reinforcement for striving efforts, love of competition and perfectionism. It has been extensively researched as a predictor of stress and stress-related behaviours and individuals with Type A personality are found to be prone to increased risk factors and poor health. The present study investigates the Type A behaviour in relation to the coping strategies used by 514 Greek hospital doctors. The initial phase of the research involved semi-structured interviews with a sample of 60 doctors. The research sample consisted of 277 (53.9 per cent) male and 237 (46.1 per cent) female doctors. The OSI Type A Scale and the OSI Coping Scale were administered providing data on Type A behaviour and coping mechanisms as well as demographics and attitudinal variables. Analyses of the data demonstrated that, overall, hospital doctors presented moderate to high levels of Type A behaviour, while female doctors presented higher levels than their male counterparts. No differences were found in the Type A behaviour levels among the different age groups. The most frequent coping strategies that Greek hospital doctors used in order to cope with occupational stressors were the maintenance of stable relationships, the setting of priorities in their duties and the immediate encounter with the situation. The findings will be discussed in reference to the working conditions in the Greek hospital settings and suggestions for intervention programmes will be given. It is envisaged that the identification of individuals with Type A personality and the implications for stress management that will be provided will shed some light into the problems that make doctors' job particularly difficult.

The factor structure of the German version of the Hospital Anxiety and Depression Scale in coronary heart disease patients

J. BARTH, University of Freiburg & C.R. MARTIN, Chinese University of Hong Kong.

Objectives: There is increasing speculation that the factor structure of the Hospital Anxiety and Depression Scale (HADS) is in fact three-dimensional rather than bi-dimensional in coronary heart disease (CHD) patients. The current investigation sought to determine if the German language version of the HADS was underpinned by a three-dimensional structure.

Design: A cross-sectional study design was used with data accrued from one observation point. This approach was taken in order to determine the underlying factor structure of the HADS in this clinical group and to allow comparison with findings from UK observations of CHD patients administered the English language HADS.

Method: 1320 patients from three German hospital sites with CHD enrolled in a cardiac rehabilitation programme were administered the HADS. The HADS was administered by clinical research staff.

Results: Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) was used to determine the factor structure of the HADS in this population. Three-factor models were found to offer a superior fit to the data compared to two-factor (anxiety and depression) models. Psychometrically, the German language HADS performs similarly to the English language version of the instrument in CHD patients.

Conclusions: Consistent with recent observations in UK CHD patients, the German language HADS fundamentally comprises a tri-dimensional underlying factor structure in this clinical group. The evaluation of alternative measures of affective disturbance are recommended, particularly those which concord with contemporary theoretical accounts of anxiety and depression.

Islamophobia in young people

A. BROCKETT & N. NORET, York St. John College.

Objectives: The main objectives of this paper, therefore, are to examine the prevalence of Islamophobic and Arabophobic attitudes among young people, to see whether gender differences exist in these attitudes and to examine whether young people who have personal relationships with Arabs and Muslims hold less negative attitudes towards Islam and the Middle East.

Design: A cross-sectional study of young people's negative attitudes towards Muslims and Arabs.

Methods: Participants: 1515 participants were recruited, from 10 schools and one FE college. 55.4 per cent of the sample were male and 44.6 per cent were female, aged from 13 to 24 ($x=16.14$, $s.d.=1.38$). The majority of participants reported being Christian (52.4 per cent, $N=787$), 43.8 per cent ($N=658$) reported having no religion, and 0.4 per cent ($N=6$) reported being Muslim.

Survey Instrument: The questionnaire was designed for the project based on the outcomes of several focus groups held with young people across England. The survey comprised of three sections; the first focused on the individual pupils' attitudes towards media representations of Islam and the Middle East, their knowledge of the subject and experiences of victimisation. The second section was completed by non-Muslim students, and asked their opinions on the Middle East and Islam, reactions to events such as the invasion of Iraq and opinions on how Muslims are treated in the UK. The last section of the questionnaire was completed by Muslim participants only; they were asked questions relating to how they felt they were treated in the UK.

Procedure: Data from the schools was collected by a member of the research team, who introduced the project to the class explaining the relevant background and research aims before distributing the questionnaire. The questionnaire was completed in class and took approximately one hour to complete.

Results: Preliminary analysis has highlighted a gender difference in negative attitudes towards Islam and Arabs, more males than females demonstrating negative views and opinions. Young people who reported knowing Muslims or Arabs personally demonstrated more positive views than those who knew none.

Conclusions: The preliminary analysis has shown the extent of Islamophobic and Arabophobic attitudes among adolescents and young people. The project has highlighted the need for further research into this area and the need for effective intervention programmes in schools which will support the full inclusion of Muslims and Arabs into our society.

A qualitative investigation of GPs' constructions of patients' use of the Internet

E.M. BROHAN & L. NANKE, University of Surrey (currently working at Oxford Outcomes Ltd.).

Objectives: Research has established that, patients are increasingly using the Internet search for and obtain health information (Pew research centre, 2000; Spadaro, 2003). However, it has also been reported that patients are not introducing this information into the medical consultation with the same frequency (e.g. Henwood, Wyatt, Hart & Smith, 2003). This study recognises that characteristics of the patient, the provider and the context of the medical encounter influence the participants' behaviour within it (Miller, 2003). It presents, a previously absent, in-depth exploration of the nature of GP constructions of patient use of the Internet and its impact on the medical encounter. This allows a contextualised and interactive picture of changing patient information and consultation behaviour to emerge.

Design: This study employed a qualitative design. The social context of Irish General practice was examined.

Methods: Nine Irish general practitioners participated in individual semi-structured interviews, which examined their representations and constructions of patients' use of the Internet. Interviews lasted 30 to 45 minutes and were transcribed verbatim. Transcripts were analysed

using the methods of Interpretative Phenomenological Analysis (IPA) (Smith, 1995). **Results:** The analysis demonstrated that participating GPs constructed this change in patient information behaviour as leading to a redefinition of the general practitioner role. In doing so, the GPs' expertise was redefined as their ability to correctly 'filter' complex medical information, a skill not available to their patients. Constructions of patients' use of the Internet as a source of conflict and as contrary to patient trust in the GP also emerged. **Conclusions:** This research is of great value to developing a deeper understanding of the dynamics of the modern consultation. It is especially interesting as it demonstrates that the GPs' in this study, rather than being challenged by patient use of the Internet, adopted a flexible and dynamic position, which allowed them to realign their role to fit with this change in patient behaviour.

Causal attributions in older people after a fall and their influence on recovery

H. BROWN & K.J. McKEE, University of Sheffield.

Objectives: Attributions for negative events influence psychological and health outcomes, and yet this process has only rarely been considered in relation to falls in older people. This study sought to determine how hopelessness attributional style (HAS) moderates the relationship between pre-fall and post-fall psychological and physical functioning.

Design: Longitudinal, with post-fall hospital-based questionnaire assessment of independent and dependent variables, followed at two-months and six-months by postal questionnaire assessment of dependent variables.

Methods: A sample of 199 older people (≥ 65 years) admitted to hospital as a result of a fall were recruited and interviewed to assess causal attributions for the fall, attributional style, fear of falling, falls efficacy, pre-fall activity restriction, depression and anxiety. Follow-up postal questionnaires assessed further falls, depression, anxiety, and functional limitation.

Results: Initial analyses indicate that 41.2 per cent of participants attribute the cause of the fall to old age, 20.6 per cent to bad luck, and 16.9 per cent to personal behaviour. Perceived cause of fall was significantly associated with perceived risk of falling again ($F(5, 129)=5.08, p<0.01$) and depression ($F(5, 130)=2.46, p<0.05$). While a minority (18.9 per cent) of participants demonstrated HAS, this variable was significantly associated with fear of falling, anxiety and depression. Moderation analyses will be carried out to determine whether HAS influences the relationship between pre- and post-fall functioning.

Conclusions: Identifying the role of causal attributions and attributional style in recovery from falls will provide an opportunity for more effective hospital and community-based intervention to promote rehabilitation.

Post-traumatic stress disorder in older people after a fall

S. CASH, H. BARKBY, T. PAIS, University of Sheffield & M.C. CHUNG, University of Plymouth.

Objectives: Many older people who display fear of falling post-fall may also be suffering from post-traumatic stress disorder (PTSD). This study examines PTSD post-fall in older people, and its relationship to fear of falling, depression, and anxiety.

Design: Prospective study, with post-fall hospital-based baseline assessment of independent and dependent variables, followed at two months and six months by postal questionnaire assessment of dependent variables.

Methods: Older people (≥ 65 years) admitted to hospital as a result of injury due to a fall were recruited, and given a questionnaire-based interview to assess fear of falling, PTSD, depression, and anxiety. At two months and six months after interview, participants were sent a postal questionnaire for self-completion, assessing the same variables.

Analysis: Of participants ($N=139$) interviewed a median 14 days after their fall (inter-quartile range: five to 28 days), 48 (34.5 per cent) reported PTSD symptoms sufficient to meet the criteria for diagnosis of full acute PTSD. However, only 54 (38.8 per cent) participants met the additional PTSD criteria of feeling helpless and terrified at the time of the fall, thus 30 (21.6 per cent) participants met the full criteria for PTSD. In a hierarchical regression model, worry over falling was regressed on PTSD severity with anxiety, depression, previous activity problems, perceived risk of falling, severity of fall and falls efficacy controlled. PTSD severity contributed significantly to the model ($sr_{-}=0.04$). **Conclusions:** Some older people after a fall display PTSD symptoms, which explain significant unique variance in worry over further falls. Data from our follow-up sample will be analysed and reported at the conference.

The Training and Support Programme for parents of children with cerebral palsy

A. CHESHIRE, L.A. POWELL & J.H. BARLOW, Coventry University.

Objectives: The Training and Support Programme (TSP) was designed to improve the psychosocial well-being of parents of disabled children by teaching parents how to massage their child. Previous research has demonstrated that following the TSP parents of children with disabilities showed significant improvements in parental self-efficacy for managing their child's psychosocial well-being, parental self-efficacy for giving their child massage and significant reductions in parental levels of anxiety. The purpose of this study was to evaluate the efficacy of the TSP with a more homogeneous group, parents of children with cerebral palsy (CP).

Design: The study utilised a pre-post test design. **Methods:** 43 participants were recruited via voluntary organisations, special schools and health professionals. Questionnaires comprising standard measures of quality of life and parental perceptions of child's functioning, were mailed to participants at two points in time, baseline (immediately pre-programme) and at four-month follow-up.

Results: The majority of parents were mothers (88.4 per cent), were married or living with a partner (88.4 per cent), White European (81.4 per cent) and had educational qualifications (95.3 per cent). Parents had a mean age of 40 ($SD=7$) years. Comparisons between study variables at baseline and four-month follow-up revealed a significant reduction in parental anxious mood ($p=0.018$) and perceived stress ($p=0.030$), and a significant increase in satisfaction with life ($p=0.009$). There were trends towards improvement on depressed mood ($p=0.082$) and parents' self-efficacy for managing children's psychosocial well-being ($p=0.068$). There were significant improvements in parental perceptions of children's sleeping ($p=0.005$), mobility ($p=0.0005$) and verbal communication ($p=0.034$). There was a trend towards improvement in children's eating ($p=0.081$). There were no significant changes on generalised self-efficacy, parental health status, self-efficacy for massage and children's non-verbal communication.

Conclusion: For parents of children with CP, the TSP appears to have a positive effect on parental psychosocial well-being and child functioning.

When therapy hurts: Clients talk of their negative experiences in counselling and psychotherapy

M.C. CROSS & L. ANDA, City University, London.

Objectives: There is growing recognition of the contribution that the voice and experience of clients could make to the shaping of the service for both for recipients and providers of counselling, psychotherapy and guidance. This project was aimed to give the clients a voice and an opportunity for therapists to learn 'what not to do'. **Design:** This qualitative study explored the accounts of nine former clients of counselling or psychotherapy who reported negative experiences. The research was analysed and executed using a grounded theory methodology.

Results/Conclusions: The results of a series of interviews contributing to this project gave rise to

an evolving theory of what led clients to label their experience in therapy negatively. The core category was deciphered to be client's expectations about therapy and their therapist. That is, clients labelled their experiences as negative when their expectations of therapy were not consistent about the therapy and/or the therapist. The findings led to a range of recommendations expressed in terms of tentative theory towards the best practice in counselling and psychotherapy.

Fathers' experiences of having a child with learning disabilities: An interpretative phenomenological analysis

J. DUTTON & D. PURVES, London Metropolitan University.

Objective: Research indicates that parents of learning disabled children define this experience as significantly contributing to parental stress. Stress is strongly correlated to the beliefs the individual holds about the stressor. In light of such findings, and the emphasis of previous research on maternal experience, this study aims to identify the impact upon fathers of the experience of having a child with a learning disability. To access the deeply held meanings this experience has for fathers, the present study adopts a phenomenological approach.

Design: Semi-structured interviews were conducted with fathers of learning disabled children. Verbatim transcripts were analysed using Interpretative Phenomenological Analysis (IPA).

Method: The study comprised of six participants who were the natural fathers of children who lived at home and attended the same Local Authority Development Centre for Children with Learning Disabilities. The sample included fathers of boys, and of girls, children of different ages and with different types of learning disabilities. Participants were volunteers recruited by the manager of the Development Centre.

Analysis: Six dominant themes emerged from analysis. Fathers experienced a sense of powerlessness, finding it difficult to control and influence events in the life of their child; thus a strong desire to protect and provide for the child was experienced as being difficult to achieve, challenging participants' expectations of fatherhood and their own self-worth. Whilst feeling sadness over the loss of their child's abilities, fathers relied mostly on spousal support, experiencing feelings of isolation beyond the immediate family. Notwithstanding such experiences, a theme of personal growth also emerged from the narratives, with all fathers able to identify areas of positive personal development. **Conclusion:** Results of the study reflected the enormous impact of having a child with a learning disability. Fathers felt they struggled to maintain a meaningful role for themselves in the life of the child; their expectations of themselves as fathers were challenged leading to internal stress and conflict. Fathers believed their role had changed them significantly.

Do polymorphism in the serotonin transporter and tyrosine hydroxylase genes predict depression and anxiety in patients with a cancer diagnosis?

L. EDWARDS, Psychosocial & Clinical Practice Research Group, J. RANDERSON-MOOR, Genetic Epidemiology Group & P. SELBY, Psychosocial & Clinical Practice Research Group. (All authors: Cancer Research UK, St. James' University Hospital, Leeds.)

Objectives: The purpose of this paper is to determine whether there is an association between polymorphism in the serotonin transporter and tyrosine hydroxylase genes and depression and anxiety, in a sample of people who have all experienced the adverse life events of a cancer diagnosis.

Design: This is a cross sectional association study with a sample of 500 cancer patients recruited from four West Yorkshire hospitals. Anxiety and depression were assessed using four standardised self-report questionnaires: the Hospital Anxiety and Depression Scale, the Beck Depression Inventory, the Mental Health Inventory-5 and the State Trait Anxiety Inventory. Patients completed the

questionnaires on computer touch screens whilst awaiting their clinic appointment. Patient blood samples were provided for DNA extraction and genotyping. Candidate genes for psychological distress were selected based on current psychiatric literature.

Results: Continuing to build on our preliminary results: descriptive analysis of the psychological distress data revealed low levels of depression and anxiety, similar to that in a working population of adults. A one-way ANOVA analysis revealed an insignificant association between the serotonin transporter gene polymorphism, 5-HTTLPR, and both depression and anxiety as measured by the four questionnaires. Mean questionnaire scores for the 'at risk' short/short genotype showed a small increase for each of the measures. Up to date results on the second transporter gene polymorphism and the tyrosine hydroxylase variant will also be reported, as analyses are currently in progress.

Conclusions: Confirming our initial findings, there is no association between the serotonin transporter gene polymorphism and depression or anxiety in this sample of cancer patients. Individuals with the short/short genotype displayed slightly increased mean scores on all of the psychological distress questionnaires.

Fear of falling in older people after a fall

J. ELLINGFORD, L. HANGER & K.J. McKEE, University of Sheffield.

Objectives: Fear of falling is a common response in older people after a fall, and has been identified as a major influence on recovery of functioning and loss of independence. This study sought to determine the overlap between different measures of fear of falling, and their relative contribution to functioning and independence post-fall.

Design: Longitudinal, with hospital-based baseline assessment of independent and dependent variables post-fall, with two-month and six-month follow-up assessment of dependent variables by postal questionnaire.

Methods: A sample of 169 older people (≥ 65 years) admitted to hospital as a result of a fall injury were recruited, and given a questionnaire-based interview to assess perceived risk and worry over further falls, falls efficacy, perceived consequences of falling, pre-fall activity restriction, depression and anxiety. Follow-up questionnaires assessed further falls and functional limitation.

Results: Initial analyses indicate that while virtually all bivariate associations between different measures of fear of falling are significant there is considerable variation in effect sizes ($r^2=0.03$ to 0.32). Regression analyses will be carried out to determine the ability of fear of falling variables assessed in hospital to predict functional limitation at two and six months post-baseline.

Conclusions: Fear of falling represents a psychological factor of great influence on recovery from falls, although as yet our understanding of this factor is poor. Initial results suggest that fear of falling is not a unitary construct, and further analyses will provide conclusive information relating to the influence of fear of falling variables on recovery, assisting evidence-based intervention.

The impact of Intensive Interaction training with staff caring for people with severe/profound learning disabilities

G. FIRTH, C. LEEMING, H. ELFORD, Leeds Mental Health Teaching NHS Trust & M.C RABBE, East Leeds Primary Care Trust.

Objectives: Intensive Interaction is an approach that aims to facilitate the development of communication between people with severe or profound learning disabilities and others. The approach is based on infant-caregiver interaction, and uses interactive sequences to develop reciprocal understanding and communication. This study aims to explore the adoption of Intensive Interaction techniques by care staff working with such clients following a period of training and supported implementation.

Design: Participants took part in four stages of the research project: (1) an initial semi-structured interview exploring their current relationships and interactions with clients; (2) five training sessions

in the theory and background of Intensive Interaction; (3) a six-month period of on-site supported implementation using Intensive Interaction with their own clients in the care setting; and (4) follow-up semi-structured interview to explore benefits and barriers in using Intensive Interaction within such care settings, and any change in practice.

Methods: 29 care staff (25 female, four male), aged from 18 to 58 (mean = 40, SD = 11.44) participated in the study. Participants were recruited from four staffed group homes in West Yorkshire.

Analysis: All the interviews were audiotaped and transcribed verbatim. Reflective field notes were also kept throughout the study. Analysis was conducted using an approach based on Grounded Theory to explore themes in the data.

Conclusions: The findings of the study had implications for the future use of Intensive Interaction with individuals with profound and multiple learning disabilities within care homes. Themes which emerged included:

- practical application issues, regarding the use of the specific techniques, the use of observation, managing time, staff priorities and staff team dynamics;
- client response issues, such as the level of feedback and opinions on the client-led nature of Intensive Interaction;
- the impact of differing concepts on Intensive Interaction, including views of this approach as communication, or relationship-building, and notions of 'age-appropriateness' and 'normalisation'.

Some staff described new levels of response from their clients gained through the use of Intensive Interaction and potential benefits in other areas of client behaviour and involvement.

Staff reported that changes to service provision are required to support the continued use of Intensive Interaction in care homes. Such changes included the acceptance of responsibility for Intensive Interaction at a number of hierarchical levels within the organisation.

Are New Zealand's general practitioners prepared for child and adolescent mental health presentations? A survey of training, perceived competence and confidence

J.M. FITZGERALD, The Psychology Centre & University of Waikato, Hamilton, New Zealand & J. CLARKSON, University of Waikato, Hamilton, New Zealand.

Objectives: A number of international and New Zealand studies have found high rates of mental health problems among children and adolescents. Research also shows that only a minority of young people who experience mental health difficulties seek help from any source, and of these only a minority find their way to specialist mental health services. One possible impediment to accessing such specialist services is the difficulty that the primary healthcare practitioners have in recognising and managing mental health presentations in young people. This may be the result of deficits in training, knowledge, skill, or perceptions that specialist help is 'unavailable'. The study reported here, which closely follows a survey of General Practitioners conducted in England by Cockburn and Bernard (2004), outlines the findings of a survey of primary (medical) healthcare practitioners examining their perceptions, attitudes and needs related to child and adolescent mental health presentations in their clinics.

Design/Method: Survey forms were sent to all General Practitioners (approximately 300) in the Waikato region (central North Island) of New Zealand. The survey form was similar to that used by Cockburn and Bernard (2004), and was used with the full consent of those researchers.

Results: While there were some differences between the results of the current survey and the English survey, both reflect a general lack of preparedness amongst General Practitioners to deal with child and adolescent mental health difficulties. Specific areas of concern are highlighted.

Conclusion: Consideration is given to the training provided for primary health practitioners within the specialist field of child and youth mental

health, both as part of their basic training and as part of typical CME programmes. A role for psychologists in the provision of training, support/consultation and supervision is outlined, with a focus on what might improve the suitability and usefulness of primary care consultations to young people.

Examining the role of stigma-tolerance, self-concept and pathology in adolescent help-seeking and service utilisation.

J.M. FITZGERALD, The Psychology Centre & University of Waikato, Hamilton, New Zealand, G. DOLAN, Taranaki Health, New Plymouth, New Zealand & I.M. EVANS, Massey University, Palmerston North, New Zealand.

Objectives: The prevalence of diagnosable mental health problems among New Zealand's youth has been estimated as high as 25 per cent at age 15 years, and 33 per cent at age 18 years. Despite these high rates only about a quarter of young people experiencing problems seek help, and only a small proportion of help-seekers make use of specialist mental health services. Research studies have identified a range of complex psychological factors that impinge on the help-seeking choices and behaviour of young people. However, while studies have focused on, for example, level of distress, the impact of significant life events, current mental health status, few have included variables that may have particular developmental salience for young people, e.g. development of identity, self-concept, image, and stigma.

This study examined stigma perceptions and tolerance, self-concept and self-reported psychopathology as variables associated with the decisions of young people to access mental health services. These variables were selected because although they have developmental poignancy for young people, but have been generally absent from recent research in the field.

Design/Method: This two part, two-centre study took the form of a group administered community survey of approximately 200 non-referred New Zealand adolescents, with additional data being collected during a small number of individual semi-structured interviews with current service users. A number of data collection tools were used. The first group consisted of measures of current psychological functioning, specifically general mental health status, mood and self-concept. The second group of measures all had a service focus such as past and future service utilisation, and two measures with a greater focus on attitudes and perceptions that may guide decisions related to help-seeking and service use.

Results: Preliminary analysis of the results revealed a complex set of interactions between pathology and life-stage factors. The results presented here are limited to the primary interactions identified from statistical analysis, and preliminary consideration of the associations between the survey and interview data.

Conclusions: In summarising the study particular attention is paid to those issues that could have the greatest influence on the design of specialist mental health services for youth.

Psychosocial aspects of chronic illness in childhood and adolescence

V. GEORGOPOULOU, South London & Maudsley NHS Trust.

The workshop aims at bringing together professionals from different sections of psychology (paediatric, counselling, clinical, educational, health) to work on psychosocial aspects of chronic illness in childhood and adolescence.

Chronic illness has an impact on many aspects of a child's/young person's life (education, mental health, life expectancy, social development, family relationships) and as a result it is best approached from an interdisciplinary perspective. The facilitator will start by providing a biopsychosocial framework for understanding chronic illness in everyday life. Some of the issues we will consider include the following:

Chronic illness can have an impact on a number of different systems (family, peers, community, health care professionals) but at the same time these systems, when appropriately co-ordinated, can act

as support systems. We will look at the role psychologists can play in this process. Transitional periods (e.g. onset of illness, change from a non-symptomatic phase to a crisis period, hospitalisations, preparing for a major operation) can be particularly demanding for family members as well as for professionals. During these times trying to cover the child's needs can feel overwhelming at times; family members are juggling with the medical, emotional and practical needs of their children.

We will explore ways of working with sensitive issues that children and families might bring to us such as dealing with guilt, blame, anger, loss. We will think about ways of allowing children the space and time to make sense of their experiences not only in terms of the medical procedures but most importantly in terms of emotional and relational issues. The meaning children and families attach to chronic illness and treatment options can vary significantly from those of health care professionals. We will bring examples from our practice about times when we acted as a bridge between children and health care professionals. Finally we will share how we manage the issues involved in chronic illness at a personal level and the types of professional support available. A variety of methods will be used in this workshop: small group exercises, case presentation by facilitator, group discussion.

We are hoping to create a pool of ideas from which participants will be able to choose the ones that fit the most with the needs of their clients.

Should menstrual symptoms be factored into stress research as a potential stressor?

R.L. GERVAIS, University of Manchester & G.R.J. HOCKEY, University of Sheffield.

Objectives: This research aims to examine the effects of menstrual symptoms on job strain and job performance while controlling for psychosomatic symptoms.

Design: The study used a diary methodology. Two waves of data were collected nine months apart, for one month on each occasion.

Methods: Four diaries, one per week, were administered to the participants, a sample of nurses, at the beginning of each wave. The nurses (Time 1: $N=60$, Time 2: $N=38$) were asked to complete daily entries twice each day, once at the start of the day, and once either after finishing work or if not at work, at home around the time of the evening meal. The diary contained structured scales assessing menstrual bleeding, menstrual pain, job stress (strain, psychosomatic symptoms) and job performance.

Results: A hierarchical regression procedure was used. This was based on pooled-time series analysis to control the between and within participant variance, especially as 'day' was the unit of analysis. The results showed that while menstrual symptoms influenced job strain at Time 1 ($\text{Adj } R^2=0.44$, $\text{DR}^2=0.02$, $p=0.02$), no effect was found for job performance. Significant effects were not obtained on either outcome variable at Time 2.

Conclusions: The present study showed that menstrual symptoms increased job strain during Time 1 of the study. These results suggest that menstrual symptoms may affect the stress levels among nurses, and should be explored further. For this study, data were collected for one-month only, and a longer time limit may be more appropriate for researching menstrual symptoms. Some menstrual cycles may extend beyond the 28-day limit of each wave of the present study. Menstrual symptoms as a stressor did not impact negatively on job performance, this may imply that menstrual symptoms are related more strongly to physical symptoms rather than ability to function. These results are comparable with other findings on job performance. Overall, while pre-menstrual symptoms are the more widely studied phenomena the onset and the discomfort of menstruation may be another stressor to which working women are subjected.

Workplace bullying: Challenges for organisation

A. GILBERT, Chair of Branch & C. RAYNER, University of Portsmouth Business School.

Purpose: The primary objective of the session is to

engender debate around the topic of implementing practices to deal with workplace bullying. The panel will be composed of representatives from a variety of professional interests.

Background: Bullying and harassment at work appear to be a common and enduring component of organisational life for many employees. The effects can be detrimental to those who experience bullying, and the costs to the organisation include increased exit rates, lower morale and employee engagement as well as reputational risk. Dealing with bullying at work involves many different types of staff; HR and trade union representatives, regular managers who might be asked to investigate informal or formal complaints as well as psychologists and other health professionals. Difficulties range from defining the problem to ensuring that the various organisational systems are 'joined up' so that a trustworthy environment is created for employees to voice if they have problems and for swift, effective and remedial action to be taken. This is a challenge for most organisations.

Methods/Key Points: The workshop will provide an expert panel of speakers who will start the discussion by providing a five minute summary of their views on where specific tensions and difficulties lie. The panel will include a trade unionist, an HR representative from a major employer, the Head of ACAS Equality Unit, an academic researcher, and a Chartered Occupational Psychologist. Thus the first half hour will be scene-setting. The ensuing discussion will be open to delegates for both questions and supplementary points to be made.

Conclusions: The panel represent a very wide set of interests in dealing with workplace bullying. The subsequent debate is expected to draw out further complexities. The implications for 'joined-up' working and coherent strategies will be exposed. The nature of the challenge to integrate our work into a coherent whole for employees, and the difficulties this very important issue provides, should contribute to a better understanding of the difficulties we face. In this way we can move closer to providing effective solutions.

Standardised psychological testing as evidence-based practice in child neglect assessments

G. GLEESON, University of Western Sydney.

Purpose: Of all forms of child maltreatment, child neglect is the most poorly understood and measured. Awareness of the potential impact of child neglect underscores the necessity of developing and identifying reliable, valid, and comprehensive measures of the consequences of such maltreatment.

Background: A current assessment focus is on examining neglect in the community by applying objective and standardised measures to circumvent the limitations of reliance on child protection services information. This might allow resources and services to be tailored to address the specific psychosocial needs of each family member involved in a child neglect case by using recommendations based on comprehensive, weighted, systematic data collection procedures to help develop specialised treatment plans and preventive strategies.

Methods/Key Points: A two-step model to assist practitioners in implementing evidence-based practice in clinical settings is extended to provide a framework for decision-making regarding the formulation of a standardised testing protocol at the Core Assessment Child Protection Plan stage in the process for managing child neglect. The movement in child welfare services to evidence-based clinical decision-making and treatment grounded in: (i) the best available research evidence; and (ii) increased efforts to standardise practice through empirically-supported guidelines, protocols, and quality indicators, is briefly described. Emphasis is placed on the delineation of a procedure for test users to follow to develop their practice to enable evidence to be used in determining which tests to employ in a child neglect assessment context.

Conclusion: Best practice guidelines devised for child maltreatment evaluations at a clinic at the University of Western Sydney are presented and specific test batteries to assist in the assessment of the consequences of child neglect are identified.

Egon Brunswik and 20th-century psychology: A reassessment

J.M.M. GOOD, University of Durham.

2005 marks the half-century since the untimely death of Egon Brunswik in 1955. In this paper I examine Brunswik's place in 20th-century psychology. My aims are to outline some of his principal achievements and to examine the current relevance of some of his ideas. To achieve these aims I first point out that a central (and much neglected) feature of Brunswik's probabilistic functionalism is his organism-environment model. In assessing this aspect of Brunswik's work I relate his ideas to those of other 20th-century theorists also interested in organism-environmental relations – especially those of James Gibson. A second focus of the paper is Brunswik's idiographic-statistical approach. This will be outlined and its implications considered for current debates about the idiographic-nomothetic distinction. Brunswik's much misunderstood notion of ecological validity is the focus of the third part of my paper in which I briefly illustrate some of the recent misconceptions about this important notion. In my concluding assessment, in addition to considering the relevance of Brunswikian ideas for 21st-century psychology, I address some of the reasons for the unfavourable reception of his ideas during his lifetime and I end by noting the problematic nature of assessing influence in the history of ideas.

Which psychosocial variables are associated with cancer support group participation?

G.E. GRANDE, University of Manchester, L.B. MYERS, University College London & S.R. SUTTON, University of Cambridge.

Objectives: Cancer patients reportedly benefit from participation in support groups, but few patients attend such groups. This study sought to identify psychosocial variables related to group participation. Using Leventhal's Self-regulatory Model of Illness Behaviour and the Theory of Planned Behaviour (TPB), main hypotheses were that support group participation would be associated with perceived control over cancer, adaptive coping, positive beliefs about support groups, encouragement from others and less perceived difficulty in joining a group.

Design: A cross-sectional comparative design using mail survey was used to investigate how support group participants and non-participants differ on psychosocial variables

Method: All members of a local community cancer self help centre and a random sample of non-members from the Cancer Registry received the survey. It was sent by the help centre or by the Cancer Registry via patients' GP, respectively. Sixty-three (61 per cent) help centre members and 44 (28 per cent) of the comparison sample responded. The survey included the Revised Illness Perception Questionnaire, Brief COPE, Hospital Anxiety and Depression Scale and the Multidimensional Scale of Perceived Social Support. TPB scales designed for the study measured beliefs about support groups, perceived views of others towards groups and difficulty of joining a group.

Results: Variables associated with help centre membership were identified through univariate and multivariate logistic regression. Univariate analyses showed that membership was associated with positive beliefs about support groups, beliefs that others held positive views of group participation, perceived ease of joining a group, use of adaptive coping (active coping, planning, reframing, acceptance, support seeking) and perceived control over cancer, but also with cancer distress, anxiety and poorer support from a special person. Multivariate analysis showed positive beliefs about support groups, beliefs about others' positive views, an active coping approach and poorer support from a special person to independently predict help centre membership.

Conclusion: Results suggest that support group uptake could be increased by targeting psychological variables, in particular components of the TPB. Prospective research is required to further test these findings and to assess whether and how support group participation could be appropriately increased.

Your health in your hands : A psycho educational group intervention for women with polycystic ovary syndrome

R. GREEN & A. CROSS, St. Ann's Hospital, London.

A pilot study and group intervention aimed at promoting self management strategies for women with Polycystic Ovary Syndrome. Eight participants referred to a Health Psychology Service from the gynaecology department of a major London hospital attended a six-week group facilitated by two counselling psychologists. This was a single group case study design for which we used pre- and post-measures (the Illness Perception Questionnaire & Hospital Anxiety & Depression Scale). The measures used provided anecdotal evidence. All participants received a combination of educational material regarding the syndrome alongside interventions aimed at reducing negative emotional representations about symptoms and improving self management strategies. IPQ scores revealed considerable improvement in self efficacy and knowledge and control of the illness, which was reinforced at a subsequent three month review.

Drug-related attitudes and prevalence rates for people with learning disabilities

A. GRIEVE, NHS Tayside, W.R. LINDSAY, The State Hospital Carstairs, NHS Tayside & University of Abertay, Dundee & L. STEPTOE, NHS Tayside & University of Abertay, Dundee.

Objectives: A number of studies have noted the lack of research into the causal factors of illicit drug use in people with learning disabilities (LD). The present study measures the prevalence of, and attitudes towards drug use.

Design: A between subjects design was used with two groups: drug users and non drug users.

Method: The participants were 23 males with mild LD with a mean age of 31.6 years (S.D.12.18). Participants were recruited through day services and as part of an ongoing clinical assessment. The main assessment used was the Parker *et al.* (1998) Drug use scale (DAS).

Analysis: This study observed total sample prevalence rates of Cannabis 25 per cent, Amphetamine 13 per cent, LSD 13 per cent, Ecstasy 13 per cent, Solvent abuse 8.7 per cent, Diazepam 17.4 per cent, Temazepam 4.3 per cent, and Heroin 8.7 per cent. The DAS showed a significant correlation when compared with a total drug use score ($r = 0.85$). Furthermore, pro drug use attitudes were also more likely in those who used drugs than those who did not ($t = -2.51, p < 0.05$). Residential comparisons are also included.

Conclusion: These findings are interesting as people with LD often live in restricted environments and are often unable to use drugs. Nevertheless, the above prevalence figures show that people with LD do use and have used illicit drugs and in addition, the findings of the attitude assessment indicated that the potential for drug use by people with LD may be predicted by their DAS scores. Therefore, this would have significant implications for providing drug orientated clinical services for this population.

The development of an assessment of relapse prevention for sex offenders with learning disability

A. GRIEVE, NHS Tayside, W.R. LINDSAY, The State Hospital Carstairs, NHS Tayside & University of Abertay, Dundee, L. STEELE & E. DUNSMORE, NHS Tayside.

Objectives: To describe the development of an assessment of relapse prevention in sex offenders with mild learning disabilities (LD). Broxholme and Lindsay (2003) note that there is a lack of assessment tools, which have been specifically designed for use with sex offenders with LD. Furthermore, they also suggest that the assessment questionnaires which have been developed with non-LD offenders are generally not appropriate for use with people with LD due to the use of complex language.

Method: The sexual imaginal provocation scale (SIPS) was administered to 15 male sexual offenders with LD. The SIPS is a five-item scale, which describes scenarios in which children are

involved in a variety of day to day situations. Responses are rated on a four-point scale ranging from 0 (adaptive behaviour) to 3 (highly maladaptive behaviour). Comparisons with the questionnaire on attitudes consistent with sexual offences (QACSO; Broxholme & Lindsay, 2003) are also included.

Results: Preliminary findings for test re-test (same-rater) reliability was ($r = 0.70, p < 0.01$), and for inter-rater reliability ($r = 0.87, p < 0.01$). In addition, between rater agreement on each of the five items of the SIPS ranged between 80 per cent to 100 per cent. Correlations between items and the total score will also be presented.

Conclusions: The present findings suggest that the SIPS is a reliable assessment tool which can be used when assessing the extent to which a client is progressing within a relapse prevention programme. Furthermore, as there is a lack of standardised assessments for this population, this assessment will provide further insight into the potential behaviours of sex offenders in a number of situations that may provoke a relapse to offending behaviour.

The influence of previous personal therapy on counselling psychology trainees' lives and views on having further personal therapy during training

K.A. HEINRICH & M. DONATI, London Metropolitan University.

Objective: The debate on mandatory personal therapy during counselling psychology training has identified a range of benefits for trainees' personal and professional development and negative implications. This research aimed to explore how prior experience of personal therapy might influence trainees' experience of personal therapy during training.

Design: Interpretative Phenomenological Analysis (IPA) of semi structured interviews with counselling psychology trainees, during their first year of training.

Method: The study included six participants with experience of personal therapy prior to training in counselling psychology. This experience ranged from 13 sessions to four-and-a-half years, including different theoretical approaches. Two participants with no prior experience of personal therapy were also interviewed. The interviews were recorded and transcribed for analysis.

Analysis: IPA was used to identify themes in the transcripts. The emerging themes were cross-referenced and compared with previous literature, for the systematic development of master themes.

Conclusions: The results reflected previous research, as students reported similar costs and benefits of personal therapy. However, those with prior experience of personal therapy had entered therapy to resolve personal issues and reported experience of vulnerability, in their personal lives and within therapy, which they felt gave a more realistic sense of client's fears of therapy and the imbalance of power in the therapeutic relationship. All those interviewed felt that personal therapy was a necessary part of training in Counselling Psychology, however those with previous personal therapy seemed to have stronger feelings in support of mandatory therapy, whilst those with no prior experience of therapy were more tentative about the prospect.

3,4-Methylenedioxymetamphetamine (MDMA/ecstasy) exposure targets cognitive dimensions of depression

M. HESLIN, L. TAURAH & C. CHANDLER, London Metropolitan University.

Rationale: Research suggests MDMA (3,4-methylenedioxymethamphetamine) exposure results in overall elevated depression scores in comparison to other recreational drugs of abuse. Previous studies have focused on generalised depression however to date no single study has investigated whether MDMA exposure affects a particular aspect of depression for example sadness, pessimism, past failures, guilt, tiredness, crying, irritability and loss of appetite.

Aims: The present study presents findings from an on-going cross-sectional study investigating whether exposure to MDMA targets a particular

dimension of pessimism using the validated Beck Depression Inventory (BDI).

Method: 997 participants completed the BDI: 182 non-drug users, 172 nicotine/alcohol users, 163 cannabis/nicotine/alcohol users, 169 polydrug users (non-MDMA), 154 'current MDMA users', 157 'ex-MDMA'/polydrug users. All groups were matched for sex, age, and educational background.

Results: Mean global BDI scores were significantly different between the control groups and the 'current MDMA users'/'ex-MDMA users' respectively (ANOVA; $p < 0.01$). There was a significant three-fold increase in mean scores for the 'current and ex-MDMA' users in comparison to the polydrug control group for the cognitive dimension of self-reported depression which included the dimension pessimism (ANOVA, $p < 0.001$). There was a significant increase in mean Pessimism scores between the polydrug control groups and the current and ex-MDMA groups (ANOVA, $p < 0.01$).

Conclusion: Preliminary data suggests that MDMA target's the cognitive aspect of depression with a three-fold increase. However, more specific research is needed regarding the relationship between MDMA exposure and pessimism.

Big issues which challenge applied psychology

L. HIGBED, R. PARRIS & L. EARLL, Gloucestershire Hospitals NHS Foundation Trust.

Objectives: Members of the recently-formed College of Fellows hope to make a useful contribution to the Society by helping to identify some of the 'big issues' facing psychology in the next few years. Identification of these key issues may help in the wider dissemination of psychological knowledge, as well as facilitating a forum for discussion of these topics. This is particularly pertinent as Society President Ken Brown, in his December 2004 column in *The Psychologist* reports a large number of enquiries to the Society's press office in recent months on a variety of topics ranging from health to fashion. This research aimed to identify themes that Fellows considered to be 'big issues'.

Design: Responses to the request for 'big issues' were analysed using a qualitative research method informed by Interpretative Phenomenological Analysis, allowing themes to be identified.

Method: Following a letter from Professor Steve Newstead (Chair of College of Fellows Steering Group) sent in October 2003 to 659 Fellows requesting 'big ideas likely to face psychology over the next few years', 104 responses were analysed, giving rise to 153 ideas. Two researchers independently identified main themes and sub-themes. This initial analysis was then discussed and any discrepancies were resolved so that a collaborative table of themes was produced.

Results: Six main themes were identified: 'World Issues', 'Society', 'Image of Psychology', 'Health', 'Technology' and 'Ageing Population'. Whilst the 'Image of Psychology' was perceived as very important, the most dominant broad ranging themes were 'World Issues' and 'Society', with a combined total of 42 per cent of the ideas produced. Many respondents detailed whether the issues they raised were aimed at a global level or a societal one. Where this was not stated, 'World Issues' were considered to be 'big' subjects that have implications at many levels (be it political, financial, social, etc.) and included themes such as environment, religion and conflict/terrorism.

'Society' issues were those that were perceived to directly impact on people's lives and their community, such as education, employment, crime and the family.

Conclusions: The identification of these six 'big issues' should enable the College of Fellows to generate research, debate and discussion throughout the BPS, and provide the opportunity for psychological theory relating to a wide range of subjects to feed into the public domain; as many of the issues highlighted are likely to not only be of interest to psychologists, but to every citizen.

Developing the Social Influence Scale for Midwifery (SIS-M) as a multi-dimensional instrument of conformity

C.J. HOLLINS MARTIN, P. BULL, University of York & C.R. MARTIN, Chinese University of Hong Kong.

Objectives: Midwives are independent, accountable and highly trained autonomous practitioners, however, the impact of authority figures, particularly senior medical staff, on the midwife's clinical judgements has seldom been explored. This may be partly due to the lack of a reliable measure specific to this health professional group. The present study sought to determine if the recently developed Social Influence Scale for Midwifery (SIS-M) may be developed as an effective multi-dimensional self-report measure of conformity in contrast to its current use as a unidimensional global measure of midwife-specific conformity.

Design: A cross-sectional study design was used. This approach was taken to determine the basic psychometric properties of the SIS-M in a comparatively large group of midwives.

Method: The SIS-M was sent by post to 323 midwives working in seven maternity sites in the north of England. Two-hundred-and-nine completed SIS-M forms were returned to the investigators representing a response rate of 65 per cent.

Results: Confirmatory factor analysis (CFA) was used to compare an a priori specified four-factor model comprising conformity, personal control, client control and non-conformity domains against a single-factor global model of conformity. The four-factor model was found to provide a significantly better fit to the data compared to the single-factor model. Examination of model fit characteristics revealed the four-factor model to provide an excellent fit to the data.

Conclusions: These findings indicate that the SIS-M has great potential to be developed as a multi-dimensional instrument to assess specific domains of conformity. The SIS-M offers considerable potential as a research tool to gain novel insights into the conformity behaviour of midwives in the practice environment and the relationship of such behaviour to maternal and neonatal outcomes.

Semantic divergence and creative story generation: An fMRI investigation

P.A. HOWARD-JONES, University of Bristol, S.J. BLAKEMORE, University College London, E.A. SAMUEL, University of Bristol, I.R. SUMMERS, Exeter University & G. CLAXTON, University of Bristol.

Objectives: This investigation was aimed at identifying areas of the brain associated with working creatively with a story generation task and to investigate the effects upon these correlates of incorporating a set of words that were unrelated to each other – a strategy considered to encourage creativity. It was hypothesised that this strategy would increase the rated creativity of outcomes and that this would be associated with increased activity in those areas of the right hemisphere previously identified with divergent semantic processing.

Design: A factorial 2 x 2 fMRI design was used with independent variables of relatedness of words (related/unrelated) and objective (Be creative/be uncreative).

Methods: Preliminary experiments investigated the possible confounding effects of the scanner environment upon creativity, and confirmed the effect of using unrelated words upon the creativity of those participating in the fMRI scan. Participants were eight drama education students (seven female, one male) aged 19 to 28 (mean age = 21.9, SD = 2.7). During scanning, participants were presented with sets of three words and asked to generate a story that included them. Statistical parametric mapping identified brain regions involved in working creatively with the task and revealed the effect upon this activity when participants incorporated semantically unrelated words.

Results: Increased activity in the right prefrontal cortex was associated with the increased creativity of outcomes when using unrelated word sets.

Conclusions: This supports the notion that the strategy operates by encouraging additional semantic divergence and that areas of the right prefrontal cortex are critical to these processes.

Antenatal prediction of postnatal depression in Chinese women in Hong Kong

W.Y. IP & CR MARTIN, Chinese University of Hong Kong.

Objectives: Postnatal psychological disturbance is common, however effective antenatal identification of those women at risk is difficult due to lack of predictive utility of the current battery of screening instruments. Recent evidence suggests that the GHQ-12 contains an embedded sub-scale comprising a composite domain of anxiety and depression. The investigation sought to determine if this sub-scale could predict postnatal psychological distress when administered in the antenatal period.

Design: A within-subjects design with participants (N=154) recruited to the study in the third trimester of pregnancy (34 weeks) and in the postnatal period (six weeks following delivery).

Method: Psychological distress was assessed at each observation point using the GHQ-12. Hypothesised sub-scales embedded within the instrument and the full scale score in the antenatal period were used to predict case classification six weeks following delivery.

Results: Logistic regression revealed that the hypothesised four-item anxiety and depression sub-scale embedded in the GHQ-12 predicted case classification status at six weeks post-delivery. The full 12-item GHQ-12 by comparison, revealed no statistically significant predictive case classification utility.

Conclusions: The hypothesised four-item anxiety and depression sub-scale embedded in the GHQ-12 may be useful as an antenatal screening tool for postnatal psychological disturbance. Further research is recommended to determine the utility of this sub-scale in this clinical group.

The psychosocial impact of corrective surgery on adults with an eye misalignment

S. JACKSON, N. RUMSEY & M. MORRIS, University of the West of England & R.A. HARRAD, Bristol Eye Hospital.

Objectives: Only three research studies have sought to address the psychological impact of corrective surgery for an eye misalignment in adults. Carried out in the main by eye clinicians, the existing studies have serious methodological shortcomings. There is no study comparing pre and post-operative data using validated questionnaires relating surgical results to psychosocial outcomes. This study aims to provide such data.

Design: A repeated measures design, 46 participants were seen at six-week pre-operative and six-month post-operative appointments.

Methods: Validated questionnaires were used: the Derriford Appearance Scale (DAS-24), the WHO Quality of Life (short form), and the Hospital Anxiety & Depression Scale (HADS). Visual Analogue scales were also employed, and a structured interview was also carried out.

Results: Interim results of a sample where N=32: one-tailed Wilcoxon tests indicate that for all patients the surgery significantly improves their perception of the severity of their eye misalignment (W=39, N=32, p<0.005). Where surgery achieved the desired outcome for both patient and surgeon results indicating statistically significant benefit were obtained in 11 of 12 psychological measures subscales, for example social anxiety and avoidance – DAS 24 – (W=2.5, N=22, p<0.001). We found no correlation pre- or post-operatively between the measured eye misalignment and scores on the psychological measures subscales.

Conclusions: Adults with an eye misalignment seem to be similar to other adults with facial disfigurement ie the extent of the measured eye misalignment is no indicator of the degree of psychosocial impact pre- or post-operatively. However, post-operatively those adults for whom surgery achieved 'normal' eye alignment yet had continuing visual problems (such as double vision) failed to demonstrate the psychological benefits experienced by the other participants. It is proposed to discuss the results for the full sample (N=46) at the conference.

Getting out or getting by? GP, patient, and supporter goals for the management of depression

O. JOHNSTON, K. KENDALL, T. KENDRICK, R. PEVELER, J. GABBAY University of Southampton & S. KUMAR, University of Sussex.

Objectives: Quantitative studies have suggested that antidepressant prescribing by GPs is poorly targeted and is influenced by factors such as severity of depression, presence of social problems, and patients' attitudes towards antidepressants. This study aimed to identify issues of importance to GPs, patients, and supporters in the management of depression.

Design: The study adopted a grounded theory approach, aiming to be guided by issues of importance to participants rather than by the preconceptions of the researchers.

Methods: Individual interviews were conducted with 111 participants (28 depressed patients, 15 never depressed patients, 18 patients who were depressed in the past, 18 supporters of depressed individuals, and 32 GPs). The majority of participants were recruited through GP surgeries. Trustworthiness was increased by the use of interdisciplinary team analysis, maintenance of an audit trail, keeping of reflexive diaries, theoretical sampling, and triangulation.

Results: A number of participants wanted to 'get out' of their depression or to get rid of it. However, for others this was not seen as an immediately relevant or achievable goal, and their focus was on getting by day to day. At times this could clash with the priorities expressed by GPs; understandably, a major GP goal appeared to be getting patients out of depression. GP frustration and uncertainty often occurred when depression was resistant to cure; such patients could be regarded as 'difficult' and their helpseeking as inappropriate. These negative reactions may result in part from a challenge to the notion of depression as a curable disease distinct from everyday life. GPs described encouraging patients to see depression as something separate from the self and everyday life (in order to clarify the ambiguous experience of depression, remove blame, and provide a way forward in the form of antidepressant treatment). However, patients and supporters often questioned the construction of these boundaries between life, illness and the self, rejecting the notion of a medical cure and emphasising the need for self-management.

Conclusions: GPs should be aware that their goals for the consultation and for the management of depression may not necessarily be perceived as relevant or achievable by patients. Future research should explore methods of achieving a negotiated strategy for management.

Is emotional indifference during early pregnancy indicative of psychological disturbance?

J. JOMEEN, University of Leeds & C.R. MARTIN, Chinese University of Hong Kong.

Objectives: To investigate the relevance of significant relationships to the occurrence of depression in women during early pregnancy. To determine if the Cambridge Worry Scale (CWS) is an acceptable measure to administer to women during early pregnancy.

Design: A between-subjects study design was used with all observations taken at the 12-week antenatal booking clinic. The data was collected as part of a longitudinal study in order to develop predictive models of postnatal depression.

Method: Specific domains of antenatal worry were assessed in 129 women during early pregnancy using the CWS. Questionnaire-based (Edinburgh Postnatal Depression Scale) differentiation was used to classify women as non-depressed (N=96) or depressed (N=33).

Results: Independent t-tests revealed significantly elevated socio-medical, socio-economic and health worries in the depressed group compared to the non-depressed group. No differences were observed between groups on measures of significant relationship worry. A logistic regression was also conducted on depression status and revealed socio-economic worry to be the sole significant predictor

of depression status. The CWS was found to be highly acceptable to women during early pregnancy.

Conclusions: These findings indicate that the role of significant relationships in pregnancy are functional rather than emotional. Emotional indifference to significant relationships during early pregnancy may not be clinically relevant or indicative of psychological disturbance. Further research is required to determine the relative importance of significant relationships throughout the period of pregnancy and postnatally to determine the emotional contribution, if any, to maternal and neonatal outcomes. The CWS is a clinically useful measure of antenatal worry.

Self-esteem: An occluded but clinically important psychological dimension in early pregnancy?

J. JOMEEN, University of Leeds & C.R. MARTIN, Chinese University of Hong Kong.

Objectives: The role of self-esteem in the presentation of antenatal anxiety and depression in early pregnancy has received little attention. The current study sought to determine if self-esteem deficits were evident between non-anxious/anxious and non-depressed/depressed women in early pregnancy.

Design: A between-subjects study design was used with all observations taken at the 12 week antenatal booking clinic by a research midwife.

Method: The Culture-Free Self-Esteem Inventory version 2 (CFSE-2) was administered to 129 women presenting at the antenatal booking clinic. The social, personal and global self-esteem sub-scales of the CFSE-2 inventory were used. Questionnaire-based measures of depression were also completed (Edinburgh Postnatal Depression Scale) and women were categorised on the basis of this into non-depressed ($N=96$) or depressed ($N=33$) groups.

Results: The anxious group and the depressed group scored significantly lower on all three sub-scales of the CFSE-2 compared to non-anxious and non-depressed groups.

Conclusions: Self-esteem is an important psychological construct associated with anxiety and depression in early pregnancy. The finding that significant differences were consistently found between groups across the broad but distinct domains of self-esteem measured by the CFSE-2 indicates the relationship of self-esteem to anxiety and depression in this group is far from clinically trivial and requires further investigation. Further research is required to determine the role of antenatal self-esteem in the both the presentation of clinically significant antenatal anxiety and depression and also as a predictor variable in the development of postnatal depression.

Implicit and explicit theory of mind in schizophrenia

S.L. KAISER & R. CORCORAN, University of Manchester.

Objectives: (1) To explore the differences between implicit and explicit theory of mind in schizophrenia; and (2) to consider whether theory of mind impairments can be improved over the course of cognitive remediation therapy (CRT) focusing on the skill of self-monitoring. Traditional mentalising tasks typically test an individual's off-line knowledge of theory of mind but do not provide much information about how it is used during everyday situations. The ability required to pass an off-line task may differ from that used during conversation; in fact, healthy adults who perform well on traditional theory of mind tests may falter during tests of implicit mentalising (Keysar *et al.*, 2003); while individuals with schizophrenia who have trouble with off-line tasks may succeed at implicit mentalising (Frith, 2004). Also, because theory of mind deficits are widely found in schizophrenia, investigating potential interventions is a crucial step towards designing theory of mind remediation. We predict that a sample with schizophrenia will show impairments during an off-line theory of mind task but will be less impaired using an implicit measure. We also predict that individuals in the CRT condition will show significant improvements beyond a social interaction control group.

Design: This study uses a one-factor between-

subjects design with repeated measures. Subjects are allocated to either a CRT experimental group or a befriending control group to test for differences between cognitive remediation plus social interaction versus social interaction. The repeated measures design allows us to determine how much improvement each group makes for each type of mentalising test.

Methods: This ongoing research examines 60 participants (30 in each group). The subjects are diagnosed with schizophrenia or a schizophrenia-spectrum disorder and are between the ages of 18 and 50. Each subject is tested on explicit mentalising using Langdon and colleagues' (1997, 1999) theory of mind story cards, and on implicit mentalising by their use of mental state references during recorded conversations. Prior to the intervention, participants are tested with the story cards. After 15 hours of intervention, each participant is then tape recorded regarding their performance on four socio-cognitive tasks in which participants are asked about the various characters' mental states. The responses will be coded according to frequency, accuracy, and sophistication of theory of mind references. After seven more hours of intervention, all subjects will be re-assessed on the story cards and recorded using four more stories.

Appraisal of traumatic events and traditional culture amongst Kosovo Albanians

B. KELLEZI, University of St. Andrews.

Objectives: Recent literature on post-traumatic stress disorder (PTSD) now recognises that the psychological impact of traumatic events is in part determined by the way in which individuals perceive and interpret those events. Some studies discuss the protective role of ideological conviction while others the role of social support networks. Despite the interest, a better understanding of social factors that influence the appraisal and psychological outcome following extreme events is needed. Adopting a social identity approach, we argue that cultural norms and values play an important role not only in shaping the appraisal of extreme events but also in influencing the availability of social support and mental health outcome.

Two main research questions guided this study: (i) are events less traumatic when they affirm social identity and are meaningful? and (ii) if events affirm social identity, do people talk more about these events, do they demand and receive more collective support?

Design & Methods: An interview study (using semi-structured interviews) was conducted with Kosovo Albanians ($N=40$) in the context of the 1998-1999 armed conflict. The semi-structured interviews were used because of the explorative nature of the study. The interviews were focusing on some issues of interest but they also allowed the participants to express their own ideas and experiences according to their own individual and situational characteristics. Thematic analysis was used to explore the links between social identity, appraisal of events and present mental health.

Results: Our data suggest that social identity mediates the relationship between extreme events and trauma. Those individuals who experienced the events as affirming communal identity reported higher levels of positive interpretation of war and particular events than the individuals who did not experience the events as an identity affirmation. The former made more use and demanded more social support from private and public resources as well.

Conclusions: The experiences of the war that affirm cultural norms and values are less traumatic than those that are interpreted as a violation of these norms, a difference that is reflected in the primary and secondary appraisal of events.

Health locus of control and coping responses as predictors of breast/testicular self-examination

P.A.D. LIST, M.P. JOHNSON & S.R. BAKER, Keele University.

Objectives: To date, research into the relationships between breast and testicular self-examination and health locus of control, and between self-examination and coping responses, has been

somewhat limited. The purpose of this study was to investigate the role of health locus of control and coping as predictors of self-examination behaviour for both males and females. In light of previous findings, a positive correlation was predicted between internal health locus of control and self-examination frequency, together with a negative correlation between powerful others health locus of control and number of self-examinations.

Design: This was a questionnaire-based study, with two time points.

Methods: 67 participants (29 males and 38 females) were recruited using a snowballing method. At Time 1, each participant completed the Multidimensional Health Locus of Control scales and the Coping Responses Inventory. Three months later, at Time 2, they reported their breast/testicular self-examination history, including self-examination frequency during the past three months.

Results: When the data for males and females were combined (excluding seven participants who had never self-examined), a significant positive correlation was found between internal health locus of control and self-examination frequency, along with a significant negative correlation between chance health locus of control and number of self-examinations. Together, internal and chance health locus of control accounted for 12 per cent of the variance in self-examination frequency. Powerful others health locus of control, approach coping and avoidance coping were not found to be related to self-examination frequency.

Conclusions: This study indicates that the relationship between health locus of control and self-examination behaviour is similar for males and females, and that scores for internal and chance health locus of control are useful as predictors of self-examination frequency among people who have practised self-examination at some time.

Investigating the relationship between anxiety and breast/testicular self-examination

P.A.D. LIST, M.P. JOHNSON & S.R. BAKER, Keele University.

Objectives: Previous studies examining the relationship between breast self-examination and anxiety have produced contradictory findings, while research into testicular self-examination and anxiety has been very limited. The purpose of this study was to investigate the relationship between anxiety and self-examination behaviour for both males and females.

Design: This was a cross-sectional questionnaire-based study.

Methods: 150 participants (56 males and 94 females) were recruited using a snowballing method. Each participant completed the State-Trait Anxiety Inventory, to measure general anxiety and self-examination anxiety, the Health Anxiety Questionnaire and a three-item cancer anxiety/worry measure. They also reported their breast/testicular self-examination history, including self-examination frequency during the past 12 months.

Results: When the data for males and females were combined, a significant positive correlation was found between breast/testicular cancer anxiety/worry and number of self-examinations. General anxiety, health anxiety and self-examination anxiety were not found to be related to self-examination frequency. Other findings from the study were that women were significantly more anxious about breast cancer than bowel cancer, and also that women were significantly more anxious about breast cancer than men were about testicular cancer.

Conclusions: This study indicates that the relationship between anxiety and self-examination behaviour is similar for males and females, and that scores on the breast/testicular cancer anxiety/worry measure may be useful as a predictor of people's self-examination behaviour. The study also provides some evidence that cancer anxiety/worry varies for different types of cancer.

Foresight Brain Science, Addiction and Drugs Project

J.L. MARSDEN, M.E. LAWRENCE & J. WITHERS, Foresight, Office of Science and Technology, Department of Trade and Industry.

Purpose: How we manage the use of psychoactive substances in the future for the benefit of the individual, community and society is the question that the Foresight Brain Science, Addiction and Drugs project is seeking to address. The Foresight programme (UK Office of Science and Technology) aims to provide challenging visions of the future, to ensure effective strategies now and it does this by undertaking science-based futures work to investigate science, technology, environmental and social issues. The Brain Science, Addiction and Drugs project will look 20 years ahead at possible opportunities and risks arising from rapid advances in brain science and drugs. The project includes psychoactive substances that affect brain function (including recreational, psychiatric, cognition enhancing or mood altering drugs) but also future technology such as trans-cranial magnetic stimulation or neural prosthetics.

Background: The science relating to the way chemicals affect the brain's function, our behaviour and in some cases lead to addiction, is an important, fast moving and exciting area. Issues arising are the implications of future psychoactive substances, cognition and performance enhancing drugs, management and treatment, genetics of vulnerability to drug problems and addiction, drug testing and screening technologies. Other related areas are the changing role of medicine, whole-life medical and drug histories.

Methods/Key Points: The project has commissioned 15 state-of-science reviews from leading experts in their fields that will explore our current understanding as well as future potential advances of a wide range of topics drawn from the sciences, social sciences and the arts. These topics include: Neuroscience, Clinical Psychology, Experimental Psychology, Sociology, Pharmacology and Therapy and the History of Addiction. These reviews will be peer-reviewed and comprise the baseline information source on which the futures work will be developed.

Conclusions: Any initial findings from the State-of-Science reviews will be explored. The project will launch its findings in summer 2005.

A factor analysis of the 12-item General Health Questionnaire (GHQ-12) in individuals with facial disfigurement

C.R. MARTIN, Chinese University of Hong Kong & R.J. NEWELL, University of Bradford.

Objectives: The GHQ-12 has been recommended as a reliable screening instrument for psychological distress in all clinical groups. However, a fundamental tenet underlying the utility of this widely used screening instrument is that it is a unitary measure of psychological distress. The factor structure of the GHQ-12 was evaluated in individuals experiencing significant facial disfigurement drawn from plastic surgery, dermatology and media-recruited populations.

Design: A cross-sectional study design was used with data accrued from one observation point. This approach was taken in order to determine the fundamental characteristics of the GHQ-12 in this often neglected population.

Method: Confirmatory factor analysis (CFA) was conducted on self-report GHQ-12 data from 362 individuals with significant facial disfigurement. Nine factor models were tested on all three versions of the recommended GHQ-12 scoring method. Internal reliability analysis was also conducted.

Results: The GHQ-12 was found to be internally reliable irrespective of scoring method adopted. However, two and three-factor models offered superior fit to the data compared to the presumed uni-dimensional structure.

Conclusions: The GHQ-12 is a multi-dimensional instrument comprising two to three sub-scales imbedded within the tool in individuals with facial disfigurement. The claim that the GHQ-12 is a unitary measure of psychological distress is unsupported.

An international comparison of the factor structure of the Hospital Anxiety and Depression Scale in coronary heart disease patients

C.R. MARTIN, Chinese University of Hong Kong, J. BARTH, University of Freiburg & D.R. THOMPSON, Chinese University of Hong Kong.

Objectives: The premise that the Hospital Anxiety and Depression Scale (HADS) is a bi-dimensional instrument has been questioned when used with coronary heart disease (CHD) patients. The current investigation sought to determine if a three-dimensional factor structure offered a superior fit to data across three culturally distinct CHD populations.

Design: A cross-sectional study design was used with data obtained from one observation point but accrued from three culturally distinctive CHD populations. This approach was taken to allow comparison in model fit between each group to determine any impact of this variable on the factor structure of the HADS.

Method: 1793 CHD patients from German ($N=1320$), UK ($N=335$) and Hong Kong ($N=138$) hospital sites were administered the HADS as part of larger research programmes. The HADS was administered by clinical research staff.

Results: Confirmatory factor analysis (CFA) was used to determine the factor structure of the HADS. Three-factor models offered the best fit to the data and were superior to two-factor (anxiety and depression) models. This finding was consistent irrespective of country category.

Conclusions: The HADS comprises a tri-dimensional underlying factor structure in CHD patients and this is consistent across culturally diverse patient groups. Those using the HADS with CHD patients should be aware that the instrument assesses three rather than two domains and this may impact on case detection accuracy of this tool in this clinical group.

Can the Hospital Anxiety and Depression Scale be used reliably to screen individuals with facial disfigurement?

C.R. MARTIN, Chinese University of Hong Kong & R.J. NEWELL, University of Bradford.

Objectives: To investigate the screening potential of the Hospital Anxiety and Depression Scale (HADS) in individuals with significant facial disfigurement by examination of the underlying factor structure of the instrument. The study also investigated the level of HADS assessed anxiety and depression in this currently under-researched population.

Design: A cross-sectional study design was used with data accrued from one observation point. This approach was taken in order to determine the fundamental characteristics of the HADS in this often neglected population.

Method: 376 participants with significant facial disfigurement were recruited from plastic surgery clinics, dermatology clinics and through a media campaign with the aid of a major disfigurement charity. The HADS was administered by either the researcher or by postal questionnaire pack.

Results: Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) was used to determine the factor structure of the HADS in this population. A two-factor (anxiety and depression) structure offered an acceptable fit to the data, though this was inferior to a three-factor model. HADS-assessed levels of anxiety and depression was observed to be very high compared to other clinical groups.

Conclusions: The HADS performs no worse in individuals with facial disfigurement than it does in other clinical groups. However, the fundamental three-factor structure of this instrument suggests that it may be usefully redeveloped as an instrument comprising three rather than two sub-scales. Alternative measures of anxiety and depression should be considered and evaluated for screening purposes in this group. Clinicians encountering individuals with significant facial disfigurement should be aware that screening for affective disturbance may be useful and clinically pertinent.

The continuing life experience of the therapist and its effect on clinical work with clients

P.A. MARTIN, University of Roehampton.

This paper is about the way that experienced therapists use their continuing life-experience in the service of their clients. It is based on the author's heuristic research carried out as a PhD thesis. Heuristic research is based around the reflexivity of the researcher and so is of special interest to counselling psychologists because it mirrors the therapeutic use of the self of the practitioner. The actual research consisted of 16 extended interviews with self-referred participants. They told me the story of their life events, and traced some of the changes in their clinical practice to such experiences as 'normal' bereavement or bereavement after violent death. Some had undergone professional disciplinary procedures, others the experience of having a son addicted to heroine. One person survived her experience of the misconduct of a trusted colleague. When I had absorbed the stories I wrote a series of poems, reflections, and echoes of what I had heard to re-present to these 'co-researchers' on a second interview. They told me what they thought of my response. The paper briefly introduces this methodology, with a few selections from interactions with the participants. The majority of the paper concentrates on what the therapists said about their clinical learning which resulted from their private experience. Some of the repercussions were predicable, but profound. Other results were drastic or unexpected. For some the experience awakened them to a different relationship with their clients; for others it was the start of a different existential position in their work. It is hoped that the paper will give listeners cause to reflect on their own experience, and its effect on their work.

The presentation of statistics in clinical and health psychology research

J.N.V. MILES & S. HEMPEL, University of York.

Purpose: To examine statistical methods in psychological research in the *British Journal of Health Psychology* and *British Journal of Clinical Psychology*. To compare standards of reporting of statistics with the medical literature.

Background: The main statistical methods that we use today arose primarily in agricultural research. Psychologists were swift to realise the usefulness of inferential statistics, and the methods were adopted, and adapted where necessary. Psychologists have been responsible for many advances in statistical thinking (for example, much of psychometrics, which has been adopted by medical research). However, other disciplines may be considered to be closer to current statistical thinking. Failure to follow best practice occurs in the reporting of statistical analysis of psychological research.

Methods: All articles published in 2003 in the *British Journal of Health Psychology* (volume 8), and the *British Journal of Clinical Psychology* (volume 42), were statistically reviewed, and errors and potential improvements noted.

Conclusions: A range of improvements could have been made to a number of papers. These include appropriate use and labelling of graphs, inappropriate description of statistical techniques (principal components analysis/factor analysis), failure to report appropriate output (e.g. lack of confidence intervals), and failure to give exact p -values. Comparison is made with the medical literature.

Reconceptualising attachment theory

R.S. NOBLE, Bolton Institute.

Purpose: To provide an explanation of attachment theory in terms of the concept of sociality. **Background:** Recent books on developments in attachment theory and techniques associated with it such as the Adult Attachment Interview suggest that the attachment type of an individual is rather like a personality dimension although in the various longitudinal studies the possibility of 'meaningful change' is discussed. This seems to be a distortion of what Ainsworth for example meant in her depiction of different attachment types – an assessment of the quality of a given attachment relationship.

Key Points: While attachment theory has been developed in a most productive way in the last few decades, some of the early issues and concerns seem to have been lost or at least downplayed. The first of these is the origin of attachment in the first instance. Bowlby's account used the concept of a goal directed innate motivational system. This has always seemed implausible once Mary Ainsworth had demonstrated the different patterns of attachment. Even the modern reading of this work in which the most 'pathological' form is the (newer) D type is problematic since most researchers report it as about 15 per cent in the population. This is a high 'failure rate' for a motivational system. Similarly when Rutter investigated maternal deprivation and its effects he argued it was 'bond distortion' rather than 'bond breaking' which produced delinquency in his epidemiological studies. How should we conceptualise the distortion of a motivational system? Sociality can provide a convincing explanation of both these problems and make greater sense of the concept of attachment type. **Conclusions:** Sociality theory re-establishes attachment as a product of human interaction. It links the development of attachment to the development of other important competencies such as language; it can deal with the cultural variability of attachment phenomena and emphasises the concept of an attachment network.

Help seeking behaviour in adolescent victims of bullying

N. NORET, I. RIVERS, H. MACRAE, S. BLACK & A. RICHARDS, York St. John College.

Objectives: The objectives of this project are to examine the prevalence of help seeking behaviours among adolescent victims of bullying, and to examine whether type of bullying experienced, frequency of bullying and gender play a role in victim's help-seeking behaviour. The study also aims to highlight the beneficial aspects of help-seeking behaviour.

Design: This study was a cross-sectional prospective study of factors affecting pupils' social interactions at school.

Method: *Participants:* 1860 pupils 59.2 per cent male ($N=1101$) and 40.4 per cent female ($N=752$). Seven pupils did not indicate their gender but were retained within the study (0.4 per cent). Ages ranged from 13 to 19 years ($X = 13.6$ years; *s.d.* 1.19 years) with the majority (78.7 per cent) falling between the ages of 13 to 15 years.

Survey instrument: The survey instrument consisted of three distinct measures: a questionnaire based upon that used by Olweus' (1991); an adapted version of the US' Youth Risk Behaviour Survey (YRBS) on drug and alcohol use among young people; and the Brief Symptom Inventory (Derogatis, 1993).

Procedure: In mainstream schools, data were collected from each school by members of the research team who introduced the project to pupils either in class or year groups. Questionnaires took approximately 40 minutes to complete which were then collected in by member of the research team and sealed in envelopes in front of pupils

Results: Preliminary analysis shows that 28.4 per cent of the sample ($N=528$) reported being bullied occasionally or more often, only a small proportion of victims reported talking to a teacher or someone at home about the bullying, analysis also found that as frequency of bullying increases the percentage of victims who report bullying increases.

Conclusion: Help seeking behaviour can be an effective coping strategy for victims of bullying. Encouraging victims to confide in parents or teachers about bullying plays a fundamental role in intervention strategies, understanding the reasons why victims may not seek help can help researchers and practitioners to build on existing intervention strategies and better support victims of bullying.

The coaching psychology movement in the UK: Past, present and future

S. PALMER & A.C. WHYBROW, City University, London.

Coaching psychology it seems has appeared from nowhere in the form of the Special Group in Coaching Psychology, the third largest subsystem within the BPS and still less than a year old. What was the catalyst to its appearance and what is this

Special Group looking to achieve? In this paper we will provide some of the context behind this historic development and look to position the future of the Special Group in terms of the development of this applied area of Psychology and the Coaching arena more broadly.

In recent years, coaching has moved from being a highly marginalised activity to being a mainstream interest for people involved in teaching, strategy and people development. Whilst individual Psychologists have been involved in this movement, coaching practice has largely developed without focused input from the Psychological profession. This is despite the fact that personal development is a core component of the work of Psychologists, with the use of validated psychological principles to enhance life experience and work performance going back at least several decades. The development of the Special Group in Coaching Psychology provides an opportunity for Psychologists to input and shape this emerging field.

In this paper, we present some of the core elements of the practice of Coaching Psychology and explore the underpinning research. Working from the definition of Coaching Psychology as used by the Special Group in Coaching Psychology, we draw on a number of existing sources of research across the framework of applied Psychology to illuminate practice in this developing area. Additionally emerging research focused specifically on coaching practice will be presented.

We finish the paper by presenting a number of key questions that research into coaching Psychology will need to address and an outline of how the Special Group in Coaching Psychology will need to progress in order to maximise the impact of Psychology on the practice of Psychologists and non-psychologists working as coaches.

Working with people who engage in deliberate self-harm: The experience of community mental health nurses

J. POWIS, A.R. THOMPSON, University of Sheffield & A. CARRADICE, Sheffield Care Trust.

This study aimed to explore community mental health nurses' (CMHNS) experiences of working with people who self-harm. As treatment depends partly on professionals' attitudes, a better understanding of their experience of working with this client group may give important insights into why current treatments are not working and highlight staff training and support needs.

A qualitative approach was chosen to provide an in-depth account of participants' experiences. Interpretative phenomenological analysis (IPA) was selected as it is concerned with an individual's perception, thoughts and feelings, as opposed to an objective account of the topic.

Eight CMHNS were recruited from two collaborating teams. Participants were chosen if they fulfilled the following criteria: G-Grade Community Mental Health Nurses without any formal psychological or therapeutic training; were currently involved with a client who self-harmed and had prior experience working with clients who self-harm. Semi-structured interviews were conducted with each participant. These were audio-taped and transcribed verbatim.

The interviews were analysed using IPA. This revealed seven themes which were: 'Trying to understand'; 'It's about monitoring risk'; 'Struggling with boundaries of responsibility'; 'Emotional impact'; 'There's little in the way of techniques'; 'The therapeutic relationship's a given' and 'Learning to cope'. Nurses tried to understand what they saw as a complex behaviour. Risk issues were anxiety-provoking and led to struggling with the responsibility for keeping clients safe. There was very little in terms of theory to guide their interventions but the therapeutic relationship was seen as very important. The work was emotionally demanding but nurses had learned to use a variety of coping methods to manage the impact of the work.

Clients who self-harm were seen as one of the most difficult client groups to work with. The results highlighted a need for increased staff training in theories to guide their work and in effective therapeutic techniques. Good quality supervision and informal support were also vital to support staff in this challenging area of work and to facilitate better outcomes for clients.

Reported unprotected sex in young adults: A cross-cultural study

C. PROTOGEROU, J. TURNER-COBB & C.L. RUSSELL, University of Bath.

Objectives: Increasing rates of sexually transmitted diseases (STD's) cause significant concern to health professionals. Health promotion campaigns advocate the successful and consistent use of condoms, which has demonstrable effects in facilitating STD protection. The World Health Organisation (2002) cites a person's culture as one factor that influences condom use. Indeed, it is important that psychologists study factors that affect condom use in different cultural cohorts. In response, this study aimed to investigate reported condom use in British and Greek samples. **Method:** Two models were employed as the theoretical framework: the theory of planned behaviour (Ajzen, 1985) and the theory of time perspective (Zimbardo & Boyd, 1999). Participants were recruited from British and Greek Universities ($N=112$), and were administered two measures: a standard theory of planned behaviour (TPB) questionnaire and the Zimbardo Time Perspective Inventory. Relationship Status (RS) was also established (i.e. exclusive or non-exclusive). Three hypotheses were generated: (1) The Time Perspective (TP) construct (future or present) would enhance the predictive ability of the TPB and might account for the 'intention-behaviour' gap, commonly observed in similar studies; (2) The Greek sample would be more present-oriented (e.g. hedonistic, living in the 'here and now'), than the British sample, which would be more future-oriented (e.g. considerate of future outcomes of current activities); and (3) A present orientation was expected to be associated with reports of less condom use.

Results: The results revealed an 'intention-behaviour' gap. Participants intended to use condoms and favoured using them, yet, a significant proportion of participants reported having unprotected sex. Correlation analyses revealed that, overall, a present orientation was associated with more condom use ($r=0.19$, $p<0.05$), whereas a future orientation was not associated with less condom use. The TP construct did not enhance the predictive ability of the TPB. When mediation and moderation analyses were employed, the TP construct did not account for the 'intention-behaviour' gap. Interestingly, relationship status influenced condom use and moderated the intention - behaviour [$F(1,107)=7.19$, $p=0.008$], and the attitude-behaviour relationship [$F(1,107)=3.92$, $p=0.05$]. Participants in exclusive relationships reported less condom use. This finding was more pronounced in the British sample. The Greek sample reported more condom use, than the British sample, in both exclusive and non-exclusive relationships.

Conclusion: In conclusion, the study demonstrated unanticipated differences in TP and cultural differences, regarding condom use. RS was a key factor, influencing sexual risk decisions and behaviours. Therefore, we advocate a shift in emphasis from rational-cognitive theoretical models, towards models that include context-specific variables when accounting for differences in condom use. It is suggested that future research explores the interface between sexual risk behaviours and people's understanding of relationships in different cultures, especially in relation to trust, intimacy, and love. This could lead to the development of more realistic safe-sex campaigns that take culture and the meaning of relationships into account, when promoting condom use.

Dignity in relationships

P. RENNIE-PEYTON, Independent.

As professionals we have codes of ethics and guidelines which guide the way in which we treat our patients/clients.

However, many people in the helping professions do not expect, many not noticing when they themselves are not treated with the same dignity and respect. This has consequences we allow ourselves not to be treated well and sadly, frequently we don't use these same rules when interacting with our colleagues, other health professionals, friends and family. This workshop invites us as counselling psychologists to take a look at our relationships

with others, in all areas of our lives, and think of ways of improving them to obtain a win/win situation for all.

On the psychological nature of explanation

G. RICHARDS, BPS History of Psychology Centre, Staffordshire University.

While there are extensive literatures on the nature of scientific explanation, 'psychological explanation' and the logical character of 'good' explanations relatively little has been written which considers the seeking and offering of explanations as psychological phenomena in their own right. In this paper it will be suggested that fundamentally explanations are responses to specific puzzles and that a 'good' explanation is, operationally, simply one which leaves the person requiring it no longer feeling puzzled. (To achieve this it may of course have to meet all kinds of criteria set by the individual in question.) What we need, therefore, is a taxonomy or analysis of the ways in which things become puzzling, and of the strategies appropriate in each case for dissipating the puzzle. Adopting this apparently straightforward approach proves, however, to raise a fundamental paradox with apparently far-reaching ramifications.

Successful counselling and therapeutic cross-cultural relationships

G. RICHARDS, University of Roehampton.

Objectives: Towards the latter part of the 20th century, there was a growing body of research that suggested that ethnic matching in counselling for ethnic minority clients would improve the therapeutic process and outcome for such clients. Now that we are firmly in the 21st century, whilst accepting that there ethnic matching should be available for ethnic minority clients, there is growing material to suggest that many cross-cultural counselling dyads can be of benefit to ethnic minority clients. Indeed, in many cases such a dyad can have beneficial effects for both counsellor and client and in some cases be more effective than ethnic matching. The aim of this paper is to report on preliminary findings (and collection of data is ongoing) on cross-cultural counselling outcomes and to compare these with therapeutic outcomes when ethnic matching occurred.

Design & Method: An independent design was used which compared the counselling outcome for ethnic minority clients who received ethnic matching and those who received cross-cultural counselling (independent *t*-tests). The retention rate (i.e. length of time in therapy for their clients) of both ethnic minority counsellors and white counsellors was also compared as was premature termination of their clients from ethnic minority and white ethnic groups (*N*=104).

Results: The results showed that there were no significant differences between ethnic minority counsellors and white counsellors in their ability to retain ethnic minority client. In addition there was no difference between the two groups of counsellors in the rate of premature termination of counselling amongst their ethnic minority clients.

Conclusions: Although this is a preliminary study, the results indicate that there are white counsellors who are able to apply their skills in the therapeutic relationship to provide an appropriate therapeutic service when working cross-culturally. This presentation will consider the components that contribute to the 'extra-something' skills that enable white counsellors to work effectively in a cross-cultural therapeutic dyad.

Inhibiting distress and humour: The effects on felt arousal, affect, and responses toward unrelated stimuli

L.V. RICKWOOD, University of Plymouth.

Objectives: While emotion inhibition in the self is at present little understood or explored, there exist indirect indications in the literature that it is difficult to reduce, especially, sad or distressful feelings via inhibition.

Design: This study, employing in total 120 female volunteer participants, was conducted primarily to examine whether self-inhibition of emotion is, immediately, linked with a self-inhibition of felt arousal.

Methods: Participants, first exposed to a series of either distressful or humorous (all pictorial) stimuli, either were or were not (controls) asked to inhibit all or any feelings prior to rating felt arousal (e.g. felt muscle tension), affect (e.g. happy-sad) and, then, their responses toward a series of unrelated, mildly erotic and non-erotic, target stimuli (photographs of semi-nude and fully dressed male models respectively) that were arranged among themselves either in an alternating fashion or consecutively with non-erotica preceding mild erotica. Also, all measures, including participants' physiological arousal (heart rate) and self-directed judgements, were obtained at several additional times during the experiment, and a separate control, neutral-emotion, group of participants was also used (Experiment 1).

Results: The main results show that in the humour condition, immediately, inhibition, in comparison with no-inhibition, participants showed especially a (significant) reduction in their reports of felt arousal as well as in their immediate emotional (e.g. exciting) responses toward mild erotica in the alternating series. However, in the distress condition, immediately, inhibition, in comparison with no-inhibition, participants showed little or no changes in the reports of felt arousal or of felt sadness, but showed a significant enhancement in their (delayed) emotional responses toward mild erotica at the end of the consecutive series. In a follow-up Experiment 2 participants were asked to inhibit all or any feelings during exposure to a similar series of distressful or humorous stimuli. Whereas, as expected, in each condition inhibition now led to little or no reduction in the reports of felt arousal across a number of employed scales, in each condition the effects of inhibition on participants' affective feelings and target ratings were essentially similar to those in Experiment 1. Also, in each condition, after the experiment, inhibition participants indicated a similar aim to inhibit felt arousal on all employed scales, although those in the distress, as opposed to humour, condition indicated also a (significantly) greater aim to inhibit negative thoughts and a (significantly) poorer perceived success in inhibiting the feelings in general.

Conclusions: The findings in this study are consistent especially with existing proposals and evidence that, immediately after a sad or distressful event, individuals are unable to regulate effectively their feelings due to depleted energy. The findings are also considered in the light of the construct of valenced arousal.

An experimental investigation into the relationship between emotional reasoning, guilt and appraisals of responsibility in obsessive-compulsive phenomenon

G. ROBINSON & M. FREESTON, University of Newcastle-upon-Tyne.

Objectives: An excessive or inflated sense of responsibility has been proposed to be at the core of several contemporary cognitive behavioural conceptualisations of obsessive-compulsive disorder (e.g. Salkovskis, 1985). More recently it has been suggested that the influence of excessive or inflated sense of responsibility may be reliant upon the presence of negative mood states (e.g. Davey, 2004). Furthermore, it may be that the phenomena of ex-consequencia or emotional reasoning provide a plausible theoretical link between negative mood (e.g. guilt) and the influence of inflated responsibility in OCD. The main objective of the present study is, therefore, to examine whether individuals' conclusions about responsibility following an intrusive thought concerning harm to others are affected by a subjective emotional response, such as guilt (e.g. 'If I feel guilty I must be responsible for harm').

It was hypothesised that: (1) High versus low experimentally induced non-obsessional or background guilt would increase the perception of responsibility and intrusion related guilt experienced by an individual following an intrusive thought concerning harm to others; and (2) High versus low appraisal of threat following an intrusive thought would increase the perception of responsibility and intrusion related guilt experienced by an individual.

Design: A 2 x 2 factorial design was used. Between

subject factors were background guilt, either high or low, and appraisal of threat following an intrusive thought, either high or low.

Methods:

Subjects: 51 undergraduate psychology students (mean age = 21.55 years, SD = 4.12)

Materials: A paper and pencil task was constructed which consisted of two scenarios in which information about non-obsessional or background guilt (high versus low) and appraisal of threat following an intrusive thought (high versus low) were systematically varied.

Procedure: Subjects were volunteers and completed the experimental task at the end of a tutorial.

Results: As hypothesised a high, compared to a low, attribution of harm following an intrusive thought lead to an increase in participants' ratings of responsibility and intrusion related guilt.

In contrast non-obsessional or background guilt influenced participants' ratings of responsibility and subsequent intrusion related guilt only under conditions of low threat information.

Conclusions: Results are discussed in terms of current cognitive behavioural models of OCD and implications for future research.

Trauma, post-traumatic stress disorder (PTSD) and co-morbid psychiatric disorders: An explorative study of a British psychiatric inpatient population

L. SARTORIO, D. PURVES & S. ROSE, London Metropolitan University & Berkshire Traumatic Stress Service.

Objectives: This study aimed to: (a) establish the lifetime prevalence of traumatic events and the point prevalence of PTSD within a sample of British psychiatric inpatients; and (b) explore further the relationship between trauma, PTSD and the degree of co-morbid psychiatric symptomatology.

Design: Non-experimental design, whereby each participant was asked to complete the same interview and self-report questionnaires. However, ex-post facto groups were created to explore differences between no trauma, trauma, trauma/no PTSD and trauma/PTSD categories.

Methods: Sample of 34 British psychiatric inpatients, aged between 18 to 60 years, diagnosed with a DSM-IV psychiatric disorder, fluent in English and capable of giving consent. Semi-structured interviews of traumatic life events and structured interviews of PTSD symptomatology were conducted along with the administration of structured self-report questionnaires of co-morbid psychiatric symptomatology.

Results: A lifetime prevalence rate of 67.7 per cent for traumatic events and a point prevalence rate of 41.2 per cent for PTSD were found within this sample. Independent samples *t*-tests showed significant differences between trauma and no-trauma groups on the degree of co-morbid psychiatric symptomatology (the trauma group reporting a greater degree of depression, dissociation, sexual difficulties and self-dysfunction). Multiple stepwise regression analyses also showed the trauma/PTSD group, compared to the trauma/no PTSD group, significantly predicted greater degrees of dissociation and depression.

Conclusions: These results support the importance of both traumatic exposure and PTSD in the development and course of co-morbid psychiatric symptoms. Ultimately, this highlights a need for considering trauma histories and PTSD in the assessment and treatment programmes for some psychiatric inpatients.

Writing for publication

H. SEQUEIRA, Editor, *Counselling Psychology Review*.

The aim of the session is to demystify the journal publication process and encourage counselling psychologists to submit their papers for publication.

Firstly, the session explores the types of scientific writing that can be submitted. These range from case studies/series of clinical work, quantitative and qualitative research studies, review articles and letters. The scope for undertaking each of these types of project within ones work as a counselling psychologist is explored. Secondly, the steps in writing a paper are explained. These include planning for publication, utilising a structure for writing, knowing the message that you want to

portray and factors involved in the choice of journal for submission. Thirdly, the common errors that authors sometimes make in writing and submitting papers for publication are explored. Practical examples and recommendations will be offered on how to get started, on conquering the fear of writing and addressing other common problems faced by writers.

The paper argues that submitting a paper for publication need not be an intimidating experience; however, it does require the observation of certain rules and conventions. These are briefly outlined so that potential pitfalls can easily be avoided.

Whilst publishing one's work may bring personal or professional benefits, it is also argued that the quantity and quality of published papers is an indication of the health and vitality of counselling psychology as a profession. It is hoped that the current paper will stimulate counselling psychologists to publish.

Anxiety and depression in offenders with intellectual disabilities

D. SKENE & W. LINDSAY, The State Hospital.

Objectives: Systematic attention has been given to the phenomena of affective disorders among individuals with developmental disabilities due to the growing realisation that such persons can suffer emotional problems. An increased emphasis has been placed on the need to have empirically supported assessment strategies. One recent development has been the Glasgow Depression Scale and the Glasgow Depression Carer Supplement (Cuthill, 2003). The current study explored the concurrent validity of the Glasgow Depression Scale – Learning Disability, a revised version of the Beck Depression Inventory and the Glasgow Depression Scale – Carer Supplement. It was predicted that the measures of depression would be positively correlated in persons with developmental disabilities. In addition, this study examined the relationship between depression and anxiety in persons with developmental disabilities. It was predicted that the measures of depression and anxiety would also be positively correlated.

Design: This paper presents a within-subject design with Pearson correlations.

Methods: 25 inpatients with a diagnosis of developmental disabilities with a mean age of 36 and IQ ranging from 53 to 74 (mild to moderate). The Beck Anxiety Inventory (BAI) retained its original format of simply one or two words, but the terminology of some of the items was simplified or described in more (and simpler) detail. The Beck Depression Inventory (BDI) was also used and reworded. The Glasgow Depression Scale for People with Learning Disability (GDS-LD) and the Glasgow Depression Scale Carer Supplement (GDS-CS) were also used.

Results: The mean BAI total score of 8.52 (SD=9.514), BDI-II total score of 16.12 (SD=9.892) and GDS-LD total score 10.16 (SD=8.209) indicated that participants were mildly anxious and depressed according to respective diagnostic ranges. The mean GDS-CS total score was 6.29 (S.D.= 4.144).

Pearson correlations of the BDI, BAI, GDS-LD and GDS-CS: Correlations between the BAI, BDI and GDS-LD were significant, indicating that the BDI and GDS-LD had convergent validity ($r(25)=0.83$, $p<0.001$) and anxiety and depression were highly correlated ($r(25)=0.65$, $p<0.001$). The GDS-CS failed to correlate significantly with any of the other three instruments administered ($r(25)=0.36$, $p>0.05$).

Conclusions: Consistent with predictions, there was a high correlation between the BDI and GDS-LD indicating the convergent validity of these measures of depression in individuals with developmental disabilities. Furthermore, there was a high correlation between anxiety and depression in the current group. Interestingly, contrary to Cuthill *et al.* (2003), this study failed to reveal significant associations between the GDS-CS and any of the other three measures used. In the original study Cuthill *et al.* (2003) relied on both family members and paid carers to complete the GDS-CS. However, this study relied on the inpatient's named nurse completing the GDS-CS, highlighting the possible difficulty of using such a measure within a secure setting.

Examining the relationship between exercise motivation and habitual 'out of school' physical activity: The role of school physical education

M. STANDAGE & F. GILLISON, University of Bath.

Objectives: Employing theoretical tenets from Self-Determination Theory (Deci & Ryan, 1985, 1991), the present study examined the relationship between a model of motivation toward school physical education (PE), exercise motivation, and reported habitual 'out of school' physical activity.

Design: A prospective design was employed.

Methods: 331 (mean age = 13.49 years; SD=0.77; range = 12 to 15 years) British secondary school students responded to a multi-section inventory assessing student motivational processes toward the context of school PE (Time 1). One week later (Time 2), data pertaining to exercise motivation and habitual 'out of school' physical activity were obtained.

Results: The hypothesised relationships among the study variables were examined using structural equation modelling. Results of maximum likelihood analysis revealed the proposed model of motivational processes to adequately fit the data [$\chi^2(80)=251.53$; $p<0.001$; CFI=0.94; IFI=0.94; SRMR=0.08; RMSEA=0.081 (90 per cent CI=0.069–0.092)]. Specifically, the model showed that perceptions of an autonomy-supportive climate, as created by the PE teacher, positively predicted the satisfaction of autonomy, competence, and relatedness within PE. In turn, competence and autonomy positively corresponded to self-determined PE motivation. As hypothesised, self-determined motivation toward PE positively predicted self-determined exercise motivation. Finally, self-determined motivation toward exercise positively predicted habitual 'out of school' physical activity.

Conclusions: The results of the study provide support for self-determination theory and corroborate the application of the framework to school PE and exercise settings.

The early days of the National Institute of Industrial Psychology

F.R. STANSFIELD, Independent Researcher.

Purpose: This paper is to re-evaluate the role of the National Institute of Industrial Psychology in the early development of industrial psychology following the First World War.

Background: The NIIP, set up in 1921, largely initiated the application of psychology to work issues in the United Kingdom. Early histories have explained the origins of the NIIP in relation to the interests of C S Myers, its first Director, and of business concerns arising out of wartime studies of worker fatigue for the Ministry of Munitions and subsequently the Industrial Fatigue Research Board.

Methods/Key Points: The study is based upon detailed inspection of the NIIP archives and of its journal and other publications. The documents show that the Institute was shaped in the 1920s through tensions relating to a variety of issues these concerns included the separation of psychology from physiology; a desire to investigate scientifically whilst rejecting the 'scientific management' movement; hopes to be a national scientific institute tempered by needs for funding; and expressed political neutrality co-existing with the social and industrial agendas of both staff and funders. There was a dynamic interplay between these interests and development of the institute, guided by both Myers and the Institute's Executive Committee. Initial moves to involve scientists in development of the Institute were overtaken by business enthusiasm. The NIIP, supported by much publicity, expanded through business projects. Later in the decade grants from major charitable trusts led to a renewed interest in scientific research investigations.

Conclusions: Because the NIIP was the largest psychological organisation in Britain during the inter-war period, its early history helps explain the role that psychology developed in Britain and hence the directions that research and practice has taken in this country.

An evaluation of an imaginal provocation test of anger in people with learning disabilities: A comparative analysis

L. STEELE, A. GRIEVE, NHS Tayside, W.R. LINDSAY, The State Hospital, Carstairs, NHS Tayside & University of Abertay, Dundee, R. ALLEN & L. ALDER, NHS Tayside.

Objective: Taylor, Novaco, Guinan and Street (2004) highlighted the need for a multi-modal assessment approach in evaluating anger treatment for adults with intellectual disabilities as anger is an important antecedent of aggression. This study evaluates the Imaginal Provocation Test (IPT) developed by Taylor *et al.* (2004) in a community and in-patient forensic intellectual disability service. **Design:** A between subjects design was used comparing pre and post treatment measures for anger as measured by the IPT for a treatment group compared to a control group.

Methods: There were 15 male participants in each group with a mean IQ of 61.45 (SD=6.90) who were assessed as having clinically significant anger problems. The IPT was administered with three anger psychometric scales – the Novaco Anger Scale (NAS; Novaco, 1994, 2003), Provocation Inventory (PI; Novaco, 1994) & Dundee Provocation Inventory (DPI; Lindsay *et al.*, in preparation). Treatment was based on an adaptive cognitive behavioural framework over four months.

Results: There were no significant differences between the two groups at time 1 on any of the assessments, age or IQ. There was a significant difference in the anger reaction composite scores at pre and post treatment for the treatment group. There were no significant pre-post treatment differences for the anger regulation index or the imaginal clarity and scene recall measures. The validity of the IPT was examined through the correlation of its indices with the NAS, PI and DPI. The anger reaction composite was only significantly correlated with the PI.

Conclusion: This study supports the findings of previous studies that cognitive behavioural therapy can be effective in the treatment of anger problems. Furthermore, the results indicate that the IPT procedure successfully induces anger. It supports Taylor *et al.* (2004) findings that treatment effects were detected by the anger reactions composite of the IPT and likewise that there was no significant treatment effect as measured by the IPT anger regulation index despite using a larger group size. Therefore, it would be interesting to test the hypothesis that changes in anger control coping behaviours will not occur until practised in vivo over time.

Counselling across a language divide – developing a productive therapeutic relationship

S. STEVENS, City University, London.

Objectives: The aim of this study will be to identify skills and attitudes that experienced counsellors working across a language divide have developed, which contribute to a positive therapeutic relationship.

Design: A relatively high proportion of refugees in the UK are in need of mental health and other counselling and psychological services, but the resources to meet these needs are limited. For many in need, for a variety of reasons, resources that are available are inaccessible. For others, the actuality is volunteer counsellors, relatively unskilled and inexperienced, working across a language divide without benefit of interpreters or sufficient knowledge of the client's cultural context. The catastrophic and traumatic events in the Indian Ocean on Boxing Day 2004 further highlight the need for psychological support services, with suggestions (in the immediate aftermath) that the call on counsellors with appropriate skills is likely to be higher than ever. Despite the difficulties and hazards of working across a language divide, the demographic, cultural and linguistic differences need not be insuperable barriers to good outcomes from the counselling process. Other factors may contra-indicate counselling through the client's native language, such as a reluctance to discuss intensely private matters in the presence of another member of their language community.

Methods: The study will employ a qualitative method, using semi-structured interviews, to obtain descriptions of how individual counsellors and counselling psychologists have worked with non-native speaker clients to promote a productive therapeutic relationship. This is viewed as an initial exploratory investigation, with the intention of looking more closely at the issues raised at a later date.

Dyslexia, self-esteem and psychopathology

M. TERRAS, L. THOMPSON, University of Paisley, H. MINNIS, University of Glasgow & E. MACKENZIE, Dyslexia Institute Scotland.

Objective: Individuals with dyslexia exhibit more frequent emotional and behavioural difficulties than those without reading problems. Self-esteem may be low, but the exact nature of the relationship between self-esteem and psychopathology remains unknown. This exploratory study examined the relationship between dyslexia, self-esteem and psychopathology. Specifically this project aimed to: (1) To establish the nature of any self-esteem deficit (global and/or specific) in a dyslexic population; (2) To determine levels of psychopathology in a dyslexic population; (3) To determine if low self-esteem is associated with psychopathology in children with dyslexia; and (4) To explore the relationship between self-esteem, behaviour problems, and understanding, attitudes and perceived impact of dyslexia.

Design: All children aged eight to 16 assessed by the Dyslexia Institute Scotland between October 2002 and July 2003 and their parents were invited to participate. 61 children and their parents were recruited (66 per cent response rate). There were 39 males (64 per cent) and 22 Females (36 per cent). Mean age at the time of testing was 10.55 years.

Method: Children and parents completed outcomes measures relating to: (1) Self esteem assessed using the Self-Perception Profile for Children; (2) Emotional and behavioural problems assessed using the Strengths and Difficulties Questionnaire; and (3) There were no existing measures to assess parental and child attitudes, understanding and perceived impact of dyslexia. Informed by our preparatory focus group findings and the extant literature, checklists for parents and children were developed.

Results: No global self-esteem deficit was found, but the mean score for both child and parent-rated scholastic competence was significantly lower than that of the general population. Rates of social, emotional and behavioural difficulties were significantly higher than those of the general population, with 60 per cent of the children in our sample 'screening positive' for the presence of social, emotional and behavioural difficulties compared to the expected 20 per cent in the general population. Psychopathology was significantly correlated with self-esteem. For example, scholastic competence was significantly correlated with the SDQ Total Difficulties score and the subscales of emotional symptoms, peer relations, conduct problems and pro-social behaviour, but was unrelated to the hyperactivity subscale. Children's positive attitudes and their understanding of their dyslexia are all highly correlated with their global self worth.

Conclusions: Academic self-esteem is lower and rates of social, emotional and behavioural difficulties are significantly higher than population norms. Psychopathology is significantly correlated with low self-esteem. The significant association between academic self-esteem and emotional symptoms is consistent with the proposed link between dyslexia and internalising difficulties. We were encouraged to find that good self-esteem and a good understanding of dyslexia may help children avoid some of these difficulties.

Is retirement the end of the affair?

M. THOLSTRUP, Independent Practice & C. SHILLITTO-CLARKE, Independent Practice.

Two practitioners contemplated their professional futures and the meaning of 'retirement' while on an expedition together: the result is this experiential workshop. Their aim is to offer colleagues a creative space in which to consider the challenges and potentials inherent in the

transition from professional working life to 'retirement'. Workshop participants will explore how changes in professional status arising in the later stages of the practitioner lifecycle might impact on their personal worlds, relationships and identities, and vice versa. Using the Gestalt cycle of awareness and destruction and the metaphor of journeying, participants will be encouraged to engage with major existential questions such as: Who am I? Who will I become without the title and the colleagues? Where can I ever find such satisfying relationships again? Is there life after Counselling Psychology?

Cerebral asymmetry, handedness and language competence in patients with psychotic illnesses. Bringing out the meaning of psychotic illness

P.M. TZOTZOLI, M. PATAPIA & T.J. CROW, University of Oxford.

The recent evolutionary approach to schizophrenia, which suggests that the disorder and language may have a common origin, has become a promising theory since there have been constantly presented supporting and less contradicting evidence through research. This theory stresses correlations between weaker right-handedness, reduced language capacity and symptoms in schizophrenia. The present study assessed the handedness and the linguistic competence of 28 Greek patients with schizophrenia and compared them with a healthy sample. The same measures were also compared across non-delusional and delusional participants within the patients group. Results showed that patients with schizophrenia were weaker right-handed implying diminished hemispheric asymmetry and suffered from more linguistic abnormalities compared to controls. Non-delusional and delusional patients had a tendency to differ in their handedness with non-delusionals being weaker right-handed implying a diminished cerebral laterality which may explain their worse symptoms. Non-delusional patients exhibited reduced semantic verbal fluency and delusionals displayed a trend for defective semantics in their discourse, possibly linking their symptomatology with reduced language competence. The findings were consistent with the notion that psychotic disorders should be perceived as variations along a continuum and not as distinct entities.

Psychology at the British Association before the formation of Section J

E.R. VALENTINE, University of London.

Purpose: The aim of this paper is to examine: (a) the role of psychology in the British Association; and (b) the role of the British Association in the development of psychology, before the formation of Section J (Psychology) in 1921.

Background: The British Association for the Advancement of Science was founded in 1831, with the aims of providing direction to scientific inquiry, promoting communication amongst scientists within the British Empire, and improving the public image of science. An annual conference was held in a city in Britain or, on occasion, abroad somewhere within the British Empire. Various research committees and research projects – some in receipt of grants from the Association – were established within the Sections.

For the first 90 years of the Association's existence there was no independent Section for Psychology. However, before that time papers on psychological topics were presented in other Sections, notably the Physiology Section (I), founded in 1893, and the Education Section (L), founded in 1901. A Subsection for Psychology was formed within the Physiology Section in 1913. It met five times before the final formation of an independent Section (J) in 1921.

Methods: The primary source material is provided by the annual Reports of the Association. This is supplemented by collateral published and unpublished source material.

Conclusions:

1. The British Association formed an important arena for the discussion and promulgation of psychological research before the formation of either the British Psychological Society or an independent Section of the Association for psychology.

2. It contributed to the funding of psychological research before the setting up of government research councils and other grant-awarding bodies.

3. It was a significant factor in the development of psychology before and after the turn of the 20th century and to this day plays an important role in bringing psychology to the general public.

PCCP? – A D(a)emonstration Workshop: Exploring the relationship between the models and practice of Cognitive Therapy and the Person-Centred Approach

Y. WALSH, NELMHT, London, & A. FRANKLAND, APSI, Melbourne House, Nottingham.

Although Cognitive and Person-Centred approaches to therapy apparently have significantly different conceptualisations about the aetiology of unhappiness, as well as different therapeutic technologies, it may be that these differences are more apparent than real.

Following a brief exposition of the theoretical models, this workshop will offer participants the opportunity to see two experienced Counselling Psychologists in action, working with at least one volunteer client. Subsequent exploration with participants will investigate the (potential) relationship between these two models and reveal similarities and differences in their working practices and underlying theory.

Plenary discussion towards the end of the workshop will consider the impact of the ethos of Counselling Psychology on how the therapist works.

The benefits of clinical hypnosis as an adjunct to therapy for anxiety with clients who have mild learning disabilities

D.A. WALTON, London Metropolitan University. Research Sites: St. George's Day Centre (Dagenham) and Hermitage (Havering). Community Learning Disability Teams.

Abstract: Research shows that hypnosis is an effective adjunct to psychotherapies including Cognitive Therapy for people with Learning Disabilities (LD). People with LD have been shown to benefit from Cognitive Therapy, there is little evidence showing the two interventions being used in conjunction with this population. Given that the LD population experiences similar (often greater) social stressors than the normal population, this study deemed it important to examine the efficacy of hypnosis as an adjunct to Cognitive Therapy for people with LD. Limited previous research has shown some benefits of the use of hypnosis, but there is no evidence of the use of hypnosis as adjunct to popular therapies such as CT.

Design: A matched unrelated groups design was used then statistically analysed for any change in anxiety levels of participants following the interventions. Participants were recruited from the Learning Disabled Populations of Havering, Barking and Dagenham.

Method: The study comprises two matched groups (10 in each) meeting the inclusion criteria, males and females between 20 to 65 years, having been identified as suffering from above normal levels of anxiety and no other major mental health problems. Participants were randomly assigned to two treatment groups and assessed (Beck's Anxiety Inventory – BAI and Test For Receptive Grammar – TROG), one group to receive the Cognitive Therapy for Anxiety with Hypnosis Intervention, the other to receive the same intervention with a control task in place of the hypnosis. Pre-assessments, interventions and post assessments were used in order to examine change in scores on Beck's Anxiety Inventory.

Analysis: A parametric t-test was used to analyse the BAI data for any significant change. A multiple regression analysis was used in order to examine any significance between verbal language comprehension, and benefits of receiving hypnosis. **Conclusion:** Even though the participant size was smaller than power analysis recommends, participants who received the hypnosis intervention showed a significantly greater reduction in anxiety

scores than controls. This data may prove helpful in increasing understanding of the use of hypnosis for people with LD, and increase interest and research in future.

The scope and content of social attention in Autistic Spectrum Disorder: Evidence from change blindness

S. WATSON, S. LEEKAM & M. TURNER, University of Durham.

Current socio-emotional theories suggest that the autistic impairment in social interaction may be due to specific social attention difficulties. However, research into autistic attention has tended to focus on the non-social visual domain, where people with ASD (Autistic Spectrum Disorder) display visuo-spatial skills and attention-switching deficits. The limited research into social visual orienting is equivocal and does not demonstrate whether social deficits interact with visuo-spatial skills and attention. The following study aimed to investigate the interface between visual skills and social deficits in autism and to provide evidence for or against a role for attention in its development.

The investigation used a 'change blindness' paradigm to examine the scope and content of both social and non-social attention. Twenty-two participants with ASD performed three 'spot-the-difference' tasks on a computer, in which they had to identify the dissimilarity between a pair of photographs presented individually with a 300ms blank screen in between. Task 1, a standard change blindness task, compared changes in areas of the image defined as being of either central or marginal interest. Task 2, a 'context' change blindness task, compared changes to objects that were either contextually appropriate or inappropriate to the scene. Finally, Task 3, a 'social' change blindness task, compared changes of social (eye-gaze direction) or non-social significance. The time taken to spot each kind of difference is considered a measure of the importance of that area of the picture to the participant. Therefore differences in reaction times between groups reflect the predispositions of autistic versus typically developing people to attend to certain aspects of a scene.

Analysis of covariance with image-type and participant group as independent factors and IQ as a covariate, showed that the reaction times of people with ASD did not differ from those of the TD comparison group. This indicates that overall attentional span is normal. Both groups showed a main effect of image-type, showing that attention was more readily caught by changes of central importance, changes to inappropriate objects and changes of social significance. In every task there was no interaction between image-type and group, nor any main effect of group, indicating that the participants with ASD responded in the same way to all image-types as their TD counterparts. Conclusions point to a normal scope and content of attention in autistic subjects. Results are discussed in terms of social orienting accounts of autism which suggest that attention to social stimuli (faces, speech sounds, eyes) early in life are important for learning the significance of social meanings. Our data suggest that evidence of a difficulty in this area is not apparent in adolescent people with autism. We discuss the implications of these findings for developing early interventions and for directing future research.

Situating the researcher in qualitative counselling research around spirituality: A relationship with practitioners and researchers

W.S. WEST, University of Manchester.

Objective: This paper explores how the culture of the researcher can influence the interpretation of the data collected.

Design: Five transcripts from in-depth interviews collected in a previous study (West 1998) into the impact of therapists' spiritual belief on their work were given to seven practitioner researchers of varying spiritual and ethnic orientation. The researchers were invited to share their immediate reactions to the data.

Methods: The practitioner researchers were all previously known to the researcher and volunteered to participate in the study. They were

sent copies of the five interviews through the post with brief instructions around recording their reactions to the text and an invitation to analyse the text in whatever manner they choose.

Results: A thematic analysis of their reactions to the data reveals three main themes:

1. Researchers' religious and spiritual reactions data;
2. Researchers' reactions as therapists;
3. Researchers' reactions to the interviews and to the interview process.

Conclusion: It is apparent that these researchers are operating from within a personal cultural frame even if they attempt bracketing. Such bracketing is clearly problematic. The reactions reported by these respondents are clearly present if unconscious within the research and within the therapeutic relationship. Given counselling's problematic relationship with spirituality (West, 1998, 2000, 2004) this has implications for training of researchers and practitioners.

Self estimates of intelligence in male and female students at old and new universities in Wales

L. WORKMAN, Bath Spa University College.

Design: A questionnaire-based survey was used to determine whether students at old and new Welsh universities differ in their self-perceptions of intelligence. In addition to differences between institutions the possibility of gender differences was also explored.

Methods: In order to examine male and female self-perceptions of their own level of intelligence at an 'old' and a 'new' university, a questionnaire was designed and administered to psychology undergraduates at the universities of Cardiff and Glamorgan. Students were provided with information concerning IQ distributions in the general population and then asked to estimate the score that they felt they would achieve were they to be given an IQ test today. Data were gathered from 744 students during a five-year period.

Results: ANOVA reveals that students attending the 'old' university rated themselves as more intelligent than those attending the 'new' university. Moreover, male students rated themselves as more intelligent than female students. Finally, during recent years an overall decline in self-estimates of intelligence amongst undergraduate samples was uncovered.

Conclusions: Findings are discussed in terms of the relationship between socialising factors and attribution error and in terms of changes in the self-perception of the intellectual standing of university students as we move from an elite to a mass higher education system.

POSTERS

Themes: Clinical, Counselling and Health

Investigating the relationship between type A behaviour and coping strategies among Greek hospital doctors: Gender and age differences

A.S. ANTONIOU, Research Centre of Psychophysiology and Education, National & Kapodistrian University of Athens & A.N. VLACHAKIS, Dept of Psychology, Panteion University of Social and Political Sciences, Athens.

The factor structure of the German version of the hospital anxiety and depression scale in coronary heart disease patients

J. BARTH, University of Freiburg, Germany & C.R. MARTIN, Chinese University of Hong Kong.

Casual attributions in older people after a fall and their influence on recovery

H. BROWN & K.J. McKEE, University of Sheffield.

Post-traumatic stress disorder in older people after a fall

S. CASH, H. BARKBY, T. PAIS, University of Sheffield & M.C. CHUNG, University of Plymouth.

The training and support programme for parents of children with cerebral palsy

A. CHESHIRE, L.A. POWELL & J.H. BARLOW, Coventry University.

Fathers' experience of having a child with learning disabilities; an interpretative phenomenological analysis

J. DUTTON & D. PURVES, London Metropolitan University.

Do polymorphism in the serotonin transporter and tyrosine hydroxylase genes predict depression and anxiety in patients with a cancer diagnosis?

L. EDWARDS, J. RANDERSON-MOOR & P. SELBY, Cancer Research UK, St James' University Hospital, Leeds.

Fear of falling in older people after a fall

J. ELLINGFORD, L. HANGER & K.J. McKEE, University of Sheffield.

Are New Zealand's general practitioners prepared for child and adolescent mental health presentations? A survey of training, perceived competence and confidence

J.M. FITZGERALD & J. CLARKSON, University of Waikato, New Zealand.

The impact of intensive interaction training with staff caring for people with severe/profound learning disabilities

G. FIRTH, C. LEEMING, H. ELFORD, Leeds Mental Health Teaching NHS Trust & M. CRABBE, East Leeds Primary Care Trust.

Examining the role of stigma-tolerance, self-concept and pathology in adolescent help-seeking and service utilisation

J.M. FITZGERALD, University of Waikato, New Zealand, G. DOLAN, Taranaki Health, New Zealand & I.M. EVANS, Massey University, New Zealand.

Should menstrual symptoms be factored into stress research as a potential stressor?

R.L. GERVAIS, University of Manchester & G.R.J. HOCKEY, University of Sheffield.

Standardised psychological testing as evidence-based practice in child neglect assessments

G. GLEESON, University of Western Sydney.

Your health in your hands: A psycho educational group intervention for women with polycystic ovary syndrome

R. GREEN & A. CROSS, St Ann's Hospital, London.

Drug-related attitudes and prevalence rates for people with learning disabilities

A. GRIEVE, NHS Tayside, W.R. LINDSAY, The State Hospital Carstairs, NHS Tayside & University of Abertay, Dundee & L. STEPTOE, NHS Tayside & University of Abertay, Dundee.

The development of an assessment of relapse prevention for sex offenders with learning disability

A. GRIEVE, L. STEELE, E. DUNSMORE, NHS Tayside & W.R. LINDSAY, The State Hospital Carstairs, NHS Tayside & University of Abertay, Dundee.

The influence of previous personal therapy on counselling psychology trainees' lives and views on having further personal therapy during training

K.A. HEINRICH & M. DONATI, London Metropolitan University.

3, 4-Methylenedioxymetamphetamine (MDMA/ecstasy) exposure targets particular dimensions of depression

M. HESLIN, L. TAURAH & C. CHANDLER, London Metropolitan University.

Big issues which challenge applied psychology

L. HIGBED, R. PARRIS & L. EARLL, Gloucestershire Hospitals NHS Foundation Trust.

Developing the Social Influence Scale for Midwifery (SIS-M) as a multi-dimensional instrument of conformity

C.J. HOLLINS MARTIN, University of York, P. BULL, University of York & C.R. MARTIN, Chinese University of Hong Kong.

Semantic divergence and creative story generation: An fMRI investigation

P.A. HOWARD-JONES, E.A. SAMUEL, G. CLAXTON, University of Bristol, S.J. BLAKEMORE, University College, London & I.R. SUMMERS, Exeter University.

Antenatal prediction of postnatal depression in Chinese women in Hong Kong

WY IP & C.R. MARTIN, Chinese University of Hong Kong.

Is emotional indifference during early pregnancy indicative of psychological disturbance?

J. JOMEEN, University of Leeds & C.R. MARTIN, Chinese University of Hong Kong.

Self-esteem: an occluded but clinically important psychological dimension in early pregnancy?

J. JOMEEN, University of Leeds & C.R. MARTIN, Chinese University of Hong Kong.

Implicit and explicit theory of mind in schizophrenia

S.L. KAISER & R. CORCORAN, University of Manchester.

Foresight brain science, addiction and drugs project

J.L. MARSDEN, M.E. LAWRENCE & J. WITHERS, Foresight, Office of Science and Technology, Department of Trade and Industry.

An international comparison of the factor structure of the hospital anxiety and depression scale in coronary heart disease patients

C.R. MARTIN, Chinese University of Hong Kong, J. BARTH, University of Freiburg, Germany & D.R. THOMSON, Chinese University of Hong Kong.

A factor analysis of the 12-item General Health Questionnaire (GHQ-12) in individuals with facial disfigurement

C.R. MARTIN, Chinese University of Hong Kong & R.J. NEWELL, University of Bradford.

Working with people who engage in deliberate self-harm: The experience of community mental health nurses

J. POWIS, A.R. THOMPSON, University of Sheffield & A. CARRADICE, Sheffield Care Trust.

Reported unprotected sex in young adults: A cross-cultural study

C. PROTOGEROU, J. TURNER-COBB & C.L. RUSSELL, University of Bath.

Inhibiting distress and humour: The effects on felt arousal, affect, and responses toward unrelated stimuli

L.V. RICKWOOD, University of Plymouth.

An experimental investigation into the relationship between emotional reasoning, guilt and appraisals of responsibility in obsessive-compulsive phenomenon

G. ROBINSON & M. FREESTON, University of Newcastle-upon-Tyne.

Trauma, post-traumatic stress disorder (PTSD) and co-morbid psychiatric disorders: An explorative study of a British psychiatric inpatient population

L. SARTORIO, D. PURVES & S. ROSE, London Metropolitan University and Berkshire Traumatic Stress Service.

Anxiety and depression in offenders with intellectual disabilities

D. SKENE & W.R. LINDSAY, The State Hospital Carstairs, NHS Tayside and University of Abertay, Dundee.

Examining the relationship between exercise motivation and habitual 'out of school' physical activity: The role of physical education

M. STANDAGE & F. GILLISON, University of Bath.

An evaluation of an imaginal provocation test of anger in people with learning disabilities: A comparative analysis

L. STEELE, A. GRIEVE, R. ALLEN, L. ALDER, NHS Tayside & W.R. LINDSAY, The State Hospital Carstairs, NHS Tayside and University of Abertay, Dundee.

Counselling across a language divide – developing a productive therapeutic relationship

S. STEVENS, City University, London.

Cerebral Asymmetry, handedness and language competence in patients with psychotic illnesses. Bringing out the meaning of psychotic illness

P.M. TZOTZOLI, M. PATAPIA & T.J. CROW, University of Oxford.

The benefits of clinical hypnosis as an adjunct to therapy for anxiety with clients who have mild learning disabilities

D.A. WALTON, London Metropolitan University.

Scope and content attention in Autistic Spectrum Disorder: Evidence from change blindness

S. WATSON, S. LEEKAM & M. TURNER, University of Durham.

Self estimates of intelligence in male and female students at old and new universities in Wales

L. WORKMAN, Bath Spa University College.

SATURDAY 2 APRIL

KEYNOTE SPEAKER

Teaching thinking: Psychology for education

C. McGUINNESS, Queen's University Belfast.

The idea of teaching thinking is not new. It has always been a central aim for education. But, for some time now, there has been a growing research literature in cognitive psychology that focuses on the theme of cognitive intervention – explicit teaching that enhances both specific and general cognitive processes. The paper will consider this proposition with regard to classroom interventions to enhance thinking skills. Theoretical orientations about the nature of thinking that sustain the different interventions will be considered, how the theories are transformed into intervention strategies in the classroom, and how they affect learning outcomes. The focus will be on the development of 'a powerful pedagogy for thinking', on the role of dialogue and metacognition, and the social construction of learning in the classroom.

INVITED SPEAKERS

Getting psychotherapy off the couch: Beyond individualised practices. Putting systemic and social constructionist ideas to work in bringing forth a resourceful community

G. SIMON, The Pink Practice, London and the Bradford District Care Trust.

Therapy occurs within the community but the relationship between a person's identity in the consulting room and a person's identity in the broader social sphere is rarely connected. This presentation moves away from the pathologising practices of earlier psychotherapeutic discourses with their narratives about the incapacitated patient to ideas from social constructionist therapy which create opportunities for the individual to be experienced as a resourceful member of the community.

Counselling psychology and proxy selves: A relationship in part with a child in transcultural therapy

L. THOMAS, Independent Practice, Refugee Therapy Centre, Islington.

This paper describes the sometimes complex process of counselling across culture, first observed in therapy, when the children were of African or Asian descent and the counsellor-therapist white. The issues are about what exists between minority and majority cultures, black and white and child and adult. Counselling in this context is a complex matter and involves the child's wariness of discrimination and their manoeuvres taken for self-protection to avoid this. The idea of the proxy self developed out of the work of British Psychoanalyst, Dr Donald Winnicott, on the true and false self: 'Ego distortion in terms of true and false self.* Working across culture can be a challenge and it is important for counsellors and therapists to pay particular attention to the transference and counter transference. Understanding the interactions helps us to work more effectively at the multi-layered aspects of the transference. *The maturational process and the facilitating environment.

AWARDS AND MEMORIAL LECTURES

AWARD FOR DISTINGUISHED CONTRIBUTIONS TO PROFESSIONAL PSYCHOLOGY

Equity and utility in testing – what is the role of the psychologist?

D. BARTRAM, SHL Group plc.

The one area of psychology that touches more people's lives than any other is probably psychological testing. It does so in relation to their

education, their work, their health and their leisure. This presentation will consider who the stakeholders are in testing and what they want from it. It will set out criteria for equity in testing and review the utility of testing with a focus on testing in occupational settings.

In the light of developments in technology, both in IT and psychometrics, we need to reconsider the role of psychologists in the design, development and delivery of testing. The move from paper to the internet has seen a related shift from testing as a craft skill to automated test delivery, from a focus on the virtues of the test to a focus on the value of the content of the reports generated from it. This shift raises the need for research to start focusing more on the relevance, accuracy and value of the information people take away from reports rather than just being concerned with the psychometric properties of the test. Increasingly psychological tests are being used as a source of data that feeds into expert systems that, in turn, provide reports for end users – test takers, line managers, human resources professionals and others. An analysis of the process of testing will be presented which puts forward some basic principles that should help guide the development of suitable tools for use by a range of different users.

AWARD FOR PROMOTING EQUALITY OF OPPORTUNITY

Daddy can you spare me some time: Fathering behaviour and child development – a view from multi-cultural Britain

J. GUISARD-PINE, SCRIPT.

Inspired by the module on paternal deprivation on her EP training course, she embarked on a PhD degree to investigate the relative influence of fathers on children's psychological and academic development using multi-ethnic samples. The very first of its kind in Britain, Jeune was curious to know whether the relatively high incidence of non-residential fathering in the African-Caribbean communities could be a significant factor in the continuing evidence of poor academic achievement of African-Caribbean children. It was a bold and insightful piece of research that challenged many of the prevalent stereotypes on the quality of family relationships in the cultural groups represented in the samples. Her findings generally exploded many myths about the father-child relationship within South Asian and African-Caribbean ethnic groups. This work was a factor in her award sponsored by The Executive and Professionals Network (EPN) in association with Ford Motors 'Woman of Merit 2003'. Her lecture will discuss some of the findings.

C S MYERS LECTURE

'A psychological regard of medical education': Myers and medicine

C. McMANUS, University College London.

My title was used by Myers for his Bradshaw Lecture at the Royal College of Physicians in 1933. Although known to psychologists as the founder of the Psychological Laboratory in Cambridge, and as an Industrial Psychologist, Myers first trained as a doctor, and practiced as one during the Great War, helping to define the concept of shell shock. Having also trained as a doctor, and then become a psychologist researching medical education, I inevitably feel an affinity with Myers.

My lecture will argue that medical students and doctors should be of far greater interest to psychologists than is presently the case. Although Health Psychology grows every year, mostly it considers patients, with only a tiny part looking at the other half of the doctor-patient relationship – the doctor. Doctors are central to health care, and there is much to study, and the interest is broader than just doctors treating patients. Medical students and doctors are a model system for studying university education – there are no other disciplines in the UK where 6000 students a year with similar entry qualifications study similar courses for five years, and then spend their lives working for the same monopoly employer. Such an

environment is ideal for studying life-long learning, the acquisition of high-level technical skills (as in surgery), the social processes of multi-disciplinary team work, and the daily stresses of encountering disease and death. I will present some of my own research into the role of doctors' personality, learning style, and training into stress, burnout, working styles, career choices, and relationship with patients.

MICHAEL ARGYLE LECTURE

Close relationships as a self-bolstering resource

C. SEDIKIDES, University of Southampton.

Do close-positive relationships function as a self-bolstering resource, armouring the self against potentially threatening information? After taking a difficult and important intellectual ability test, participants thought about a relationship that was either close-positive, close-negative, or neutral (Experiment 1), or about a relationship that was either close-positive, close-negative, distant-positive, or distant-negative (Experiment 2). All participants received bogus unfavourable feedback about their performance and subsequently indicated their interest in obtaining further performance-related information. This information was ostensibly accurate. Participants who had brought to mind close-positive relationships expressed the highest interest in receiving such information, despite rating it as unpleasant. Experiment 3 tested whether mental activation of close positive relationship eliminates cognitive dissonance. Participants who opposed a certain university policy were given either high or low choice for writing an essay favouring this policy. Participants who freely chose to write this essay manifested cognitive dissonance (i.e. their attitudes toward the policy became more positive) as did participants who had thought of a close-negative relationship, a neutral relationship, or no relationship at all. However, participants who had thought of a close-positive relationship maintained their anti-policy attitude (as did low-choice participants). Thus, mental activation of a close-positive relationship eliminates cognitive dissonance. Close-positive relationships function as a unique – and unconditional acceptance conveying – psychological resource that bolsters the self: (a) against information about a personal weakness to the point where receptivity to additional feedback actually increases; and (b) against having to modify one's attitudes in order to maintain attitude-behaviour consistency.

SYMPOSIA

Symposium: Psychological therapies with people with intellectual disabilities

Symposium of the DCP Faculty of Learning Disabilities

Convenor: N. BEAIL, Chair elect of the DCP Faculty of Learning Disabilities.

The evidence base for the psychological therapies for people with intellectual disabilities has been slow in getting off the ground. The concept of evidence based practice has been embraced but without an empirical foundation. This symposium presents overviews of past research and findings from current and ongoing studies. This research has been carried out in naturalistic settings by clinician-researchers. The evidence is, therefore, practice-based. The symposium also considers the theoretical basis to practice and research and considers the agenda for researchers and clinicians to develop soundly-based interventions.

Practice-based evidence: Psychodynamic psychotherapy with people with intellectual disabilities.

N. BEAIL, Barnsley Learning Disability Service & University of Sheffield.

Objectives: Little progress has been made in the development of evidence-based practice for psychodynamic psychotherapy for people with

intellectual disabilities. This paper provides an overview of a series of projects that have produced practice-based evidence through naturalistic designs.

Design: Past projects are reviewed and current projects are presented. These include pre-post designs, examination of the dose-effect relationship and the application of the Reliable Change Index.

Methods: All studies were carried out in routine clinical practice. All participants were service users who have intellectual disabilities. Outcome was evaluated through measures of psychological distress, interpersonal functioning and self-esteem.

Results: The overall results of these studies show a positive effect in terms of statistical significance and effect sizes. The dose-effect curve found in non-disabled populations was also replicated.

Conclusions: In the absence of evidence-based practice, practice-based evidence may be the way forward to demonstrate the effectiveness of the use of psychodynamic psychotherapy with people with intellectual disabilities.

The importance of theoretical models for the development of therapeutic approaches in intellectual disabilities

W.R. LINDSAY, The State Hospital, Carstairs, NHS Tayside & University of Abertay, Dundee.

Background: There is a rapidly growing body of positive evidence supporting the use of cognitive therapies in people with ID. In most of this work, researchers and clinicians have taken existing cognitive models and adapted procedures to accommodate participants' cognitive and linguistic limitations. Clinical applications in these cases have been essentially pragmatic and practitioner based rather than specifically related to theoretical constructs. The exception to this is the field of anger management where Novaco's (1986) model has received some developments in theoretical framework which are specific to individuals with ID.

Purpose: A strong theoretical model on which to base treatment, allows a number of healthy developments. One is able to test aspects of the model in both analogue and clinical situations; some aspects of anger treatment can be assessed for the relative effectiveness against others; and the model can be scrutinised and criticised for strengths and weaknesses leading to continual adaptations and refinements of therapeutic processes. Sturmey (2004) has been able to employ theoretical models of anger management to make a more detailed analysis of theoretical principles and procedures underlying cognitive therapy. He is able to address important theoretical issues, alternative experimental designs, appropriate control conditions and alternative validated treatments, precisely because of the clarity of the theoretical model and its practical implications.

Method: This paper will outline the possibilities for theoretical development with reference to three examples: anger management treatment, the implicit theoretical structures emerging from work on cognitive therapy for anxiety and depression based on the work of Dagnan and his colleagues, and the wide ranging theoretical models for sex offending as they might be applied to offenders with ID (Lindsay, 2004).

Psychotherapy for people with developmental disabilities: Is the 'unoffered chair' still justified in the new NHS?

J.L. TAYLOR, Northumbria University and Northgate & Prudhoe NHS Trust.

Purpose: To review the evidence for the effectiveness of psychological therapies for mental health problems experienced by people with developmental disabilities.

Background: We know relatively little about the emotional lives of people with developmental disability. Also, people with developmental disabilities have increased vulnerability to mental health problems. Despite this we are unsure about the prevalence and course of these conditions in this population. There are a number of reasons for these gaps in our knowledge, including a general lack of interest in, or concern for the needs of people seen as different, and a paucity of instruments to help with the assessment

and understanding of the emotional and mental health needs of people with developmental disability. It has also been suggested that therapists are reluctant to offer individual therapy to people with developmental disabilities as this would necessitate building close therapeutic relationships with people perceived as unattractive because of their disability (the 'unoffered chair').

Methods: In this paper the evidence to support the effectiveness of psychological therapies (psychodynamic, psychosocial and cognitive-behavioural) for emotional and mental health problems amongst people with developmental disabilities is selectively reviewed, with particular reference to treatment outcome research that has been carried out locally at Northgate Hospital in Northumberland. Issues relating to the evaluation, delivery and sustainability of these therapeutic approaches in routine service settings are considered, and priority clinical research questions for future enquiry are discussed.

Conclusions: There have now been several reviews and commentaries concerning psychotherapy for people with developmental disabilities and mental health problems. The existing reviews tend to be limited in scope, and patchy or inaccurate in their accounts of published outcome research studies in this field. These issues aside, the evidence to support the use of psychological therapies with this client group, particularly cognitive-behavioural therapy, is limited but promising. Further research into the applicability of these therapies with this client group across clinical problems and service settings is indicated.

Symposium: Supporting group work in Scottish primary schools: The influence of rural/urban location and mixed-age classes

Convenor: D. CHRISTIE, University of Strathclyde.

This symposium reports on the work of the project funded by the ESRC Teaching and Learning Research Programme as a Scottish Extension of the TLRP Phase II project, Social Pedagogic Research into Grouping (SPRinG) led by Peter Blatchford, Institute of Education, Maurice Galton, Cambridge and Peter Kutnick, Brighton. The aims of the 'ScotSPRinG' project, which is a collaboration between the University of Strathclyde and the University of Dundee, were as follows:

- To examine how far programmes for supporting effective group work need to be adapted for use in rural and urban primary schools with composite classes, where interactional styles are potentially different from those in same-age classes;
- To identify a representative sample of teachers in rural and urban schools with and without composite classes, and recruit these teachers to in-service programmes which will support them in planning and implementing group work training activities for children and collaborative group work in the area of science;
- To collect data on learning outcomes for participating pupils, both in science and other areas of the curriculum, and also on changes in self-esteem and quality of collaborative behaviour in class;
- To establish whether there are differences in outcomes associated with cross-age vs same-age pupil groups and rural vs urban settings, and to compare patterns of outcome to those obtained by SPRinG;
- To interpret the findings in the light of current models of factors affecting collaboration between pupils, and extend the social pedagogy being developed by SPRinG;
- To make recommendations about modifications to group work support programmes for teachers of composite classes in rural and urban schools.

It was hypothesised that differences in implementation and effects would be found between urban and rural schools and between single-age and composite classes. This paper in this symposium report data from various aspects of the investigation with relation to these independent variables. Generic training in group work skills was followed by opportunities for children to apply these skills specifically within the science curriculum (particularly two science topics – states of matter and forces and friction), with the expectation of subsequent generalisation across the

curriculum. Dependent variables included science attainment, attainment in other core curricular areas, social relationships and self-esteem. The study employed an assessment battery which included general PIPS attainment tests for P7 pupils, tests of specific aspects of science and measures of self-esteem and social relationships. From a large pool of interested schools, 24 were selected in eight local authorities in Scotland. The selected schools provided a balance of urban single age classes, urban composite classes, rural single age classes and rural composite classes. The 500 (approximately) participating pupils were aged 10 to 12 years (P6/7). A pre-post design was coupled with gathering process data regarding implementation integrity. Data was also collected on the attainment tests from three control classes. This symposium will be structured as three papers followed by a short plenary discussion.

Supporting change in group work practice in Scottish primary schools

D. CHRISTIE, K. LIVINGSTON & E. JESSIMAN, University of Strathclyde.

This paper outlines the context, aims and design of the study. It then explores data from researcher observation of classroom processes, and considers teacher perceptions of the extent to which, and the ways in which group work developed. Classroom observations showed that, while schools in the initial survey of schools reported group work frequently being a feature of learning and teaching, children were in fact quite unfamiliar with many of the basic requirements of collaborative group work. Teachers involved in the intervention found the general group work training materials and resources helpful in supporting their classroom group work practice. Subsequent observations indicated improvements in the quality of group work within participating schools. This paper explores the nature and consistency of those changes. It is worth noting that there was an exceptionally high degree of cooperation and enthusiasm on the part of teachers participating in the study. Participating teachers found the generic communication and social skills activities very useful and many have reported the project materials to be more valuable than the curricular resources for PSD currently in use in their schools.

The impact of collaborative group work: Cognitive gains.

C. HOWE, University of Strathclyde & A. THURSTON, University of Dundee.

In addition to the group work training in communication and social skills, pupils in participating classrooms worked through two units of primary science curricular activity, which provided a structure and a context for collaborative group work. The overall attainment of pupils in science, mathematics and English language was assessed using the PIPS instrument, which also included some attitudinal items. Focused science attainment tests were also undertaken in the two science topics, evaporation/condensation and forces/motion. Four control classes with a similar profile to the study classes were also assessed with PIPS, and three of these also completed the specific science tests. Both intervention and control classes showed gains on the PIPS tests. However, there were significant differences between intervention and control classes which showed that the group work intervention had yielded clear and consistent attainment gains in both of the specific science topics. Regression analysis showed that observed quality of collaborative dialogue during group work was associated with the cognitive gains. The pattern of results also indicated that the nature of adult engagement, namely, adopting a supportive but not intrusive role in the group work predicted successful learning outcomes in the specific science topics. The implications for practice, policy and future research are explored.

The impact of collaborative group work: Socio-emotional gains.

A. TOLMIE, University of Strathclyde, K. TOPPING & C. DONALDSON, University of Dundee.

The 24 teachers participating in the main part of

the study received in-service training and were provided with classroom resources and suggested activities designed to foster collaborative group work skills and dispositions. The activities in the first phase of the intervention focused on communication and social skills training. In addition to PIPS general assessment materials, pre- and post-testing also included a specially devised sociometric social relations test. This was created to provide direct evidence on the assumed potential difference between urban and rural schools in terms of the friendship patterns and experiences of social contact out of school. A self-esteem measure was also included. Data from these instruments was combined with informal observations and reports from participating teachers in order to evaluate the impact of the group work training on children's personal and social development. There were clear gains attributable to the intervention in terms of children's social relationships in all four conditions, but only marginal gains in self-esteem (in the urban single age classes). Regression analysis confirmed that it was the quality of collaborative engagement within tasks that was central to the benefits obtained. It was noteworthy that the socio-emotional gains were broadly independent of cognitive gains. The major structural variables (rural vs urban area; composite vs single-age class) did not predict socio-emotional gains. The paper will explore how the social pedagogy of group work might take account of a more fine-grained analysis of the complex interaction of both demographic and social factors.

Symposium: Developments in individual differences

Convenor/Discussant: C. COOPER, Queen's University Belfast.

Chair: M. McRORIE, Queen's University Belfast.

Individual differences encompasses the study of personality, cognitive abilities, mood, motivation, emotional intelligence and their measurement, and is a core area of Psychology. Now that the main traits have been broadly mapped out, most research focuses on understanding the underlying developmental, cognitive, biological and social processes which cause pronounced variations in levels of these traits from person to person (and, in the case of moods and motivation, from occasion to occasion). Some research also has a strong applied focus, with ability and other tests proving to be potent predictors of success in the workplace and education, and as useful diagnostic tools. This symposium, sponsored by the Northern Ireland Branch of the BPS, draws together several interesting developments in individual differences: interestingly none of them involve correlating together scores on various questionnaires. We have moved on from that kind of approach. The papers were chosen because they offer something new in terms of theoretical insight or applied importance, and most also have a Northern Ireland connection, as befits the sponsoring branch. Thus we are exposed to a new model of leadership, and the Leadership Judgement Indicator which appears to be a useful tool for identifying leadership competency in occupational psychology, two papers on the underpinnings of intelligence, work on mood variability and on the relationship between the emotional valence of pictures and the way in which they are rated by smokers and non-smokers.

Multiple measures of inspection time and their relationship to general intelligence

C. COOPER & C. McCRORY, Queen's University Belfast.

Objectives: Because most Inspection Time (IT) research has been based on a single experimental paradigm, it is unclear whether the sizeable correlations between IT and general intelligence (g) reflect strategy-use, rate of learning when thresholds are being estimated, or a relationship between speed of processing and g. Our study determined the overlap between very diverse IT tasks, and the size of any relationship between a common IT factor and measures of cognitive ability.
Design: IT thresholds were established and were correlated with measures of cognitive ability

including Raven's Matrices and the Multidimensional Ability Battery (MAB) within a sample of 70 students.

Methods: Adaptive psychophysical procedures were used to administer six different tasks, three visual and three auditory. Performance data were fitted using two-parameter logistic curves, which allowed thresholds and the steepness of the psychophysical function to be estimated for each individual.
Results: The six IT measures loaded substantially (above 0.5) on a single factor. Scores on this IT factor correlated above -0.5 with general cognitive ability from the pencil-and-paper tests before correcting for restriction of range or unreliability. Strategy-use did not mediate this relationship, and large correlations were found between IT and both timed and untimed ability tests.

Conclusions: As different tasks are likely to involve different strategies, the finding that different IT tasks intercorrelated substantially suggests that IT tasks do indeed all measure speed of perception to a substantial extent. The correlations between the IT factor and g provide support for theories linking g to speed of neural processing.

Personality and psychosocial correlates of mood variability in later life

C. McCONVILLE, G. RAE, E. SIMPSON & J. O'CONNOR, University of Ulster.

Objectives: Several decades of research into the phenomenon of mood variability show that it is an individual difference characteristic quite distinct from many of the main personality traits (e.g. Eid & Diener, 1999). Yet most mood variability research has used younger individuals, usually students. It has been argued that older individuals experience their moods with lower degrees of activation (Larsen & Diener, 1992), and therefore may differ in terms of how these moods are expressed over time. We assess the nature of mood change among a sample of older adults, and investigate how this psychological trait is related to other psychosocial factors such as personality, stress, and coping.

Design: Mood variability was estimated by determining the occasion-to-occasion variation in mood scale scores. This was correlated with personality and psychosocial data.
Method: 93 participants (43 males and 48 females) between the ages of 55 and 70 were recruited in Northern Ireland as part of a European study to assess health and psychological factors associated with aging under the ZENITH project. Each participant completed 20-item PANAS mood scales twice a day for seven days prior to the completion of a battery of psychometric tests and beginning an intervention study involving dietary supplementation.

Results: The current presentation refers to the baseline data on mood variability and the psychological tests administered (i.e. EPQR-S, Perceived Stress Scale, COPE). The importance of mood variability as an individual difference characteristic in older adults will be presented together with the consideration of personality and psychosocial factors that may impact upon it.

The leadership judgement indicator: A theory and a tool

M. LOCK, Formula 4 Leadership & C. COOPER, Queen's University Belfast.

Objectives: The Formula 4 Leadership Model places the relationship between the leader and the follower at the core of success. It identifies four main leadership styles: Directive ('I make the decisions based on my ideas'), Consultative ('I make the decision based on our ideas'), Consensual ('We make the decision based on our ideas') and Delegative ('You make the decision based on your ideas'), and suggests that the key to leadership success is identifying the most appropriate strategy to use in each situation. The Leadership Judgement Indicator (LJI) assesses the quality of leadership judgement by asking managers to identify the effective and ineffective strategies in 16 hypothetical scenarios. This paper introduces the Formula 4 Leadership Model and describes and evaluate the Leadership Judgement Indicator.
Design: A between-subjects design was used to compare the LJI scores of managers varying in seniority. Correlational designs were used to explore overlap with other scales, age, etc. Factor analysis and reliability analysis was used to

determine the psychometric properties of the scale.
Method: The LJI was administered to various groups of managers, sometimes alongside other tests.

Results: The reliability of the LJI was 0.68 within a sample of 241 managers. No sex differences were found, and correlations with an ability test were small. There was a very marked relationship between LJI scores and seniority of post (F(7,523)=5.01, p<0.001).

Conclusions: The LJI has potential to be a useful measure of leadership skill.

Intelligence, electromyography (EMG) and reflex speed

M. McRORIE & C. COOPER, Queen's University Belfast.

Objectives: The literature relating response time measures to intelligence remains inconclusive. There are several early reports of associations between mental ability and speed of nerve conduction in the patellar reflex arc. However, although the Eysenck/Jensen 'speed of neural processing' theory should suggest a link between reflex latency and g, later studies generally failed to replicate. In attempting to clarify the issue, this investigation used a more sophisticated methodology to address the sequence of events which combine to produce reflex behaviour.

Design: The study examined correlations between reflex speed, latency of underlying muscle contraction, inspection time and general mental ability. The reflex arc is the nervous pathway along which nerve impulses travel to produce a reflex action. Far from measuring cognitive function, this involuntary contraction of a muscle is an automatic reaction to stimulus impressions on a sensory nerve – a measure of the capacity to respond rapidly. The knee-jerk reflex represents the most basic of motor responses and is thus an important measure of response time as far as intelligence research is concerned.

Methods: The sample consisted of 40 students. Speed of reflex response was estimated by tapping the patellar tendon, and the latency of muscle contraction assessed via electromyography (EMG). Two auditory inspection time (IT) tasks provided indirect measures of speed of neural transmission, and cognitive ability was assessed using the Wide Range Intelligence Test.

Results: Correlations between measured variables are reported, with preliminary analysis suggesting a link between visual IQ and a behavioural measure.

Conclusions: Theoretical implications of relationships between individual differences in general mental ability and speed of reflex response are discussed.

Responses to positive and negative pictorial depiction of smoking: Evaluation of content and urge to smoke by groups with different levels of smoking dependency

L. VAN HANSWIJCK DE JONGE & M. GORMLEY, University of Dublin.

Objectives: Previous research has indicated that smokers are as aware of the negative connotations of smoking as non-smokers. For example when participants were asked to list negative or positive smoking attributes both smokers and non-smokers produced more negative than positive propositions. However, for smokers the positive information was more likely to be in the early part of the sequence of responses. This and similar work has relied on the subjective creation of affective propositions over which the experimenter has little control. The aim of this study was to determine if the rating of pictorial stimuli depicting both positive and negative connotations of smoking could also differentiate between heavy, light, ex- and never smokers.

Design: A repeated measures design was employed in which participants were asked to evaluate a series of pictures.

Method: 24 of the pictures used came from a preliminary web-based study involving 185 participants. This study validated the pictures in terms of whether they were positive, negative or neutral in how they depicted smoking. In addition eight pictures were used from the Canadian anti-smoking database and were classified as very-negative for the purposes of this study. Sixty-five

participants took part in the study and were identified in term of the level of smoking dependency (16 never-smokers, 16 ex-smokers, 15 light-smokers and 17 heavy-smokers). Participants were asked to rate pictures in terms of their smoking relating content. Emotional valence of the picture was also measured to ensure that any differences were not produced by a differential evaluation of this content. In addition, at regular intervals participants were asked to rate their urge to smoke.

Results: Mixed factorial ANOVAs established that the four groups differed only on their evaluation of positive pictures (heavy and light smokers rated positive pictures more positive than ex- or never-smokers). This pattern was replicated and accentuated in the urge to smoke data. Two additional findings were of interest. Firstly, heavy smokers were found to have greater urge to smoke relative to all other participants across all picture types. Secondly, urge to smoke was reduced in negative pictures relative to positive pictures for light and heavy smokers.

Conclusions: These findings demonstrate that when validated pictorial stimuli are used only positive pictures can differentiate between the different smoking groups. Consistent with previous research this would suggest that smokers are as aware as non-smokers of the negative consequences of smoking.

Symposium: Building relationships

Convenor: P. HEGARTY, University of Surrey.

Building relationships project: Resources in lesbian and gay psychology for the voluntary and community sector

P. HEGARTY, University of Surrey and Committee Chair, BPS Lesbian and Gay Psychology Section & D. BRAITHWAITE, Consortium of LGB Voluntary & Community Organisations.

This session focuses on the history and constituency of the Lesbian and Gay Psychology Section of the BPS, positions British lesbian and gay psychology in a global context, and explains how psychologists' work might be used to strengthen the voluntary and community sector. The register of psychologists seeking to build relationships within voluntary and community organisations will be launched and explained. This session will also introduce the Consortium of LGB Voluntary & Community Organisations as an umbrella organisation that facilitates communication within the sector and provides a key role in developing relationships between organisations.

The law's an ass(et)!

J. McMANUS, Barking and Dagenham PCT, D. McCANN, Community and Adolescent Mental Health Service, Edgware City Hospital and Institute of Health Studies, City University & S. WHITTLE, Manchester Metropolitan University.

Recent changes in British law create new policy territory for LGBT persons and organisations. McManus addresses issues in recent public and employment law and practice for LGBT people, and discuss what resources exist to enforce the new laws. McCann examines the history and current state of policy surrounding same-sex parents, attending to the past relationship between research and policy and laying out possibilities for future research agendas. Whittle examines the Gender Recognition Act and its implications for transpersons and others.

Resourcing our agencies, resourcing our practice: Sharing findings from research and practice

E. PEEL, University of Aston, I. RIVERS, York St. John's University, G. HAGGER-JOHNSON, University of Edinburgh & J. McMANUS, Barking and Dagenham PCT.

This session examines concrete cases of collaboration across sectors. Elizabeth Peel talk about progress in diversity training, developments in practice across the field and challenges for

trainers today from recent research. She draws on research findings and autobiographical reflections on her experiences as both a trainer and as an academic doing research with trainers. Ian Rivers looks at the practical and legal issues of working with young people on LGBT issues and addresses in particular recent policy arising from research on homophobic bullying. Gareth Hagger-Johnson takes a broader look at the pros and cons of research conducted in partnership between voluntary sector and academic researchers, and evaluates methodologies that provide benefits for all. Jim McManus looks at practical and tactical issues involved in helping statutory agencies address homophobic violence, including organisational development and response.

Working together

M. BARKER, Southbank University.

A feedback and brainstorming session based on the previous three sessions.

Symposium: History and opposition: Psychological binaries and their dominating politics

Convenor: P. HEGARTY, University of Surrey.

Modern Western thinking has often been described as structured by hierarchical binaries such as nature/culture, reason/emotion, truth/deception, male/female, hetero/homosexual, and local/global. Psychologists have often approached these binaries as research problems by aiming to examine where and when gender differences and cross-cultural differences occur, and developing tests that might distinguish homosexual from heterosexual men. However, literary theorists caution that such binaries are both hierarchical and constructed (Derrida, 1967) and this suggests a need to remember the specific power relations which have shaped seemingly neutral psychological constructs such as intelligence, emotion, attachment, culture and adaptation; and the technologies used to measure them.

The present papers scan the period from the earliest foundations of psychology to the contemporary moment and examine power relations that fall out along intersecting lines of gender, race, class, sexuality, and nation. A consistent theme of these papers is that claims to truth, objectivity, reason, and universality are inseparable from the operations of power. Our aim is not to simply describe the past, but to prompt critical thinking about interventions in current psychological frameworks that continue to be complicit with Western imperialism fraught with gender anxieties, enacted upon 'others' at home and abroad. Thus the panel challenges liberal notions that both history and psychology are progressive, calling attention to the power dynamics from which psychological categories of analysis emerge and by suggesting ways of thinking about alternatives.

The papers follow a historical sequence. Shields examines evolutionary theory as an ideological legitimisation for intersecting dynamics of class, race, and gender in European and American imperialism in the nineteenth century. Emotionality was not defined in antithesis to masculinity, but the restraint of emotion was essential to its performance. Hegarty picks up these themes by describing anxieties about gender and sexuality in American psychologist Lewis Terman's writings on gifted children. Terman's work provides an X-ray of shifting beliefs about masculinity and increasingly calcifying homophobia over the period of growing American dominance in the first half of the twentieth century. The next two papers are situated within the period of Cold War American technophilic dominance that Terman's work helped to create. Bunn describes the anxious faith in polygraphs as modern technologies of detecting liars that have recurred since this time. Not accidentally, this technology takes female bodies as the prototypical ones who harbour secrets to be revealed. Burman takes issue with the explosion of cross-cultural literature on the US and Japan that occurred during Japan's post-war reconstruction, revealing how particular categories of analysis, and indeed the logic of 'cross-cultural research' itself is complicit with politics of domination. Finally, Cassidy brings us up to the present moment describing how Darwinisms continue to achieve

popularity by their insertion into current political debates in the UK about gender and sexual equality. Like the other contributors, Cassidy emphasises the variability between psychological schools of thought and the ideological implications of these differences.

Passionate men, emotional women: Psychology constructs gender difference in the late 19th century

S.A. SHIELDS, The Pennsylvania State University.

Purpose: In this paper, I examine notions of natural and ideal masculinity and femininity in the late 19th century as portrayed in British and American scientific psychology of the time. My goal is to show how scientific explanation of gender and gender difference relied importantly on assertions regarding the nature of emotion. Specifically, I propose that hypothesised complementarity of masculine and feminine emotional qualities and behaviour was central to the construction of a scientific account of gender and of gender difference.

Background: In Western societies, beliefs about the gendered nature of emotion abound. In previous research I have shown how these beliefs are implicated in the construction of gender and gender difference in contemporary US culture. The present paper explores these connections in 19th century scientific study of human sex differences. While conventional historiography has characterised the late 19th century as one in which male/masculine was equated with reason and female/feminine was equated with emotion, this reason-emotion dichotomy is an oversimplification. In fact, strong emotion was viewed as 'manly' while 'mere emotionality' was coded feminine.

Methods & Key Points: Methodologically, this project draws primarily on discussions of sex differences and the theory of complementarity of normal gendered psychological attributes, such as intelligence and instincts, in published scientific books and articles by 19th century US and British psychologists and evolutionary theorists. Secondary material drawn from recently published social histories is used to analyse the scientific writing within the framework of the sociology of science and the social realities of the time. I begin with an overview of how justification of existing gender arrangements was framed as scientific.

Evolutionary theory was appropriated to explain, and thereby legitimise, existing gender roles and status differences and their intersection with race and class categories. One of the main psychological defining features of difference was thought to be the quality of emotion and emotionality identified as normal, natural, and ideal for each sex. I will show that the identification of emotion with manliness centred on males' purportedly better capacity to harness the power of emotion in the service of reason, and so drive evolution and civilisation forward. 'Feminine' emotion, in contrast, was portrayed as a comparatively inferior and ineffectual emotionality, a by-product of female reproductive physiology and evolutionary need to be attractive to males.

Conclusions: In a brief concluding section I will consider the relevance of the 19th century scientific perspective to present-day concerns with the practical and political dimensions of embodied emotion, especially what is at stake in the give-and-take of asserting emotional legitimacy.

The gender of psychological genius: Degeneracy, homosexuality and giftedness in the Lewis Terman's research on gifted children

P. HEGARTY, University of Surrey.

Purpose: I hope to show how Terman's research on gender roles and marital happiness were not deviations from his more central work on intelligence, but component parts of a single project on psychological normativity.

Background: Lewis Terman is best remembered for developing the 'Stanford Binet' IQ test, building the Stanford psychology department, being instrumental in inserting IQ testing into the selection practices of the American military, and initiating an unprecedented longitudinal project on intellectually gifted children. Along with E.G. Boring and Robert Yerkes, he is considered by some

historians to be part of a 'triumvirate' that crafted the shape of twentieth century American psychology. Terman's IQ work has been roundly criticised by historians of racist psychology. However, feminist and queer criticism of Terman's work has been largely focused on his measures of gender roles and marital happiness.

Methods & Key Points: Methodologically, this project draws on close readings of Terman's texts and attention to the structure of his tests. It also draws on the author's research conducted in the Terman archives at Stanford. The method of close reading flags up implicit assumptions about identity (race, gender, sexuality) in the content of test items, their discursive construction in research reports and private letters, and relates them to author's positioning of their own identities as normative. For example, I hope to show the inter-relatedness of Terman's presentation of his own scientific masculinity as a source of his objectivity and 'masculinity-femininity' as a psychological variable under construction in his work.

Conclusions: The project concludes that 'intelligence' in Terman's formative work is a far more explicitly gendered construct than previous criticisms have noted. Terman's work was informed by two nineteenth century traditions of 'genius' research; a criminological one which sees intellectual precocity as evidence of degeneracy, and Francis Galton's positive eugenics which understands gifted men as national leadership resources. Terman's earliest papers on leadership and intellectual precocity show a deep familiarity with this literature, and his research repeatedly emphasises the 'normality' of gifted children's psychological adjustment, by attending to the normativity of their genders. Yet gender non-conforming children, and later homosexual adults within the sample, trouble this construction. By examining transformations in Terman's account of his subjects, I hope to reveal two intersecting processes of social change. These are the shift from Eugenic justifications of British imperialism in the late 19th century to psychological technologies of American imperialism in the mid-20th century, and the simultaneous shift from 'gender inversion' to 'homosexuality' as the salient model of male non-normativity in the human sciences.

Polygraphs and the policing of deviancy

G.C. BUNN, Liverpool Hope University College.

Purpose: In this paper I explore the history of the lie detector's involvement with deviant forms of emotion and personhood. In particular, I ask what the theoretical implications of the Home Secretary's proposal are for governmentality studies, the neo-Foucaultian enterprise concerned with the 'conduct of conduct'.

Background: This paper takes as its starting point Home Secretary David Blunkett's recent announcement to instigate a programme testing polygraphs on paedophiles. This is not the first time that a British government has investigated the validity of lie detection technology; in the 1980s the Thatcher government based their rejection of the technology on a specially commissioned study undertaken by the Cambridge Applied Psychology Unit. Nevertheless, in this case the intended target population is certainly novel.

Method & Key Points: Invented in 1921, the lie detector took root in American popular culture during the Depression. By the time of the Cold War, the instrument had firmly secured a place in the American crime-fighting armoury, a situation encouraged by the McCarthyite era. An analysis of polygraph textbooks during this period reveals that the instrument's functioning was dependent upon the policing of another category it rendered deviant, namely, femininity. Broadening out the discursive net to include newspaper articles, TV shows and films reveals a deep commitment to demarcating between male and female rationality – and other clichéd correlates of this beloved modernist binary.

Conclusion: Although a creation of science's flirtation with liberalism, the polygraph nevertheless retains a deep affection for illiberal forms of governance. I conclude that the lie detector problematises the valourisation of freedom argument found in much of the governmentality literature.

Between orientalism and normalisation: Cross-cultural lessons for a critical history of psychology

E. BURMAN, Manchester Metropolitan University.

Purpose: To analyse forms of argument and representation within cross-cultural psychology. Taking the example of psychological research in Japan to generate new perspectives on the role of cultural differences within the history of psychology.

Background: Cross-cultural research performs a vital role within the confirmation of psychological 'truths', its differentiations working simultaneously to establish their general applicability and the superiority of Anglo-US ways of living and relating. In this sense it works both to establish cultural differences, and to normalise these within a narrative of universal cultural development that implicitly globalises the cultural and economic privilege of Anglo-US psychology.

Methods & Key Points: This paper draws on textual analysis and critical literary analysis, informed also by the author's recent research visit to Japan. Theoretically, post-colonial studies forms a key framework for this critical-historical analysis of psychological discourse. Key, classic publications that are taken as exemplifying (in the sense of formatively structuring) prevailing discourses of cultural specificity, through a particular focus on Japan. Taking three examples (group/individual relations, shame/guilt societies, and attachment styles) of how 'Japan' figures within English language psychological accounts, I indicate how the apparent stability of these truths suppresses the violent history of their generation. Japanese texts and (other translated) accounts are juxtaposed with these classic texts to highlight alternatives to the prevailing discourse of cultural variations on a universal theme confirming the authority and legitimacy of Anglo-US psychology.

Conclusions: Beyond critique, I suggest how resisting the assimilation of cultural specificity into a discourse of mere variation can indicate ways of challenging the hegemony of Anglo-US psychology, including also reframing the vexed question of specificity vs. universality.

The sexual politics of evolution: Popular controversies over evolutionary psychology during the 1990s

A. CASSIDY, University of Manchester.

Purpose: I aim to illustrate how evolutionary psychology became a site for negotiating gender and sexuality in the UK media during the late 1990s, and why the claims made by evolutionary psychologists had a particular currency at this time.

Background: Evolutionary psychology (EP) is an emerging area of research, mostly located in the social sciences, which stresses the importance of, and seeks to investigate further, the evolutionary origins of modern human psychology and behaviour. During the 1990s, claims made by evolutionary psychologists were extensively debated on a popular level in the UK, particularly through 'popular science' books on the subject, and through widespread discussion, by academics and others, in the press and other media. In these contexts, evolutionary psychology claims were often closely intertwined with broader discussions of gender and sexual politics during the 1990s; changes in the political landscape; concerns over biological determinism; and recent developments in genetics, biotechnology and neurobiology.

Methods & Key Points: The material presented here is drawn from a case study of these popular debates, looking at UK press and other media coverage of evolutionary psychology from 1990 until 2001. Quantitative content analysis of the press coverage of EP was carried out, alongside qualitative discourse analysis of broader media (including book) coverage, as well as of semi-structured interviews with academics and media professionals involved with popular evolutionary psychology. Crucially, this combination of research methods has found that evolutionary psychology was covered in very different areas of the media to other sciences, whilst its subject matter provided a strong 'pull' into the popular domain.

Conclusions: Following widespread social change around gender/sexuality and family relationships through the late 20th century, such issues were an

important topic of discussion in the public domain of the UK during the 1990s. In particular, much of this had turned from debates about equal pay and sexism, to discussions of the differences between the sexes, relationships, divorce and families. Evolutionary psychology claims about sex differences and the nature of heterosexual attraction were therefore seen as highly congruent with media 'news values' at the time, meaning that these scientific claims were discussed as an integral part of wider debates about gender and sexuality. In addition, the functionalist approach of evolutionary psychology to sexuality contributed to mainstream discourses which exclude all non-reproductive forms of sexuality. The diversity of 'feminisms', as well as of 'Darwinisms' under discussion at the time was such that the relationship between these two areas was far more complex than was the case earlier in the 20th century. In particular, feminist disagreements over issues of equality/difference provided an area where some Darwinian arguments about gender were in fact highly congruent with some forms of feminism, increasing the acceptability of evolutionary psychology in the UK public domain.

Symposium: Cross-domain longitudinal study of infant cognition and its relation to mother/child interaction

Convener: A. KARMILOFF-SMITH, Institute of Child Health, London.

Most studies of infant cognition are cross-sectional and focus on a single domain. Such data cannot be used to evaluate whether different cognitive abilities change because of domain-general cognitive mechanisms or whether each ability is subserved by domain-specific mechanisms. It is thus crucial to study in the same infant a number of different abilities and assess longitudinally how these change over developmental time. In light of the usual variability found between infants in studies focusing on separate domains, we hypothesise that some of the individual variation in development may be accounted for by differences in the quality of mother-child interaction.

In this symposium we present the results of longitudinal research on a large population of 180 infants at six months, and again at 10 months of age, across a variety of cognitive domains, and assess how these relate to differences in quality of mother-child interaction. Each laboratory focuses on a particular domain: MPI, Munich: perception of human action versus physical causality; CNRS, Paris: face processing of own race versus different ethnic group; ICH, London: speech stimuli from own language versus foreign language. The discussion focuses on developmental changes within each domain, and across domains, and how such changes may be related to differences in mother-child interaction, with each laboratory arguing from a somewhat different theoretical perspective. The symposium concludes with a discussant, Dr. G. Scerif of the University of Nottingham, who has a strong experimental and theoretical background in infancy studies.

Explaining individual differences in development: The importance of longitudinal cross-domain investigation

G. ASHERSLEBEN, Max Planck Institute for Human Cognitive and Brain Sciences, Munich.

This first paper sets the scene for the remaining three papers. Numerous cross-sectional studies of infant development report significant differences in group data for different ages. Yet camouflaged in these data are substantial individual differences. Many studies report, for instance, that six-month-olds fail and nine-month-olds succeed on a particular task. These age differences hold from the viewpoint of significant statistical differences between the two age groups. However, if one inspects the individual data trends, then often a sizeable number of the six-month-olds pass while some nine-month-olds continue to fail. There was a time when differences of a month between six and 10 months were not considered crucial. However, progress in neuroscience has shown how fast synaptic stabilisation or neuronal reorganisation can be, so developmentalists have come to realise that a difference of one month during the first year of life can be very significant. What explains such individual differences in

cognitive development, which hold in most infancy experiments?

The main hypothesis that we test in the present set of studies is that part of these group differences in infancy can be explained by the quality of mother-child interaction. More specifically, we hypothesise that the quality of mother-child interaction affects those domains which require more social experience than those that do not. We assessed our main hypothesis in a longitudinal study of the domains of action perception, face processing and speech processing. This is the first time in which the same infants have been tested across all of these domains, under the perspective of mother-child interaction, and for the first time longitudinally.

Three studies took place in three infant laboratories (Paris, Germany and London) which, to the greatest extent possible, were set up identically. Healthy, monolingual six-month-olds were recruited from the infant subject pools of each centre. Mothers and infants visited the labs for one half-day when the infants were six months of age and for another half-day four months later at 10 months of age. Each infant was tested individually, while seated on the parent's lap. Stimuli will be presented using a large TV monitor with speakers on both sides. An observer outside the booth monitored the infant's looking behaviour on a closed-circuit TV system. The experiments were administered in a counterbalanced order, allowing for frequent breaks including sleep and feeding time. The quality of mother-child interaction was assessed using structured ratings (e.g. maternal sensitivity, infant responsiveness) of six minutes of videotaped adult-infant play (three minutes while the experimenter remained in the room, and three minutes while the experimenter was absent). Mothers were instructed to play with their infants as they normally would, using a specific set of toys. Cognitive development was assessed by a series of experiments designed to measure developmental changes in action perception, face processing and speech processing. These experiments will be described in detail in each of the papers.

Perception of goal-directed actions and causal events in relation to mother-child interaction

A. HOHENBERGER & G. ASCHERSLEBEN, Max Planck Institute for Human Cognitive and Brain Sciences, Munich.

Objectives: In the first year of life, infants develop an understanding of human actions as being goal-directed. They attribute action goals to human agents by reasoning about the choice of the objects involved in the action and by paying attention to the results of these actions (action effects). Infants also develop a model of physical causality such as the representation of collision events. This gets refined over time by taking into account variables such as size and mass of the interacting objects. The study had two aims: (1) To replicate and extend findings of infants' developing understanding of goal-directed human action and of causal physical events, at six- and 10-months of age; and (2) to assess the impact of mother-child interaction on performance on these two tasks.

Design: The participants and set-up were the same as described in Paper 1. Each infant participated in both tasks, separated by at least one break. Order of tasks was counterbalanced.

Methods: An infant-dependent familiarisation procedure was used in both tasks. For the human goal-directed action, a modification of Woodward's (1999) 'Back-of-hand' study was used, in which a salient action effect (relocating an object) was added to the unfamiliar action of lowering the back of the hand in front of an object, in order to enhance the perception of goal-directedness. In four familiarisation trials, the hand aimed at one of two objects on the screen. The positions of the objects were then swapped. In the test phase, the human agent alternately aimed at the 'new' object while carrying out the same movement path, or at the 'old' object while carrying out a new movement path. For the physical causality task, a modification of Kotovsky and Baillargeon's (1994, 1998) collision study was used. In four familiarisation trials, infants were familiarised with a collision event between two medium-sized balls, providing a calibration point (mid-stage) for their expectation of how far a ball of this size will

dislocate a target ball of equal size. In the two test trials, infants saw alternately a 'possible' event, namely a big ball pushing the target ball to the end of the screen and an 'impossible' event, namely a small ball doing the same. Dependent variable: looking time.

Results: Infants who understand human actions as goal-directed are expected to look longer at the test trial in which the hand aims at the new object. Infants who appreciate the role of the variable 'size/mass' of objects in collision events are expected to look longer at the 'impossible' event. An age effect is expected between the six- and 10-month-olds. Scores of mother-child interaction are expected to correlate with the human action task, but not with the physical causality task.

Conclusions: The mechanisms through which expertise in mother-child interaction can facilitate the understanding of goal-directed human action is discussed.

The other-race effect in infants: The development of Caucasian and Asiatic face expertise in Caucasian infants, in relation to mother-child interaction

S. de SCHONEN, S. SANGRIGOLI & J. SERRES, Neurocognitive Development Group, Centre for National Scientific Research, Paris.

Objectives: Level of expertise with faces can be evaluated from the existence of the other race effect. People are better at recognising faces of their own race than faces of another race. Children reared in a Caucasian environment show an 'other race effect' that does not change between age three to six years (Sangrigoli & de Schonen, 2004). The other-race effect is also observed in three-month-old infants (Sangrigoli & de Schonen, 2004). However, in the latter age group, presentation of two additional non-native faces cancels the effect, suggesting that this very early 'other race effect' might be due to lack of experience rather than expertise. The study had two aims: (1) to check whether the other race effect is present and even stronger in 10- than in six-month-olds; and (2) to assess the impact of the quality of mother-child interaction on the face expertise.

Design: The participants and set-up were the same as described in Paper 1 and in Sangrigoli and de Schonen (2004). Each Caucasian infant participated in two face discrimination experiments, one with Caucasian and one with Asiatic female faces as stimuli. The experiments were separated in time, where several hours intervened, and order of the experiments was counterbalanced between infants.

Methods: Black-and-white photographs of the faces of three Caucasian (aged 23 to 32 years) and three Asiatic women (same age range) were used as stimuli. All faces were photographed in a frontal view with a neutral expression, under the same light and against a grey background. They were photographed with a white shower-cap masking the hair and ears. Differences due to details of the shower-caps were cancelled by subsequently pasting, by means of software, the same unique shower cap on every head. There were three different pairs of Caucasian and three different pairs of Asiatic faces. Each face of a pair was used for an equal number of infants for familiarisation and as a novel face. Each pair was used with an equal number of infants. Infants were first habituated with one face and then presented with a pair of faces, the familiar and a new face of the same ethnic morphology. Recognition was assessed by a novelty visual preference test during which visual fixation on each stimulus was measured.

A trial started when the infant looked at the central fixation point which disappeared when the stimulus was presented. When the infant looked at the face, the presentation of the stimulus continued until its completion (25 seconds) or until the infant stopped looking for more than two consecutive seconds. The stimulus was re-presented until the infant's total looking time had reached 25 seconds. Quality of mother-child interaction was assessed using the procedure described in Paper 1.

Results: Both age groups are expected to show novelty preference for the Caucasian faces, but the recognition of Asiatic faces is expected to disappear earlier in infants with expert mother-child interaction than in infants with poorer mother-child interaction.

Conclusions: The mechanisms through which expertise in interactions with mother may be a factor facilitating the development of face expertise are discussed.

Perception of native and non-native language contrasts in relation to mother-child interaction

M. ELSABBAGH, J. VANHERWEGEN, R. CAMPOS & A. KARMILOFF-SMITH, Neurocognitive Development Unit, Institute of Child Health, London.

Objectives: Infant sensitivity to syllables from the phonology of sounds from the native tongue was compared to sensitivity to non-native phonemes. The study had two aims: (1) to replicate the finding of loss of discrimination of non-native phonemes between six- and 10-months of age in English, as well as extending it to French and German; and (2) to explore the relationship between this phonological sensitivity and the quality of mother-child interaction.

Design: The participants and set-up were the same as described in Paper 1. Each infant participated in two syllable discrimination experiments, one in their native language (English, French or German) and one from a different language family, namely Hindi. The experiments were separated in time, and order of the experiments was counterbalanced.

Methods: The syllable pairs were 'ba' vs. 'da' in the English/French/German native experiments, and dental vs. retroflex contrasts (voiceless, non-aspirated) in the non-native Hindi experiment. Various tokens of the syllables were recorded by native female speakers of each of the four languages. With the exception of the syllables used, the two experiments were identical.

A familiarisation-preference procedure was used to assess discrimination. In the familiarisation, half of the infants was familiarised with one syllable and half with the other (either 'ba' or 'da'), until they reached criterion, i.e. until they accumulated 1.5 minutes of sustained attention. In the test phase, four trials were presented, two in which new tokens of the same category as the one in the familiarisation phase were presented (same trials), and two in which new tokens of the contrastive category were heard (switch trials). A familiarisation or test trial started with an image on centre-screen to capture the infant's attention. As soon as s/he began to look at it, this image disappeared and a different one appeared on one of the two sides. When the infant looked in that direction, the presentation of the test stimuli began and continued until its completion (25 seconds) or until the infant ceased to look for more than two consecutive seconds. Quality of mother-child interactions was assessed using the same procedure described in Paper 1.

Results: We expected that both groups of six- and 10-month-old infants would discriminate contrasts in their native language, but that only six-month-old infants would discriminate contrasts in the non-native language. Within the group of six-month-olds, we also predicted some individual variation where discrimination between non-native phonemes would be at the same level as native phonemes for infants with less satisfying quality of mother-child interaction, whereas non-native discrimination would be poor/absent in infants with satisfying mother-child interaction.

Conclusions: The mechanisms through which good mother-child interaction may be a factor facilitating the specialisation of speech processing to the native tongue are discussed.

Symposium: Issues in the assessment and treatment of psychosis within forensic NHS settings

Convenor: H.M. LAITHWAITE, The State Hospital, Carstairs.

Chair: J. MCGOVERN, University of Manchester.

The aim of this symposium is to bring together current research and clinical practices that relate to issues in the assessment and treatment of individuals with psychosis within a forensic setting. In particular, the objective of this symposium is to discuss the challenges in working with this population and in conducting research. The speakers in this symposium will present their

experiences of developing services, evaluating them, and their ideas about further service developments and research. Dr Karen Allan and Patricia Cawthorne (The State Hospital) will outline the development of the CBT for psychosis service at The State Hospital, and present findings from a preliminary service evaluation. Current research in the field of psychosis has pointed to the importance of focusing on self-esteem and investigating the effect of this on patient symptomatology. Of relevance to this, Andrew Benn (Rampton Hospital), will present findings from an evaluation of a self-esteem programme and will discuss service developments and further research. With reference to the literature on self-esteem and psychosis, Dr Heather Laithwaite (The State Hospital) will present findings from a qualitative study that investigates sense of self, adaptation and recovery in individuals with psychosis within a high security setting. The findings and implications for further research and clinical practice will be discussed. Of further relevance to the notion of recovery and psychosis, John McGovern (University of Manchester) will be presenting research currently being carried out into recovery and psychosis within a low security setting.

Cognitive behavioural therapy for psychosis in a forensic setting: The development of The State Hospital Protocol

K. ALLAN, P. CAWTHORNE, The State Hospital, Scotland & A. GUMLEY, University of Glasgow. **Objectives:** The principle aim of this paper is to present an overview of the development of The State Hospital treatment protocol for patients with a psychotic illness. **Method:** Within this, the research base that guided this development will be identified, and an explanation of how and why this was adapted for use in this setting (high-security NHS facility) will be given. Explanation of the implementation strategy, training and supervision issues, future service developments, and ongoing research activity will also be provided. **Conclusions:** A summary of the programme to date and ongoing service developments will be discussed. This paper will then be followed by a brief presentation of the results of a case series evaluation of the protocol as it was when first piloted.

Results of a case series following The State Hospital Pilot Protocol

P. CAWTHORNE, The State Hospital, Scotland. **Objectives:** This study investigated whether or not cognitive behavioural therapy, delivered in accordance with a specifically designed protocol, could be effective with forensic inpatients who suffer from psychosis – that is, that clinically significant improvement could be demonstrated as a result of this treatment intervention. It also sought to establish whether or not these outcomes would be comparable with those found in a non-forensic population. **Design:** Case series methodology was used to explore the above objectives. **Methodology:** Pre-treatment and intermediate treatment scores are reported on four measures – The Psychotic Symptom Rating Scale (PSYRATS) for Auditory Hallucinations; The Psychotic Symptom Rating Scale (PSYRATS) for Delusions; the Beck's Depression Inventory – II (BDI-II); and the Beck's Anxiety Inventory (BAI), for a small sub-sample (N=5) of the initial cohort of patients who were referred to this service. **Results:** A review of the findings would appear to suggest that (notwithstanding the obvious limitations of a study of this size), results may be significant and comparable with those found in a non-forensic population. **Conclusions:** This study attempted to add to the relatively poor evidence base on Cognitive Behavioural Therapy for psychosis in a forensic setting. The results attained were encouraging and would appear to support the view that this specifically designed protocol has been well-conceived and may have much to offer this particular patient group. Further research of this important development would certainly seem worthwhile.

The relationship between psychosis, anger and aggression and the implications for their treatment

G. HADDOCK, University of Manchester. There has been much research examining the relationship between severe mental health problems such as schizophrenia and the occurrence of aggression and violence. However, the findings have been inconsistent with some researchers reporting higher rates of violence in samples of people with a diagnosis of schizophrenia while others report no such links. This has led some researchers to examine whether the suggested links with aggression and violence may be related to other factors such as the presence of specific psychotic symptoms, anger or particular environmental factors rather than to the presence of schizophrenia *per se*. This paper will describe recent findings from a study that examined the relationship between individual psychotic symptoms, anger and aggression in a sample of people who had a diagnosis of schizophrenia and a recent history of violence or aggression. The findings suggested that the severity of psychotic symptoms was unrelated to anger but the content of the symptoms and beliefs that the patient held in relation to them were specifically related to anger. The implications for treatment will be discussed.

The development of a programme to enhance self-esteem for patients detained in maximum secure settings

A. BENN, Rampton Hospital, Nottinghamshire. **Objectives:** This paper will describe the development of a clinical programme for enhancing self-esteem in patients detained in a maximum secure setting. The role and relevance of self-esteem to mental health problems and offending will be outlined. Previous outcome studies are reviewed and their implications for the development of clinical programmes are described. An outline of the programme will be provided. A review of the first four groups is presented together with case illustrations. Finally, future developments to the programme and its evaluation are described.

Sense of self, adaptation and recovery in patients with psychosis in a forensic NHS setting

H.M. LAITHWAITE, The State Hospital, Scotland & A. GUMLEY, University of Glasgow. **Objectives:** The principle aim of this study was to qualitatively explore, using grounded theory methodology, sense of self in patients with psychosis within a high security NHS setting. Furthermore, by exploring the positive and negative sources of self-esteem, this study also explored how patient's sense of self might be linked to the process of adaptation and recovery. By exploring the process of adaptation and recovery, it was anticipated that new insights might be found regarding the important factors involved in this. It is anticipated that this study might generate ecologically valid findings that can be integrated into clinical practice. **Design:** Grounded theory methodology was used to explore the above objectives. **Methodology:** 12 patients in a high security NHS setting were recruited and interviewed for this research. **Results:** Data is still being collected and will do so until a point of theoretical saturation. **Conclusions:** Following the emergence of themes, conclusions and recommendations will be discussed.

The effectiveness of a multi-disciplinary recovery based approach with individuals with treatment resistant psychoses and history of challenging behaviour or forensic incidents

J. MCGOVERN, M. BLACK, J. BOWIE, P. NEILSON, J. BROMFIELD, S. DUFFY, D. MONK & M. FORSE, Dane Low Secure Service, Cheshire & Wirral Partnership NHS Trust. **Objectives:** This presentation on Recovery will appeal to all who struggle to engage some

individuals with severe mental health problems in PSI/CBT approaches. The increasing importance of the user led recovery movement and the challenges of adopting this approach in a low secure setting will be highlighted.

In line with the symposium theme, i.e. the importance of effectiveness research for psychoses' the presentation will provide practical guidelines for clinicians/therapists to get engaged in research even though they do not have the time, resources or 'suitable' clients to conduct randomised controlled trials.

Recovery is an optimistic philosophy on mental health which has 'evolved from both the physical disability movement and deinstitutionalisation within psychiatry to emerge as a guiding vision for mental health services in the US during the 1990s. It has been the basis for Mental Health Services in New Zealand since 1998. Growing interest in the UK was indicated by the publication of Journey to Recovery (Department of Health, 2001b)

Design: The implementation of a repeated measures design aimed at determining the effectiveness of this approach will be detailed. Specific differences in a recovery-based approach vs. a traditional service will be highlighted, i.e. people navigators' vs. key worker, Self Management v Managed Care. The research is also designed to examine the impact of change on the overall service.

Symposium: Community psychology: An empowering psychology for the 21st century?

Convenor: R. LAWTHOM, Manchester Metropolitan University.

'Doing psychology' traditionally involves a plethora of professional interventions in various arenas – counselling, educational and organisational psychology (to name but a few). In this symposium, we present an alternative vision of psychological practice, community psychology. The papers are linked by a common way of working, an approach which characterises community psychological thinking. This value based approach to working promotes social justice and empowerment and works alongside marginalised or disadvantaged people. We demonstrate both the principles of community psychology and ways of working community psychologically through actual research projects. Community psychologists can work across different levels – personal, relational and collective collaborating with individuals, families, and communities (for example). The range of work presented here demonstrates the diversity of community psychological ways of working, both in focus and methodology. Siddiquee presents a collaboration between herself and refugee women around Internet usage and the impact upon employment, resettlement and integration. Sixsmith *et al.* presents the findings from a European study exploring community and societal participation in older adults (aged 75 to 90) who live within community settings. Knowles *et al.* present narratives of how community psychological practice can work over time. Lawthom presents a case study of a community psychology project involving students, community psychology tutors and residents within a community setting. The change process through learning and participation affects all involved. Kagan presents the research processes used in evaluating a community arts project, aimed at improving well being. This symposium draws upon local and international data to demonstrate a truly different approach to using psychology in applied ways.

Refugee women and the Internet

A. SIDDIQUEE, Manchester Metropolitan University.

Objectives: To investigate Internet use and its impact on refugee women in the UK using a community psychology perspective.

Design: A multi-method investigation was conducted including semi-structured interviews regarding Internet use; and a non-participant observation conducted during Internet use.

Methods: Semi-structured interviews and an observation were conducted with six refugee women and the course tutor taking part in a Community Internet Project (CIP), which aimed at teaching Internet skills. Interview transcripts were

thematically analysed, and combined with findings from the observation.

Results: The women were using the Internet to find information about local training/education providers, their host community (from local government websites), and current affairs regarding their country of origin. Furthermore, the Internet was used for communication purposes using web-based e-mailing (including attached photographs and being written phonetically) and Internet voice communication facilities. The Internet was impacting on the women by reducing isolation; increasing employment prospects; aiding integration and resettlement into their asylum community; and empowering the women. Other findings were that the women's Internet use was restricted due to economic reasons; and public Internet access points failed to meet the women's needs in terms of ICT support.

Conclusion: To conclude, the usefulness of community psychology as a paradigm for research will be considered. Particular emphasis will be placed on the values, methodology and level of investigation advocated by community psychology; and their relative role in enriching the research aims and process.

Community psychology meets participatory arts: Participation, well-being and creativity

C. KAGAN, Manchester Metropolitan University.

In this paper, I explore the research processes and outcomes in a community psychology evaluation of community based participatory arts projects. Can these projects be both empowering and therapeutic?

Objectives: To identify the impact of participatory action research upon well being and to explore the processes of change within Participatory Arts Project. The maintenance of well-being is a key outcome for community psychologists. Arts for Health initiatives posit a link between participation in art (here, in community settings) and positive well-being.

Design: There are very different traditions of research from community psychology approaches and community arts. Evaluation and artistic interpretation pose particular challenges for research. Therefore, a mixed method evaluation of both process indicators and outcome criteria was used, underpinned by an empowerment agenda. Collaboration between researchers, community artists and participants enabled a shared research vision.

Methods: Employing a community psychology approach, data was collected in various formats through collaboration and negotiation. Expressive outputs (art products), individual interviews and group discussions were held with community artists and participants.

Results: How can community psychological ways of working be introduced into the creative and therapeutic processes of community arts? Analyses involve integrating creative outputs with more 'standard' evaluation data.

Conclusions: The challenges of introducing research into ongoing processes of individual and social change will be discussed. Moreover, the evaluation undertaken here will be linked to current debates about evidence-based practice in both health and community settings.

The meaning of community participation amongst very old people: Findings from the cross national ENABLE-AGE project

J. SIXSMITH, Manchester Metropolitan University, D. NAUMANN, Department for Social & Ecological Gerontology, Heidelberg, Germany, A. SIXSMITH, Liverpool University, C. KUCSERA, Hungarian Academy of Sciences, S DAHLIN-IVANOFF, Lund University, Sweden & S. TOMSONE, Riga Stradins University, Latvia.

This paper presents preliminary findings from a qualitative study on the meaning of societal participation among community-dwelling older adults living alone (aged 75 to 90 years), drawn from the EC-funded ENABLE-AGE project. The ENABLE-AGE project explores the relationship

between home and healthy ageing.

Objectives: The research objectives in relation to community participation were to investigate the meaning of community participation from the perspectives of older people in the context of healthy ageing. Literature suggests that, from a socio-environmental gerontological perspective, societal participation may evolve over the life course due to aspects of ageing and social change. However, little is currently known about the socially oriented life of very old persons, particularly with respect to the meaning of community participation.

Design: A grounded theory approach was taken, involving 190 semi-structured interviews conducted across Eastern and Western Europe.

Results: Findings indicate that proactive, active and 'passively oriented' forms of community participation are important for well-being in later life. Understanding the ways older people view their position in wider society helps to unpack the concept of participation. Moreover, participation depends on the psycho-social and physical relationship between the person and their environment and the various facilitators and constraints that are part of life for very old people.

Conclusions: This work highlights the need to encourage community contributions from very old people by ensuring barrier-free environments and socio-cultural contexts that encourage the connection between older people's needs/interests and those of wider society in order to improve older people's quality of life and benefit wider society.

Everyone learns through participation in communities: A community psychology approach

R. LAWTHOM, Manchester Metropolitan University.

This paper draws upon community participation as learning. Psychology undergraduate students, community psychology tutors and community residents participated in a community project.

Objectives: To explore through a case study how working in community settings can be transformative for all participants and stakeholders. The participants are community residents on an overspill housing estate and co-researchers include students of community psychology and tutors of community psychology.

Design: An action research and community psychology approach was used in working with community members to improve well being in an overspill housing estate. Community residents contracted the research and with community psychologists (students new to this approach and experienced staff members) designed and shaped the research process.

Methods: Using a community psychology approach entailed working with residents' agendas rather than eliciting data from participants.

Neighbourhood work and stakeholder analysis were undertaken to set a research agenda. Action research around particular issues (e.g. transport accessibility for older residents and play space for younger residents) was undertaken. The process was reflected upon by students, staff and residents.

Results: Community psychology work is a process rather than assuming finite data. Changes in the community setting around provision of transport, accessibility to the community house, etc., are outlined. Community participants were included in exploring the community psychology approach by attending student presentations. Residents reported positive change outcomes and in addition, both students and tutors also learnt from community residents and working in community settings.

Conclusions: Working in a community psychology paradigm can be challenging for all – the benefits of working in a community psychology approach will be outlined.

Partnership and collaboration – community activists' involvement in community psychology

K. KNOWLES & D. BANKS, Tenants and Residents Association.

This paper reports on an ongoing collaboration between community psychologists (in academic settings) and community activists, representing a community tenant and residents' association. Using

this detailed case study approach allows a rich and longitudinal picture of relationships and involvement across diverse community stakeholders.

Objectives: To explore how a community psychology approach impact upon residents' experiences in a community setting. The benefits and challenges of long term collaboration in order to sustain development are identified and reflected upon.

Design: The nature of community psychology work entail collaboration and negotiation, hence the relationships between stakeholders (activists, residents and community psychologists) are key to the process. A user-led empowering action research approach is used.

Methods: Neighbourhood working and relationship building over time enable the co-authoring of resident and community activist narratives. This facilitated process produces a jointly constructed narrative representing collaboration. Analyses are also interpreted jointly to allow for negotiated meaning. Storytelling is both accessible for all participants and revealing of complex processes of participation, collaboration and marginalisation.

Results: Narratives of the community (across different stakeholders) are presented and interpreted. Working with an empowerment philosophy means working with rather than 'on' residents and this process is reflected upon.

Conclusions: Psychological work in a community psychology tradition takes the position that psychology can be 'given away'. Narratives of community residents (stakeholders in the process) can shed light on this way of working. Working with marginalised groups within a community psychology framework can radicalise psychological practice.

Symposium: Integration of static and dynamic risk factors into a unified etiological framework for sex offending.

Convenors: W.R. LINDSAY, The State Hospital, Carstairs, NHS Tayside & University of Abertay & D. SKENE, The State Hospital, Carstairs, NHS Tayside.

Background: Over the last 15 years, leading researchers have revealed a wealth of information on personal, social and environmental characteristics and their influence on and relationship to men who commit sexual offences. These variables contribute to risk assessment, assessment of individuals prior to treatment and management, review of the process of treatment, the development of treatment programmes and the development of theoretical models of which both assessment and treatment are based.

Purpose: This symposium contains theoretical and empirical contributions which will reflect on this considerable literature. Lynda Todd and colleagues provide some empirical support linking one set of actuarial variables with a set of dynamic variables. Todd Hogue presents and initial analysis of information from a major study on risk assessment and the assessment of personality disorder. The concepts have been used for many years with individuals with Intellectual Disability but this is the first major piece of work to investigate the empirical validity of these concepts and measures with this client group Don Fisher reviews the variables involved with risk assessment of sex offenders and provides recommendations on their use. The symposium contains two theoretical contributions. The first attempts to provide a framework for the treatment of sex offenders with intellectual disability and incorporates issues of quality of life as an active component of treatment. The second, by Tony Beach and Tony Ward, incorporates the two distinct clinical domains of static and dynamic risk into an integrated etiological framework. Because there are two theoretical contributions which attempt to advance theoretical and practical considerations in this field, the final presentation (20 minutes) will be given over to roundtable discussion.

A model of aetiology and risk

A.R. BEECH & T. WARD, University of Birmingham & Victoria University of Wellington.

Background: In this paper we attempt to

incorporate static and dynamic risk factors into an etiological framework.

Method: The major purpose in constructing the model is to link two related clinical domains in order to further both risk assessment and theory directed research.

Results: The integrated model of risk and etiological elements, and its clinical and research utility is discussed. In this model the interaction between significant learning events, psychological vulnerabilities (as evidenced by historical and stable dynamic risk factors), contextual or triggering factors, and their convergence in offence related psychological states (i.e. acute dynamic factors) is clearly depicted.

Conclusions: It is suggested that this model may be a useful framework in order that those working with sex offenders can employ in any thorough risk assessment.

Risk assessment of sex offenders

D.D. FISHER, Llanarth Court Psychiatric Hospital & University of Birmingham.

Background: Research on risk assessment with a range of offender groups has developed considerably over the past 15 years. The aim of this talk is to describe what is currently suggested as needed to carry out a thorough risk assessment of a sex offender?

Design: The purpose of this presentation is to describe four main components of risk assessment: (1) a functional analysis of the offence process in order to determine how the offenders problems contributed to their offending and to identify the modus operandi used to their offence(s); (2) the application of a suitable actuarial risk predictor to assess the offenders global level of risk; (3) identification of stable-dynamic risk factors that make potential treatment targets; and (4) monitoring of acute dynamic factors that indicate offending is imminent.

Conclusions: The range of variables described will be related to different types of sex offender assessed

A model underpinning treatment for sex offenders with intellectual disability: Developments on current theories of sex offending

W.R. LINDSAY, The State Hospital, Carstairs, NHS Tayside & University of Abertay, Dundee.

Background: A number of writers have provided a theoretical framework for work on mainstream sex offenders but this has not been extended to sex offenders with intellectual disability.

Design: To bring together a number of strands of research in order to provide a theoretical model for working in this field. These include theories of sex offending, developmental theories for offending, and work on quality of life.

Results: It is argued that in addition to dealing with issues of sex offending such as deviance, cycles of offending, relapse prevention, sex education and personality issues one should deal with developmental and societal issues which are crucial in the genesis of sex offending and offending in general.

Conclusions: Since societal issues are also of importance in relation to treatment, engagement and identification with society become important aspects with which to deal. It is argued that quality of life becomes a central issue when considering this aspect of treatment for sexual offenders. Issues directly related to sex offending should also be addressed.

The use of Personality Disorder (PD) measures in offenders with Intellectual Disability (ID) in high security, medium secure and community settings

T. HOGUE, C. MORRISSEY, P. MOONEY, Rampton Hospital, L. STEPTOE, NHS Tayside & University of Abertay, Dundee, J. TAYLOR, Northgate Hospital & University of Northumbria & W. LINDSAY, The State Hospital, Carstairs & NHS Tayside & University of Abertay, Dundee.

Background: In most cases, PD has been consistently found to predict criminal and violent recidivism. Recording of DSM-IV diagnosis of PD as

a predictive factor with an actuarial risk assessment is of significant relevance (VRAG; HCR-20). The prediction of accurate risk of recidivism relies on the reliability and validity of information attained relevant to assessment of risk. However, there is minimum research regarding the reliability of DSM-IV PD measurement for people with ID.

Method: To investigate reliability of PD (DSM-IV) measurement and use of the Psychopathy Checklist - Revised (PCL-R) within a sample of 180 offenders with ID from three levels of security: maximum secure, medium/low secure and community. Four different measures of PD were used: file rating, clinician (x file), observer and interview (keyworker). Diagnosis was allocated from consensus of all ratings employing previously agreed criteria.

Results: Measurement difficulties were apparent particularly with reference to differentiation of PD variables from deficits due to intellectual disability, lack of empathy, immaturity, remorse, close friends and conformity to social rules. Differences between the three cohorts were generally as predicted with a higher rate of PD in participants for a high secure setting.

Conclusion: Measures of severe personality disorder varied in a very lawful fashion with actuarial measures of risk for violence and less so with measures of risk for sexual assault

The relationship between measures of dynamic and static risk in sex offenders

L. TODD, D. SKENE, M. SCOTT & W. LINDSAY, The State Hospital, Carstairs.

Background: Research on risk assessment for future sexual and violent offending initially focused on actuarial/historical variables. Several authors (e.g. Quinsey *et al.*, 1998) found that variables such as previous violence, conduct disorder in childhood, a history of substance abuse and relationship history all contributed towards models which predicted future offending. More recently, several authors have found that immediate/dynamic variables also contribute towards the prediction of short-term risk for violence (Hanson & Harris, 2000). Such variables include emotional instability, a hostile attitude and attitudes towards offences. The present study investigates the relationship between a number of historical and attitudinal variables in sex offenders.

Method: 34 participants who had committed a variety of sexual offences against children and women completed the RAPE and MOLEST Attitudinal Scales (Bumby, 1996), the Questionnaire on Attitudes Consistent with Offending (Lindsay *et al.*, 2005), the Seto/Lalumiére Paedophile Interest Scale, and two risk assessments, the Violence Risk Appraisal Guide (VRAG) and the Sex Offender Risk Appraisal Guide (SORAG). (Both by Quinsey *et al.*, 1998).

Results: Spierman's correlations on the matrix of scores reveals significant correlations between the attitudinal scales. Interestingly, the MOLEST Scale and the Offenders Against Children Scale of the QACSO correlate significantly with the Paedophile Interest Index. The risk assessments correlate together but not with the Attitudinal Scales.

Conclusions: The Attitudinal Scales showed convergent validity and there was a significant relationship between attitudes on children and the actuarial Seto/Lalumiére Index. Consistent with previous studies there was no relationship between deviant attitudes and assessment of risk. However, the scales assessing attitudes consistent with offences against children correlated with an actuarial scale of sexual interest in children.

Symposium: New developments in assessment and treatment for offenders with intellectual disabilities

Convenor: W.R. LINDSAY, The State Hospital, Carstairs, NHS Tayside & University of Abertay, Dundee.

Background: The field of assessment and treatment of offenders with ID is developing quickly on a sound empirical base. Even since the publication of a recent summary volume (Offenders with Developmental Disabilities: Lindsay, Taylor & Sturmey, 2004) there have been a number of major developments. This symposium attempts to present some of this new material. All of the contributions

are empirically based and attempt to reflect the theoretical, assessment and treatment advances made in the last two years.

Presentations: Lynne Steele presents a review of a forensic learning disability service at 12 years follow-up. Danielle Skene and Bill Lindsay provide information on assessments of emotion. Both presentations investigate the psychometrics of assessments and Skene also investigates the differences in anxiety and depression between classes of offenders with ID. John Taylor and Ray Novaco present some fascinating new work on the effect of early experience on the development of anger and aggression in individuals. Lesley Steptoe investigates attachment relationships and quality of life in different classes of offenders. and Lynne Steele presents a review of a forensic learning disability service at 12 years follow-up. Finally, Nigel Beal presents a study which suggests new directions in the assessment of perspective taking abilities in offenders with ID. Cumulatively these papers present an overview of assessment and treatment work in the field and also investigate etiological variables relevant to offenders with ID.

A community forensic intellectual disability service: 12 year follow-up of referrals, analysis of referral patterns and assessment of harm reduction

L. STEELE & W.R. LINDSAY, NHS Tayside.

Background: There is extensive literature investigating criminal offences by individuals with intellectual disabilities over the last century. This has developed in recent years to address developments and issues regarding service provision, the involvement of the judicial system, treatment in the community under conditions of probation and other forms of court disposal. Attention has been drawn to the necessity of evaluating more than proximal measures of outcome, with a need to review the impact of treatment and service provision on recidivism.

Method: Males who committed sexually-related offences (Group 1; N=121), other types of offences (Group 2; N=105) and females referred for a range of offences (Group 3; N=21) are compared on personal characteristics, patterns of referral and re-offending rates up to 12 years after referral to a community forensic intellectual disability service between 1990 and 2003.

Results: For Group 3 there were higher rates of sexual and physical abuse, mental illness and rates of medication. Occurrence of mental illness in these cohorts was consistent with rates reported elsewhere. There were significantly more court referrals for Group 1 while Group 2 had significantly higher rates of referral from other sources, predominantly psychiatrists. There has been an increase in court referrals for Group 1 and 2 in the last five years while the number of other types of referrals has decreased. Group 2 has significantly higher levels of anger and aggression than Group 1 while the converse was true for sexual relationship problems. Group 3 experienced significantly more problems with aggression, anxiety and alcohol and drug abuse. At referral and at follow-up there was a similar pattern of offences; Group 1 committed predominantly sexual offences while Group 2 primarily committed non-sexual offences. Fire-raising was not overly represented in this population. Recidivism for Groups 1 and 3 (23 per cent and 19 per cent) was significantly lower than for Group 2 (59 per cent). **Conclusion:** High levels of mental illness and low rates of recidivism for Group 3 support the hypothesis that treatment of mental illness is an important factor. It is difficult to assess the effectiveness of each individual intervention provided by this service but it can be concluded that the service may have an impact in reducing recidivism.

Two studies on the Beck Anxiety Inventory (BAI) and Beck Depression Inventory (BDI) in people with intellectual disabilities

D. SKENE, W. LINDSAY & L. STEPTOE, The State Hospital & NHS Tayside

Background: There have been several developments in research on emotion in people with ID. These have revealed that aspects of this client group and

that assessments can be used reliably and validly. To date little work has been published using the BAI and BDI.

Design: This paper presents two studies, the first of which provides information on the psychometric properties of the BAI and the BDI. The second study addresses differences between ID sex offenders and an ID control group on the BAI and BDI.

Method: Both assessments were appropriately revised for use with persons with intellectual disability and individually administered. A sample of 100 participants from inpatient and community settings completed the assessments in study one. In the second study a sample of 37 sex offenders and 56 control participants (all of whom were male) from inpatient and community settings completed both measures.

Results: The joint factor analysis of the BAI and BDI revealed a two-factor solution corresponding closely to a depression and anxiety factor providing support for the discriminant validity of these measures. The results from factor analyses independently demonstrated that the BAI had three factors corresponding to; cognitive, somatic-temperature and somatic-balance symptoms. The BDI exhibited three factor dimensions; cognitive-self, cognitive-affective and somatic symptoms. In Study 2, it was found that sex offenders had significantly lower anxiety and depression scores than the control group.

Conclusion: The factor structures of the BAI and BDI conform specifically to those found in research with the general population. This result and the finding that sex offenders have lower anxiety and depression than controls is discussed in terms of theoretical developments.

The Dundee Provocation Inventory (DPI): An assessment for anger in people with intellectual disabilities (ID)

W. R. LINDSAY & L. ALDER, The State Hospital, NHS Tayside & University of Abertay, Dundee.

Background: Problems with anger and aggression in people with ID are among most common to be reported in the field (Taylor, 2002). In response to this frequency, a number of treatment approaches have been developed of which the most successful involve the functional analysis of behaviour and anger management treatment which is based on the cognitive analysis of anger (Novaco, 1994). In order to assess the impact of treatment, appropriate cognitive assessments are required. Novaco Anger Scale (NAS) is the most frequently reported measure of personal perceptions of anger. The DPI is based on Novaco's analysis of the functions and presentation of anger and has been used in several treatment outcome studies. The present paper provides psychometric information on the DPI.

Method: 114 individuals with ID were individually administered. The 20 DPI items. Forty were also administered the NAS and the NAS Provocation Inventory.

Results: The DPI had extremely high correlations with the NAS PI ($r=0.77$) and the NAS ($r=0.57$). Cohen's alpha for the whole test was 0.91 indicating a strong convergence of the 20 items on a single concept. Exploratory principal components analysis using an Oblimin rotation found four factors with an eigenvalue of over one, which accounted for 59 per cent of the variance. The first factor, accounting for 37 per cent of the variance on its own could only be explained as a number of major provocations. Other factors, each of which accounted for over seven per cent of the variance were explained by the headings Minor Irritations; Anger Arising from Football; and Anger Towards Self.

Conclusions: The DPI is quick, easy to use and understood by clients with ID. It performs lawfully in treatment trials and appears sensitive when comparing different groups. The present studies indicate that it has reasonably psychometric properties. The relevance of the findings to the theoretical analysis of Novaco will be discussed.

Family environment links to patient anger and aggression: Effects of volatile parents on people with developmental disabilities

J.L. TAYLOR, Northumbria University and Northgate & Prudhoe NHS Trust & R.W. Novaco, University of California.

Objectives: Children's exposure to inter-parental anger and aggression has been shown in many studies to have long-term adverse effects on a child's development and psychosocial adjustment. Exposure to domestic violence has been found to contribute to children's delinquency and clinical dysfunction, to predict child conduct disorders and personality disorder. In this study the relationship between childhood exposure to parental anger and aggression and anger and violence in later life is explored with a population of adults with developmental disabilities.

Design: The current study incorporated a cross-sectional assessment design using correlational analyses.

Methods: The participants were 110 male forensic in-patients with developmental disabilities. The relationship between patient anger and aggressive behaviour (assessed by multiple self-report, staff-rated, and file measures) and their childhood experiences of parental anger, parental fighting, and abusive victimisation was examined.

Results: Patient anger and violent conduct in the hospital were found to be significantly related in convergent analyses to parental anger and aggression and to physical and sexual abuse victimisation. In hierarchical multiple regression analyses, parental anger and aggression was highly predictive of patient anger, controlling for both parental and patient alcohol and drug abuse and for patient physical and sexual abuse victimisation. **Conclusions:** The study results have relevance with regard to the development of anger and aggression in this population within a social-learning theory framework. There are implications for clinical assessment and cognitive behavioural anger treatment procedures in terms of clients' threat-sensing anger schemas, and aggressive scripts.

Quality of life and relationships in sex offenders with intellectual disabilities

L. STEPTOE, The State Hospital & NHS Tayside.

Purpose: Several authors have developed hypotheses about the importance of social and developmental variables in the aetiology of sexual offences in offenders with intellectual disability. Poor parental attachment is noted to be a salient factor in the aetiology of sex offending behaviour and in forming internal working models of self and others, which form the individual's prototype for building future relationships. Control Theory suggests that poor relationship development may lead to lack of integration and identification with society, which in turn, underpins the development of criminality. The present study is the first of its kind to investigate the perceived quality of life and relationships in sex offenders in comparison to an appropriate control group.

Method: 28 sex offenders were compared with 28 control subjects both with ID. All subjects filled out the Significant Others Scale and the Life Experience Checklist.

Results: There were no differences between the groups on sex and IQ. On the SOS there were no differences between the groups on the number of times each significant other was mentioned. Actual and ideal levels of support from both mother and father were lower for the sex offenders than the control group. On the LEC, sex offenders reported lower scores on the relationships and leisure sections.

Conclusions: Poorer attachment relationships and no indication of any wish to change that state of affairs suggests lower levels of integration and identification with society for sex offenders compared with the controls. These results are discussed in terms of individual responses and implications of treatment.

Theory of mind and empathy in offenders with intellectual disabilities

N. BEAIL & T. PROCTOR, Barnsley Learning Disability Service & University of Sheffield.

Objectives: Lack of empathy and more recently

theory of mind abilities (TOM) are considered to play an important role in the assessment and treatment plans of offenders with and without intellectual disabilities. However, there has been no research on this in the field of intellectual disabilities. This study compared TOM and empathy abilities in offenders and non-offenders with intellectual disabilities.

Design: Offenders with intellectual disabilities were compared with a matched group of non-offenders. **Methods:** 25 male offenders and 25 non-offenders with intellectual disabilities were assessed on first and second order measures of TOM tasks, the Interpersonal Reactivity Index and the Test of Emotional Perception. The measures were administered in random order.

Results: Offenders performed significantly better on the second order TOM task and on emotional recognition and description of emotion tasks. All participants were more successful in situations involving the expression of happiness rather than sadness or anger.

Conclusions: Contrary to belief, the findings suggest that offenders have better TOM and empathy abilities. The implications for assessment and treatment are considered.

Symposium: Culture, change and loss; an exploration of this theme by counselling psychology trainees using disparate methodologies

Convenor: P. MARTIN, University of Roehampton.

The purpose of this symposium is to follow through and explore the theme of Culture, Change and Loss, researched using several disparate methodologies. The first two papers are based around the theme of culture. One researcher explores the reasons behind the take up of psychological help by members of immigrant communities in Britain. This uses thematic analysis and develops two new dimensions of accessibility and acceptability as indicators for seeking psychological help. The Polish Cultural Attitudes questionnaire and Ego-resiliency scales were also used as comparators. Cultural differences are also explored in the next paper, this time using narrative analysis. The author seeks to understand the dynamics of a black counsellor giving therapy to white clients. This is new research with very few other studies to support it. It continues the theme of understanding cultural complexity and is of particular interest to counselling psychologists since its findings are ambivalent and, therefore, somewhat controversial.

The third paper puts under the microscope the anatomy of change in culture. In this case a narrative analysis details the changes brought about by compulsory therapy on a counselling psychology training course. The results are clearly analysed and provide a timely reminder that culture change in terms of induction into a profession may well have radical implications for individuals within that culture. The fourth paper is auto-ethnographic. The writer explores the effects of heterosexual clients on him as a gay therapist. The first part of the research consists of his own storying of his journey, while the second part deconstructs this narrative. It asks important questions about the value of auto-ethnography in epistemological terms. There are some useful links here with the second paper which investigates black on white counselling. The final paper brings the focus from community right down to the individual within the culture. It examines one woman's investigation into loss, using a heuristic methodology. The outcome of using such a methodology is essentially phenomenological. There is no attempt to reach out for a universal truth, but rather an attempt to explore what the process of research does to the subjectivity of the researcher. The parallels with the processes of counselling are likely to engage a counselling psychologist audience.

My job as convenor is to highlight the 'storyline' that runs through these investigations. This unity is fortunately inherent both in the areas being researched, but also in an attempt to understand the human condition when it reaches a junction, and new understanding have to be sought. The whole symposium might be seen as a celebration of the 'Third Way' a distinctive contribution of counselling psychology to the wider world of psychology.

Influence of cultural identity and psychological resilience on attitudes toward seeking psychological help among Polish immigrants in UK

A. BASSALY & H. MACALLAN, Roehampton University.

Objectives: Positive attitudes toward seeking and receiving psychological help expressed by clients are thought to play an important role in securing and maintaining the therapeutic relationship. For members of immigrant communities in the UK establishing positive relationships with professionals in mental healthcare settings may be particularly difficult. Such difficulties may underlie a much publicised under utilisation of psychological services by these groups. This study sought to investigate attitudes toward psychological help among first-generation Polish immigrants in the UK. Within the context of theories of Minority Identity Development and Psychological resilience this study set out to test the hypothesis of an association between cultural identity (with the constituent dimensions of Conformity, Resistance, Transition and Awareness), resilience and attitudes toward seeking psychological help.

Design: Pilot study in which semi-structured interviews were conducted was followed by a main project utilising self-report questionnaires. Material obtained in the pilot stage was used to develop and adopt an existing Attitudes Toward Seeking Psychological Help measure.

Methods: Three participants took part in the pilot study, where interview material was analysed using Thematic Analysis to identify Accessibility and Acceptability as important new dimensions of willingness to seek psychological help. In the main study 100 Polish immigrants completed three self-report measures: The Polish Cultural Attitudes questionnaire, Ego-resiliency scale and revised Attitudes Toward Seeking Psychological Help questionnaire – ATSPH. Multiple regression analysis was used to test hypotheses.

Results: Of the variables examined, only Resistance was found to be a predictor of ATSPH scores, with participants who endorsed only Polish cultural values least likely to seek psychological help. Resilience was only related to the Accessibility sub-scale of the ATSPH indicating that more resilient individuals in this group are confident of their ability to access help when needed.

Conclusions: These results indicate possible difficulties in accessing services for less resilient Polish immigrants in the UK who reject British cultural values. Ways in which counselling psychologists might address these difficulties are discussed.

A narrative exploration of African-Caribbean counselling practitioners perceptions of how their colour effects therapy when working with white clients

S. SIKPAH, Roehampton University.

Objectives: This enquiry focuses on an exploration of African-Caribbean counselling practitioners perceptions regarding the effects of their colour when working with white clients.

Design & Method: Narrative analysis was used to analyse the taped and transcribed interviews of nine African-Caribbean practitioners.

Results: The findings highlighted a number of themes in the narratives. These include a temporal flow in terms of the practitioner's black professional identity development, which in turn seemed to influence the practitioner's awareness and management of colour-related issues in the therapy. Particular difficulties in working with white clients were also identified, as was the fact that training and supervision failed to adequately prepare these practitioners to deal with the complex issues involved in the black counsellor and white client counselling dyad.

Conclusions: Primarily it was concluded that there is an urgent need for greater awareness of these issues on the part of the practitioners, trainers, and supervisors alike, furthermore that additional research into this area is necessary.

Training in counselling and coping with possible impacts on the trainee's personal relationships

S. DOWLER, Roehampton University.

Objectives: This paper presents an analysis of trainee counsellor's experiences of change in personal relationships during their training to become a counsellor.

Design & Methodology: A narrative analysis was used to explore how trainee counsellors made sense of the changes they experienced in their personal relationships. Personal narratives provide a rich source of insight into how people identify, react and then adapt to changes within themselves and others and how these changes then impact on relationships. The research consisted of nine interviews with trainee counsellors lasting between 45 minutes to 75 minutes. All participants had completed a minimum of two years personal therapy.

Results: Although each interview presented its own unique narrative, a number of shared themes emerged for all participants. All participants recognised that changes they experienced in themselves caused some degree of difficulty for the significant others in their lives. It also emerged that most trainees felt less able to tolerate relationships that were perceived as one-sided, in that they were doing all the giving, or that were deemed to be superficial. One participant abandoned two long-term friends as he became more aware of how these relationships were detrimental to his own sense of self while another discovered the courage to say 'no' to members of her family without fearing rejection. One woman referred to her training as a process of deconstruction and reconstruction of the self, a theme that was reiterated throughout many of the narratives.

Conclusions: Overall, personal therapy was identified as the major contributor to change within the self.

An heuristic inquiry into loss

Z. GLANOWSKA.

Objectives: This study sets out to explore and understand the experience of loss in a person's life. What does an individual interviewed as part of this research, identify as a loss and how is their daily life informed by this experience?

Design & Method: Heuristic methodology developed by Clark Moustakas (1990) was employed to explore the human experience of loss. This approach utilises the concepts and processes of identifying with the focus of the inquiry, self dialogue, tacit knowing, intuition, indwelling, focusing, and the internal frame of reference. The five phases of heuristic research are initial engagement, immersion, incubation, illumination, explication, and creative synthesis. Four participants took part all of whom had personal experience of the topic under investigation. They were presented with the open-ended question, 'Describe as fully as possible your experience of loss.'

Results: These interviews were analysed, yielding two exemplary portraits, four individual depictions, a composite depiction and a creative synthesis of the experience.

Conclusions: This paper presents the results of this inquiry in terms of changes in the researcher's subjectivity.

Symposium: Clinical, legal and ethical issues in the assessment and treatment of asylum seekers in the UK

Convenor: C. McNULTY, The City Practice, London.

In 2002–2003 over 100,000 people sought asylum in the UK. Many had suffered from serious levels of physical abuse and many suffer from additional mental health and psychological problems. In the course of their work clinical psychologists are often called upon to provide opinions on levels of psychological distress, including levels of Anxiety, Depression and Post-traumatic Stress.

Clinicians are also often asked to comment on the likelihood of long-term changes, and make recommendations for treatment and intervention. In legal settings advice is often sought on the extent to which a person's symptoms are consistent with their biographical accounts, how their mental

state affects their presentation in interview and ask for recommendations for treatment.

The symposium aims to explore some of the clinical, legal and professional practice issues. We have invited speakers who have a working knowledge both of the clinical assessment and treatment issues and of the legal and CLS funding issues that can affect and shape the way that psychologist's evidence is presented and considered by immigration appeal tribunals in the UK.

Psychological assessment and intervention with asylum seekers – clinical and legal issues from a practitioner's perspective

J. BOWLEY, The Haven Project, Pennine Care NHS Trust, Rochdale.

Jake Bowley works in the NHS through a charity funded 'Haven Project' that provides a psychological assessment and intervention service to asylum seeking and refugee children and families in Rochdale. He has worked for a number of years with asylum seekers across Greater Manchester, and has experience of the complications that arise from working therapeutically with individuals who have ongoing asylum applications.

He also works closely with the Medical Foundation for the Care of Victims of Torture and voluntarily produces reports as part of the North West Medical Foundation's newly developed Medical Report Writing Service.

This talk will focus on examining how client's difficult legal situations present challenges to clinicians working with a therapeutic focus, especially in the area of post-traumatic assessment and subsequent intervention. It will explore the differing pressures this can put on client and clinician alike and look at some of the strategies and heuristic models that can assist in working with this client group.

Legal issues and concerns in the psychological assessment of asylum seekers – a lawyer's perspective

S. WOODHOUSE, LLB, Birnberg Peirce and Partners, Solicitors, London.

Birnberg Peirce and Partners is a small legal practice, specialising in civil liberties and human rights work. Currently it is largely occupied with the fall out from September 11th, representing those detained indefinitely as suspected international terrorists, and those charged with terrorism-related terrorist offences.

Our small team of six immigration and asylum practitioners represent about 500 individuals at any one time. Most of this work is with asylum seekers and almost all of it is funded by the Legal Services Commission (LSC).

The talk will discuss the relevant legal framework in which reports from clinicians are assessed, the requirements of the Court regarding expertise, and the purpose of such reports from a lawyer's point of view, i.e. the legal tests lawyers are trying to meet. Changes to be implemented in April 2005 to the structure of immigration appeals will be touched upon since these will require reports to be written in a tighter time frame, as well as changes to the LSC funding regime which have already had a significant impact on lawyers' ability to pay for reports from clinicians.

Cognitive incapacity and psychological distress in Kurdish and Afghan asylum seekers

C. McNULTY, The City Practice, London.

Craig McNulty works for a small independent practice that provides clinical psychology services in the UK and Europe. Over the past 10 years he has assessed many asylum seekers, particularly with regard to cognitive capacity, and prepares reports for use by immigration tribunals.

The paper will draw on data collected from over 100 cases involving Kurdish and Afghan asylum seekers. He will describe some of the unique clinical issues he has encountered via case-studies, and will describe what appear to be cultural differences in the way that symptoms of anxiety and depression are expressed by clients from different ethnic groups.

The talk will touch on the issues of reliable assessment of cognitive capacity, and will explore some of the practical issues involved in preparing reliable and detailed clinical reports while working to extremely tight deadlines and funding limitations imposed by the CLS system. The talk will also consider some of the professional practice issues associated with this area of work, in particular the use of interpreters in clinical assessment and the reluctance of some tribunals to accept a diagnosis of post-traumatic stress.

Symposium: CYP Symposium

Convenor: K.S. GOLDING, Wyre Forest Primary Care Trust.

International mental health support for the victims of natural disasters and terrorism: The role of clinical psychologists

L. RENTOUL, Barnet Child and Adolescent Mental Health Service, Barnet, Enfield and Haringey Mental Health Trust.

This paper is part of a symposium of papers submitted by the Faculty of Child and Adolescent Clinical Psychology on the diverse nature of the work of clinical psychologists. In this paper I wish to illuminate the role of a child and adolescent clinical psychologist in working in the international arena to provide mental health interventions for children, parents and other significant people in their lives (such as school teachers) in the wake of disasters (both natural and acts of terrorism). I will discuss my work as the Director of Children's Services for Project Liberty (the organisation overseeing the mental health work in the wake of the terrorist attack on the World Trade Centre in New York in September 2001); my work providing support to the children and school teachers of Bam, following the earthquake of 2003 and my work in planning and policy with international agencies from around the world.

I will emphasise the importance of highly accessible community based services, which link together local organisations and draw upon local resources. I will draw upon my experiences in setting up community-based services for children, adolescents and their carers in New York. This work entailed close liaison with the Department of Education and the Administration for Children's Services in the establishment of training programmes, screening programmes for children affected by the terrorist attack and national experts in the development of evidenced based mental health interventions. The paper will discuss immediate interventions as well as longer term ones and will also discuss the importance of resilience building among young people, their carers and within whole communities. The importance of understanding different cultural and ethnic aspects will be underscored throughout the presentation.

Adolescent depression - innovations and developments in clinical practice

M. SCHWANNAUER, The Young People's Unit & University of Edinburgh & C. RICHARDS, The Young People's Unit, Edinburgh.

The recent discourse around mood dysregulation and depression as an essential element of most enduring and recurrent psychiatric disorders and psychological difficulties inspired a number of reformulations and a range of novel clinical adaptations. The significant advancements in cognitive models, interpersonal models, models of emotion and reformulations of our treatment of depression highlight the importance to investigate the developmental precursors to these elements and to consider such a developmental understanding as key to the treatment of depression in young people.

The paper will emphasise a developmental understanding of depression in adolescents and present developmental and interpersonal models of the psychotherapeutic treatment of depression as well as examples of treatment innovations and self-help methods for this clinical population.

Attachment theory into practice, where are we now?

K.S. GOLDING, Wyre Forest Primary Care Trust.

Attachment theory suggests that infants are biologically predisposed to form attachment relationships from which they can experience security and comfort. The young child develops a range of attachment behaviours that are designed to keep the carer close, so that they can provide a secure base. Such behaviours are triggered by threats of separation, physical rejection or alarming conditions in the environment. These attachment behaviours are complemented by explorative behaviours when the child is feeling safe. The early experience of attachment relationships leads to the development of a cognitive model (internal working model) of these relationships which influences and is modified by later relationships. Attachment theory can guide our understanding of the effects of early abuse, neglect, separation and loss on the child's ability to form healthy attachments with parents. It can help us to make sense of the child's subsequent behaviour. Increasingly practitioners working with children and young people who have not developed secure attachments with carers are also looking towards attachment theory to guide their interventions. The importance of secure attachments for the emotional health and well being of children is clearly recognised in many of the documents that are influential in guiding practice. The Children's Bill and The National Service Framework for Children have the importance of child-parent attachments as central to the provision of interventions, especially during infancy. This does raise a number of questions for commissioners and clinicians involved in the development and delivery of services for children and young people.

- Is attachment theory useful as a guide for interventions?
- Do we have evidence and practice based interventions that are successful in improving security of attachment for infants and children?
- How do we evaluate interventions for their success in improving security of attachment?

This presentation will explore the usefulness of attachment theory as a guide for interventions aimed at improving security of attachment within birth, foster and adoptive homes.

Symposium: Extracting simplicity from complexity in vision and cognition

Convenor: T. TROSCIANKO, University of Bristol.

The environment within which biological systems operate is complex, and contains properties that are both stable and unstable in space and time; furthermore, various subsets of these properties are relevant to successful performance at a given task. The problem with trying to learn about how neural systems extract useful information from such a complex environment is that traditional laboratory approaches lack the richness of stimuli and tasks that would be required to investigate the environment/brain relationship in a more ecologically valid manner. This Symposium brings together five presentations which attempt to extend our understanding of the action of complex neural systems in complex environments. In each case, the authors have used innovative techniques to break out of the confines of traditional laboratory methods. The Symposium begins with the presentation of Tom Troscianko, who studies the interplay between the structure of the visual environment, the task being carried out, and the manner in which visual neurons encode the information in an efficient way. Philippe Schyns looks at what low-level visual information is required to categorise complex stimuli of faces, using EEG methodology to predict what information is relevant to a given task when looking at a face. Thus, he bridges the divide between low-level and high-level representations of the task. Ian Thornton uses novel methods of dynamic stimulus generation to show that information about motion is important in determining what we see – and yet, most vision research uses static stimuli. The technological achievement here is to be able to control the motion of stimuli and measure how such manipulations affect performance. Ben Tatler studies dynamics of a different sort – inspection of

natural scenes by movements of our eyes. Contrary to popular (and traditional scientific) belief, there is no 'picture in the head' of the rich visual environment and its constituent objects. Tatler investigates how the encoding, at the level of objects, is robust against dynamic changes in the environment. Finally, Nigel Franks discusses a different species – ants. These solve complex problems both individually and, most importantly, in a collective manner as well. Understanding decision-making in social insects raises issues relevant to understanding the action of neurons and also to other social groupings such as humans. The Symposium thus showcases recent work which tries to break out of the confines of the traditional laboratory.

Making sense of complex visual environments

T. TROSCIANKO, University of Bristol.

How do the properties of primate vision depend on the composition of the optical environment? We start with the premise that the main problem facing a successful visual system is to be able to sample a complex and time-varying set of input information in such a way that the important aspects of the information are encoded in a robust, noise-free manner. In order to know what is important, we have to have some knowledge of the task facing the system. In this talk, we will consider tasks known to be important to primates, such as detection and identification of food, and judging distance. Using the example of colour vision, we will see how the capture of chromatic information by the visual system allows the important aspects of the incoming information to be encoded while the random, time-varying aspects are attenuated. Examples of such time-varying aspects are shadows, and changes in the colour of the illuminant. The general point is that an understanding of such issues cannot be obtained from classic laboratory experiments alone – it is important to assess the characteristics of the relevant environments.

Receptive fields for flexible face categorisations

P. SCHYNS, University of Glasgow.

The receptive fields of brain signals elucidate how information impinging on the former modulates the latter. We applied this time-honoured approach in early vision to the higher-level brain processes underlying face categorisations. We recorded EEG in response to face information samples when observers resolved two different categorisations (gender and expressive or not). Using a method with low bias and low variance, we compared the information determining behaviour with the receptive fields of emergent brain signals associated with face encoding and category decision. Reversing the analysis, we used the receptive fields as an orthogonal basis to decompose the raw EEG. Here, we show that selective attention to diagnostic information modulates temporal activity (the eyes in gender and the mouth in expressive or not), whereas automatic attention to the eyes in both tasks determines occipito-temporal activity. This study represents a new approach to attribute function to different components of the neural system for perceiving complex stimuli.

Does motion matter?

I.M. THORNTON, University of Wales Swansea.

Our knowledge of object and scene recognition is largely based on studies that have used static stimuli. However, in reality, motion and change are fundamental aspects of our world. Do our perceptual/cognitive systems make use of these real world dynamics? In this talk I will discuss some of the reasons why researchers have traditionally used static stimuli, why they continue to do so, and what, if any, are the consequences of ignoring time in favour of space in current conceptions of mental representation.

Throughout the talk I will try to illustrate the theme that motion, or more generally, change-over-time, 'matters' to the visual system by drawing on a growing body of research where performance can be shown to improve in dynamic versus static displays.

Object memory in the real world

B. TATLER, Dundee University, I.D. GILCHRIST, University of Bristol & M.F. LAND, University of Sussex.

Object descriptions are extracted and retained across eye movements when observers view natural scenes. What types of information are encoded into objects files? Do these descriptions accumulate when objects are fixated more than once? How stable are the object files once constructed? To address these questions we tested immediate recall of multiple types of information from real world scenes and from computer presented images of the same scenes. We then looked at the relationship between fixations and the properties of object memory. Position information was encoded and accumulated from multiple fixations. In contrast, identity and colour were encoded but did not accumulate. We found no evidence for encoding of shape information or the relative distances between objects. Where information was encoded we found differential patterns of stability. Data from viewing real scenes and images of the scenes were very consistent, but effects were much stronger in the real world. Our findings suggest that object files are not dependent upon encoding any particular object property and so are robust to dynamic visual environments.

From individual to collective problem-solving: Insights from social insects

N.R. FRANKS & A. DORNHAUS, University of Bristol.

Making a correct decision can involve the collection and processing of a considerable amount of information. Such information gathering usually requires time, which means that in decision-making, there is often a trade-off between speed vs. accuracy (which is related to the investment in information collection). Such a trade-off is well known in the psychological literature. Social insects, however, face an additional difficulty: individuals are often incapable of collecting all the information needed, either because of limited sensory or cognitive abilities. Decisions often have to be made at the colony level, but then the individuals not only have to exchange the information collected, but also to reach an agreement to implement a collective decision. We will discuss some recent studies of decision-making in social insects, which combine individual and collective decision-making and demonstrate quorum sensing and a flexible compromise between speed and accuracy.

INDIVIDUAL PAPERS & WORKSHOPS

Mindfulness-based cognitive therapy for work stress: Focusing on relationships with self and others

W.J. ALLADIN, University of Hull/Humber Mental Health Services NHS Trust & Centre for Work Stress Management.

For whom: All participants who have experienced work stress or deal with it professionally. Prior experience of mindfulness training is not required as this is an introductory workshop.

Background: Traditional work stress models are outdated. The Health & Safety Executive have proposed a bold but controversial approach to work stress. This introductory workshop presents a nine-dimensional cognitive behavioural conceptual model covering issues such as: work-life balance, competence-performance issues, control-dominance, well-being criteria, satisfaction at work, organisational culture, employee-employer relationships, personal-professional role boundaries, harassment and bullying.

Learning Objectives:

- Participants will be encouraged to reflect on their relationships with self and others.
- They will then be introduced to the nine dimensional conceptual model for work stress.
- They will learn to conduct a basic assessment of work stress using the model and following a framework provided.
- They will learn to apply the model to real-life problems on the basis of their assessment.

Teaching Methods: A combination of experiential and didactic methods will be used. Brief

video/power-point presentations will illustrate the key concepts. Participants are also welcome to bring their own concerns and case examples.

Workshop Leader/Facilitator: Waseem Alladin, Department of Clinical Psychology, Postgraduate Medical Institute, Hull University & Humber Mental Health Services NHS Trust, is a consultant clinical & counselling psychologist, clinical director centre for workstress management/centre for cognitive neuropsychology therapy. He is also a member of the Institute of Directors with wide experience of occupational stress. He has been consulted by personnel from IBM, British Airways, local authorities and social services and health authorities and by the legal profession in cases of breakdown following work stress induced trauma.

Inclusion in Australia: What teachers say they need and what educational psychologists can offer

C.J.K. ANDERSON, South Gloucestershire Psychology Service & R.M. KLASSEN, University of Alberta, Edmonton, Alberta, Canada.

Objectives: The move to greater levels of inclusion in mainstream schools is a global phenomenon, with international research converging on the finding that the success of inclusion policies hinges on teachers' positive attitudes towards the policy and its implementation. This study examines the inclusion-related beliefs and perceived needs of primary teachers in Western Australia, and proposes ways that educational psychologists can help meet these needs.

Design & Methods: We constructed a concise mixed-method survey to assess teachers' confidence about inclusion, attitudes about inclusion, current level of support for inclusion, and perceived needs for additional support. The survey was created through adaptation of previous inclusion surveys and through consultation with a range of teachers, educational psychologists, and education managers in Western Australia. An initial form of the survey was trialed on a small group of teachers; suggestions for changes were included on the final version of the survey. Forced-choice and open-ended survey questions provided quantitative and qualitative data from 162 primary school teachers who were in the midst of implementing an inclusive education programme in a large urban/suburban education district in Western Australia.

Results: The majority of teachers perceived benefits (85 per cent) as well as drawbacks (95 per cent) to teaching in inclusive classrooms. Only 10 per cent of teachers noted educational psychologists as part of structures that successfully support inclusive practices and only four per cent of teachers requested additional educational psychology time as a support structure needed to enhance implementation of inclusion. Qualitative responses indicated that teachers supported the idea of inclusion, but were ambivalent about implementing inclusive practices, and were concerned that the movement toward greater inclusion would result in costs to teachers and students. Teachers' strongest needs were for additional training and professional development and more teacher aide time.

Conclusions: We conclude with suggestions based on our findings for how educational psychologists can best support teachers to implement more inclusive practices. Specifically, we suggest that educational psychologists need to be more visible and proactive in supporting teachers, and can positively influence greater inclusion by: (a) offering more training and professional development; (b) disseminating research that shows social and educational benefits of inclusion; (c) developing realistic behaviour and learning plans; and (d) listening to and advocating for teachers.

A new type of personality measure: The Apter Motivational Style Profile

M.J. APTER, Georgetown University.

The aim of the paper is to discuss The Apter Motivational Style Profile (AMSP) and to show the special characteristics of this psychometric instrument.

The AMSP is a measure of personality based on reversal theory. It is being taken up by increasing

numbers of management consultants and other practitioners, especially in Britain and in the US, for use in the personal development of their clients. Training courses are provided in both countries to train coaches, counsellors, trainers and consultants in its use.

It differs from other more conventional personality scales in a number of significant ways: (1) In line with reversal theory, but opposing the traditional and more static trait concept, it recognises that people change regularly in the course of everyday life – specifically that they reverse between opposing motivational states representing incompatible desires. The subscales of the profile measure the relative frequency of these contrasting states. (2) The subscales are derived not from factor analysis, but from a theory that is supported by a variety of types of evidence, including clinical evidence and evidence from the psychological and the psychophysiological laboratory. (3) The psychometric profile that results helps the practitioner not by labelling people – which can be counterproductive when the aim is to help people to change – but through identifying issues that need to be explored in the client's life. (4) Expert software systems have been developed to generate narrative reports, and an innovation is that the practitioner may choose between different types of report using the same data from the same clients. A narrative report for the consultant, which helps him or her to structure their intervention, is also available. A set of other psychometric tools has been developed, based on the same structure of motivational states derived from reversal theory, but operating at different levels within an organisation: the team, the leader, and the organisation as a whole. This allows the management consultant to move up and down between levels in a systematic way. The AMSP is a psychometric tool that merits attention from both researchers and those who apply psychology, especially in organisational contexts.

Building successful relationships: The reversal theory approach

M. APTER, Georgetown University.

In order to understand what is happening in a relationship or an interaction, it is essential to take into account the motivations of the parties involved. This is true whether we are talking about husband and wife, player and team, experimenter and subject, teacher and pupil, or any other kind of relationship whatsoever. Reversal theory, which it is the aim of this paper to introduce and illustrate, provides a systematic way of looking at relationships of all kinds and is based on an analysis of the interplay of different motivations. It has been used successfully in family therapy, child guidance, team building, leadership development, market research, and other applied fields.

Reversal theory identifies a set of eight basic psychological motivations, these being arranged in four pairs of opposites. Reversals occur between members of such a pair under conditions specified in the theory. Although all four pairs are implicated in interactions between people, two of them are specifically about relationships: (1) the need for care and affection, versus the need for power and control; and (2) the need for individual independence versus the need to identify with, and be part of, something beyond oneself. Reversal theory shows how, in different combinations of these motivations, and in relation to different outcomes, relationship emotions are generated, such as gratitude, humiliation and resentment, and how sudden shifts in emotion can occur. The ever-changing and unstable nature of relationships is also emphasised.

Relationship problems can arise in many ways. For instance, when people are subject to incompatible motivations at the same time, especially when they are not aware of this, or when they understand the other's motives very well but denigrate them, or when they use tactics to satisfy their motives that are inadequate, inappropriate, or damaging to themselves or others. In contrast, the person who relates well to others, in whatever capacity, is the person who can read the other person's motives and adapt to them, or is able to change them. For example, the effective leader provides a 'microclimate' around himself or herself that tends

to induce and harness appropriate motivations in followers. Various tools have been developed within reversal theory, including psychometric scales and workshop exercises, to help people to develop their relationship skills, or deal with their relationship problems. Taken as a whole, the approach is one that can claim to be both theoretically integrative and highly practical.

Telling us how it is: The patient's experience of neuropsychological assessment

N. BLAKE, St. George's Healthcare NHS Trust.
Objectives: This paper will present the findings of a study that investigated the experience of neuropsychological assessment from the patient's perspective and discuss the implications of these findings for clinical psychology training and professional practice. The study sought to gain an understanding of how the patient viewed the purpose of assessment and how the patient experienced the assessment process. It explored the impact of the assessment on the patient's sense of self and elicited patients' views about what was particularly helpful or unhelpful about the assessment process.

Design: A within-group qualitative design was employed to investigate the experiences of nine men and women who presented for neuropsychological assessment in the context of an outpatient assessment clinic or as part of an evaluation for a rehabilitation programme.

Method: Verbatim transcripts of semi-structured interviews were analysed using interpretative phenomenological analysis.

Results: Six master themes were identified: Expectations of assessment, context of referral, experience of process, impact on self, components of a good assessment and experience of illness/disability. The findings indicated that patients are poorly prepared for assessment but come with positive expectations for information that will help them understand and cope with their impairments. Their relationship with the psychologist is central in determining the quality of their experience and in facilitating improved self-esteem, coping and better awareness of cognitive strengths and deficits.

Conclusions: It is concluded that neuropsychological assessment can have an educative and therapeutic function that should be further exploited in a diagnostic and rehabilitation context. The findings are considered in relation to the literature on sharing a diagnosis, coping with illness and the client-clinician relationship. The implications of the research findings for clinical training and neuropsychology service provision are discussed and consideration given to future research opportunities.

Comprehension abilities of students with dyslexia in higher education

E. A. BOYLE, M. TERRAS & S. ROBERTS, University of Paisley.

Objective: Increasing numbers of students with dyslexia are entering higher education. Evidence suggests that the majority of developmental dyslexics have phonological processing difficulties and short-term memory deficits that persist into adulthood. However the impact of these difficulties on higher-level cognitive processing abilities and on achievement in higher education remains unclear. This research aims to compare the reading and listening comprehension abilities of students with dyslexia with a non-dyslexic control group.

Design: A matched pairs design was used: 16 students with dyslexia currently in higher education were matched with 16 non-dyslexic controls. Control participants were matched in terms of gender, age, year of attendance and course (e.g. first-year social science) as this was assumed to reflect similar reading demands.

Method: Participants were individually assessed and measures of accuracy and completion time were collected. Phonological processing ability was assessed using word and non-word reading tasks, Spoonerisms and phonemic fluency. Reading ability was assessed by a one-minute reading test and the Schonell Silent Reading Test. Short term memory was assessed via digit span and reverse digit span. Reading and listening comprehension were assessed

using passages drawn from the Neale Analysis of Reading Ability.

Results: Significant differences were found between participants and controls on tests of phonological processing (word and non-word reading, Spoonerisms and phonemic fluency), digit span, reading ability and reading comprehension. There were no significant differences between the groups on tests of listening comprehension and reverse digit span. Correlational data indicates some interesting differences between the groups. For students with dyslexia, non-word accuracy was strongly correlated with word accuracy and reading ability measures. Both reading and listening comprehension scores were unrelated to any reading tests scores. However, for the control group, non-word accuracy was unrelated to other measures of reading accuracy and reading ability. Reading comprehension was significantly correlated with reading ability. The correlation between listening and reading comprehension was marginally significant for control students but non-significant for students with dyslexia.

Conclusions: The poorer performance of students with dyslexia on tests of phonological processing, digit span and reading comprehension is consistent with the persistence of phonological difficulties into adulthood. As the Neale reading test mainly assesses recall with a limited amount of inference, the significant difference in reading comprehension between dyslexics and non-dyslexics found in the current study may reflect differences in recall ability. These results differ from those of Simmons and Singleton (2000) who found that the reading comprehension difficulties of dyslexics were largely linked to problems with inference rather than recall. Further research should explore the influence of both modality (listening or reading comprehension) and test format (recognition or recall) on the assessment of the comprehension abilities of students with and without dyslexia.

Behavioural symptoms and cognitive deficits in adults with ADHD: What changes with age?

J. BRAMHAM, S. YOUNG, R. MORRIS & B. TOONE, Institute of Psychiatry, London.

Objectives: Attention Deficit Hyperactivity Disorder is no longer viewed as a disorder limited to childhood as some children diagnosed with ADHD continue to exhibit symptoms and cognitive deficits in adulthood. Adults with ADHD have been shown to be impaired on various neuropsychological measures, particularly those involving attention, response inhibition and other executive functioning tasks. Although some studies have shown improvements in cognitive functioning and symptoms through childhood, their trajectory is not clear through the disorder in adulthood.

Design & Methods: A cross-sectional study design was used. Two-hundred-and-eighteen adults who were diagnosed with ADHD at the National Adult ADHD service were assessed using neuropsychological tests of attention, impulsivity and executive functioning, as part of a routine diagnostic assessment. The relationship between age and test performance was examined for patients aged between 16 to 50 years. Self- and informant-ratings of ADHD, anxiety and depression symptoms were also analysed for to determine any changes in symptomatology according to age.

Results: With regard to symptoms, there was no decline in either inattention or hyperactive/impulsive symptoms with increasing age but there was a significant increase in both anxiety and depression for older patients with ADHD. Neuropsychological assessment revealed a significant improvement in response inhibition with increase in age. However, on tests of attention and executive functioning, all age groups exhibited comparable deficits.

Conclusions: Cognitive deficits in response inhibition seem to improve as adults with ADHD grow older. In contrast, attention and executive functioning impairments may persist into middle adulthood and possibly beyond. Similarly, there is no decrease in self-reported experience of symptoms and an increase in anxiety and depression. However, the limitations of the clinical sample will be discussed.

Psychosis and transformational crisis: An interview study

C.M.C. BRETT, Institute of Psychiatry.

Objectives: As part of a wider investigation of the role of anomalous experiences (AEs) and appraisal processes in the development of psychosis, a qualitative study was carried out to investigate the impact of AEs associated with psychosis on the individual's view of the world and themselves. Transpersonal perspectives on psychotic phenomena that view these experiences as transformational crises were assessed in the light of these investigations.

Design: Interview data, from a large sample of individuals who had experienced AEs associated with psychosis, was subjected to Interpretative Phenomenological Analysis (IPA) in order to identify prevalent themes regarding the role of the experiences in the participants' views of the world, themselves and their lives.

Method: A sample of AE experiencers including: (i) individuals who had received a diagnosis and treatment for a psychotic disorder ($N=35$); (ii) individuals who had never received any treatment or diagnosis of psychosis ($N=34$); and (iii) individuals considered to be 'at risk' of developing psychosis ($N=20$), was recruited and interviewed about their AEs using a novel semi-structured interview schedule (the Appraisals of Anomalous Experiences interview). The interviews were tape recorded, and transcripts were made of participants' responses to open-ended questions regarding: (i) the salience of the anomalies for the person's view of the world; (ii) the salience of the anomalies for the person's view of themselves; (iii) factors which the person found helpful in coping with or integrating the experiences. These transcripts were then studied and prevalent themes and narratives were identified in the data using IPA methodology. These themes were considered in the light of cognitive psychological and transpersonal perspectives to psychotic phenomena.

Results: Themes consistent with a view of psychotic phenomena playing a role in cognitive restructuring, as a facet of transformational crisis, were identified in the interview data. Most participants described an accommodation of their view of themselves and/or the world in response to the AEs they had experienced. This accommodation of core beliefs frequently centred around an expansion in what could be called a 'spiritual' dimension to life, comprising increased appreciation of basic connectedness to 'the world' and other people, increased personal insight, 'moral' improvement, and the emergence of a perspective of learning or self-knowledge, as well as belief in non-material dimensions of existence. These themes were observed in the responses of both the clinical and non-clinical participants. In the clinical participants, accommodation in a negative direction was also observed, comprising a sense of loss, deficit or incapacity in their view of themselves as a result of the AEs.

Conclusions: AEs associated with psychotic disorder frequently alter the way that the individual views and understands themselves and their world, and as such can be seen as components of transformational crisis. Support for the transpersonal perspective has implications for therapeutic approaches towards those seeking help for psychotic-like AEs. An appreciation of the potential for cognitive restructuring as a result of AEs should translate into a willingness to support the client in exploring changing and developing metaphysical views of themselves and the world, and thereby to take advantage of the opportunity to abandon previous maladaptive core beliefs.

Appraisals of anomalous experiences in psychosis and benign schizotypy

C.M.C. BRETT, E.P. PETERS & P.M. MCGUIRE, Institute of Psychiatry.

Objectives: A study was carried out to assess the role of appraisals of anomalous experiences (AEs) in the development of psychotic symptoms, within the context of a continuum of psychotic experiences across the population. Specifically, the hypothesis that negative, externalising, and personalising appraisals of AEs are pivotal in the development of distress and need for care, was tested.

Design: A cross-sectional comparison of appraisals of AEs made by individuals with and without a

diagnosis of psychotic disorder was carried out. If appraisal processes contribute to the formation of clinically-relevant symptoms, people who experience psychotic-like AEs without a need for care should appraise these AEs differently to those who receive a diagnosis and treatment (the kinds of anomalies being experienced being held constant).

Method: Two groups of age- and gender-matched participants were recruited: (i) a 'Diagnosed' group (D) who had been diagnosed and treated for a psychotic disorder ($N=35$; mean age = 32.6 years); (ii) an 'Undiagnosed' group (UD) who reported AEs associated with psychosis, but who had never received a diagnosis or treatment for psychosis ($N=36$; mean age = 34 years). All participants were assessed using a novel semi-structured interview (the Appraisals of Anomalous Experiences interview) designed to rate the incidence and frequency of 40 AEs, and the participants' appraisals of these experiences, as well as anomaly-related distress. AEs were rated between 0–2 to reflect occurrence at several timepoints including the time of first onset and the time current to the assessment. Appraisals were rated according to the type of explanation for the anomaly (nine categories of explanatory framework rated between 0–2), and on four dimensions: 'valence', 'dangerousness', 'externality' and 'personalising' (rated between 1–5). Anomaly-related distress was rated between 1–5. These ratings were anchored to specific AEs at each timepoint.

Results: Principal Components Analysis was used to summarise the AE ratings into five dimensional component scores. Group differences in appraisals (utilising all timepoints), and the predictive value of appraisals for anomaly-related distress, were tested using ordinal logistic regression, controlling for the kinds of AEs being appraised. The D group appraised their AEs as being more negative, dangerous, and personally caused (i.e. by some agency) than the UD group, even when controlling for the kinds of AEs being experienced, and these dimensions of appraisal were predictive of distress. The D group were more likely than the UD group to appraise their AEs as having a medical cause, and as being caused by other people, when controlling for the kind of AEs occurring, and both these categories of appraisal were predictive of distress. The UD group were more likely to make psychological or normalising appraisals of AEs. Spiritual and normalising appraisals were predictive of less distress, across different kinds of AEs. **Conclusions:** Appraisal processes distinguish benign occurrences of AEs and those leading to distress and need for care. These results support the rationale for CBT approaches that aim to intervene at the level of appraisals to reduce distress, specifically indicating normalising approaches, those that engage with the meaning of AEs in spiritual terms, and the need to address personalising biases. The externality of appraisals does not seem clinically important, contrary to the original hypothesis.

Reasons to be fearful: Distrust in Internet health services

P. BRIGGS, E. SILLANCE, L. FISHWICK, Northumbria University & P. HARRIS, Sheffield University.

Empirical Research Paper:

Objectives:

1. Establish the predictors of trust in online health advice for patients faced with a controversial health decision (whether to take Hormone Replacement Therapy – HRT).
2. Test a model of trust developed by Briggs *et al.* (2002, 2004) which predicts a role for the attractiveness and usability of the site in the first few minutes of interaction and a subsequent role for source credibility, predictability and personalisation in subsequent engagement.

Design: A six-month longitudinal study of menopausal women in two phases: (i) observation of interactions with health websites over a one-month period with data logging and qualitative interview data; (ii) a six-month diary phase detailing integration of advice across sources.

Methods:

Participants: 15 women considering taking HRT to relieve symptoms of the menopause

Materials: Participant- and experimenter-selected websites offering advice on the menopause

Procedure: Participants attended an Internet café over the course of a month for four two-hour sessions. Each session involved one hour surfing plus one hour discussion. In weeks 1 and 4 participants explored sites freely, whereas in weeks 2 and 3 participants were directed to particular sites. Search behaviour was automatically logged and participants also recorded their impressions in paper and pencil log books. At the end of the month, participants were given diaries to take home and asked to record their subsequent web searches and any health related interactions with family and doctors.

Results & Discussion: Identity issues were crucial for building trust in online advice. General sites with few identity cues (NHS, Bupa) were seldom selected as trusted sources. Sites with home pages containing relevant information and that offered the opportunity to browse stories from like-minded individuals were viewed very positively. In terms of a theoretical model, support was found for a two-process model (similar to that proposed by Chaiken, 1980) in which early heuristic assessment of the credibility of information was made on the basis of design factors, followed by a systematic analysis of the expertise and motivation of authors.

Sleep characteristics of patients attending a Pain Management Programme

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The Pain Management Programme (PMP) aims to help patients dealing with intractable chronic pain. Patients almost invariably complain of poor sleep quality and of daytime fatigue due to insomnia. Lack of sleep or poor quality sleep has been linked to depression and to impairments in cognitive functioning. We report objective and subjective measurements from an initial survey of sleep characteristics in patients assessed prior to joining either a four-week or five-day PMP. Objective measurement was undertaken using the Epworth Sleepiness Scale. This is a commonly used measure of pathological sleep propensity in narcolepsy and other sleep disorders. Of the 190 consecutive patients 24 per cent above the cut off score of 10. This indicates the presence of clinically significant sleep problems.

Subjectively, only 2.7 per cent of patients reported that they did not have a sleep problem, 11.4 per cent complained of excessive daytime sleepiness and the remaining 85.9 per cent of insomnia (defined as problems in getting to sleep and maintaining sleep). Seventy-nine per cent indicated that their sleep problems significantly interfered with feelings of well being and their day to day activities. Although 64.5 per cent took an acceptable 1–30 minutes minimum to fall asleep the remaining patients took between 40 to 60 minutes (27.8 per cent) or over an hour (5.3 per cent). During sleep, 89 per cent woke at least three times. Of these 6.7 woke over eight times a night. Information concerning 'sleep hygiene' could alleviate some of the provoking factors that inhibit sleep initiation.

Curiously, despite the difficulties in night time sleeping reported by PMP patients (the majority of whom are unemployed because of chronic disability), 42 per cent of the patients reported that they did not take naps during the day.

Approximately 19 per cent, however, took at least three naps per day. The maximum number of naps per day recorded was 10. The time taken for these naps was very variable. Overall, 18.3 per cent took naps each of which was up to 20 minutes long, 39.3 per cent took naps which could last up to an hour per nap and 6.2 per cent had naps which could each be of 90 minutes or more duration. Comparable with a control population, taking daytime naps was largely not refreshing (46.4 per cent). Planned daytime napping is a successful, refreshing strategy used in the management of narcolepsy but, alternatively, may reduce the 'drive' to sleep in other patient populations. This is clearly an avenue which could be explored in the management of sleep problems in PMP patients.

In conclusion, in this initial descriptive survey of their sleep characteristics, patients with chronic pain demonstrate significant sleep pathology both objectively and subjectively. The present data suggests that in helping patients to cope with their pain, education about the nature, role and cycles of sleep is likely to form a useful element in the rehabilitation process.

Alcohol-related attentional bias and problem severity is negatively correlated in problem drinkers: A new finding with the flicker paradigm for inducing change blindness

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More than a dozen papers have reported finding an alcohol-related attentional bias (AAB) in problem drinkers in treatment. Such a processing bias towards alcohol-related stimuli that is normally absent in social drinkers helps explain some unusual aspects of alcohol consumption at this level – that it continues in the face of escalating problems that would normally motivate restraint and that after apparently successful problem resolution, a return to problem drinking is unusually frequent.

We report an experiment using the flicker paradigm for inducing change blindness. Change detection latency for changes made to either an alcohol-related or neutral object in a visual scene made up of both types of objects is measured in problem drinkers in treatment and social drinkers. Apart from replicating the differential AAB found using other paradigms, a negative correlation was found between change detection latency and problem severity in the problem drinking group given the alcohol-related change but not in the problem drinking group given the neutral change. Such a continuity of AAB within problem drinkers was not found in the one other (modified Stroop) study in which it was sought which suggests that the flicker paradigm might be a more sensitive paradigm for measuring AAB in problem drinkers or that the two different paradigms measure different aspects of AAB.

Encoding of matched emotional expressions reveals repetition blindness

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Repetition blindness for visually-presented stimuli refers to when only one of two similar items is available to a viewer's conscious awareness. Repetition blindness has occurred with visual stimuli that are similar in terms of being: identical repetitions, orthographically similar, phonologically similar, and conceptually similar.

Objectives: The objective of the experiment presented here was to investigate whether the encoding of similar emotions can produce repetition blindness. A secondary aim of the study was to assess whether such an effect could be modulated by attentional task demands: would emotion based repetition blindness occur both when participants were required to attend to the emotion (by recalling what facial expressions were presented), and when their attention to the emotion was not necessary for the task (by counting how many faces)?

Design & Method: Using a traditional rapid serial visual presentation (RSVP) paradigm, faces were presented so that four key within participant conditions could be compared: identical face repetition (identical), same emotion but different individual's face repetition (emotion), same face but different emotion repetition (face), and non-identical trials, where the face and emotion were different. A between participant factor was employed for the task condition: participants either responded by recalling what expressions had been seen ($N=7$), or by recalling how many faces they had seen ($N=13$). Faces to be reported were either happy or sad, and the number of faces to be reported was either one or two.

Results: D prime scores were used in the data analysis, allowing response bias (false alarm rates) to be taken into account. A 2 x 4 mixed factorial analysis of variance was calculated with one between factor (task condition: expression or

count) and one within factor (repeat condition: identical, emotion, face, or non-identical). The results revealed that both types of task produced repetition blindness for identical faces (same emotion and same face) and for different faces that shared the same emotion.

Conclusions: This experiment offers preliminary evidence that the emotional coding of facial expressions is sufficient to produce repetition blindness effects. Moreover, this occurs regardless of whether participants are directed to attend to the emotional expressions or not. This is consistent with models of automatic and rapid processing of emotional expressions.

The relationship between the physiological measures of heart rate and electro dermal activity and self-regulation in typically developing and 'hard-to-manage' pre-school children

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Aims: To examine the relationship between physiology and emotion and compare self-regulation between typically developing children and those with emotional and behavioural problems.

Objectives: To establish whether 'hard-to-manage' children will display differences in the physiological measures of heart rate (HR) and electro dermal activity (EDA) than those of typically developing pre-school children. Furthermore, to examine whether patterns of emotional regulation emerge between the two groups.

Design & Method: A mixed design was used. Thirty 'hard-to-manage' children and 30 typically developing children, aged three to four years were recruited. Changes in HR and EDA were measured using 'biopac' equipment during a moderately challenging experimental procedure.

Results: Changes in HR and EDA were derived by subtracting baseline (pre-task) measures from 'on task' measures and analysing the difference using ANOVAs.

Conclusions: Whilst it has been established that HR decreased and EDA increased during the procedure and that these differences are greater in the 'hard-to-manage' group, conclusions drawn at this stage are tentative as the role of attention and differences in movement during the procedure is examined.

Repetitive behaviour, sensory processing, and weak central coherence in children with Autism Spectrum Disorder

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Introduction: Autism Spectrum Disorder (ASD) is a developmental disorder which includes a range of abnormal repetitive behaviours and sensory symptoms. The theory of 'weak central coherence' (WCC) has recently been proposed to explain some patterns of behaviour in autistic individuals, such as the focus on visual and auditory details at the expense of processing information in context. In addition, the theory has been put forward as an explanation of the presence of stereotyped movements and thoughts, some language impairments, and perceptual and emotional impairments. However, very little work has explored whether there is a relationship between repetitive behaviour, sensory processing, and WCC. This research explores whether there is a relationship between the degree of repetitive behaviour and sensory symptoms and the presence of weak central coherence in children with ASD.

Method: 37 children (range seven to 16 years, mean full-scale IQ 107) with formal diagnosis of high-functioning autism or Asperger's syndrome were recruited. The children completed the Weschler Intelligence Scale for Children (Short Form), and two measures of WCC, a Planning Drawing Task (PDT), and the Embedded Figures Test (EFT). Parents completed the Social Communication Questionnaire (SCQ) to check the level of autistic symptomatology, and the Short Sensory Profile (SSP), and Childhood Routines Inventory (CRI), measures of sensory processing and repetitive behaviours respectively.

Results: Correlations were used to explore the relationship between the outcome variables.

Multiple regression analyses were used to determine which variables predicted performance on the WCC tasks. Participants completed the EFT task more rapidly than published norms (indicative of WCC) and showed more repetitive behaviours and abnormalities in sensory processing compared to norms. However, the regression analysis indicated that neither degree of sensory processing differences nor repetitive behaviour predicted performance on the two measures of WCC.

Discussion: The results indicate that sensory processing and repetitive behaviour do not predict cognitive style in individuals with ASD. This study was limited in that it only focused on WCC in the visual domain. Future research could investigate the relationship between behavioural phenotype and cognitive phenotype in children with ASD on both visual and language processing WCC tasks. The distribution of scores on the EFT and PDT indicated that not all children with autism showed local processing in visuo-spatial tasks. This suggests that weak central coherence is not a universal cognitive style for all individuals with autism. Further work should be undertaken to identify which children are more likely to exhibit detail-focused processing.

Asymmetric dominance and confidence in strategic interaction

A.M. COLMAN, B.D. PULFORD & F. BOLGER, University of Leicester.

In individual decision making, when a decision maker chooses between alternatives A and B, the availability of a third alternative X, with A but not B strictly preferred to X, tends to increase the decision maker's preference for A. This asymmetric dominance effect is robust, occurring under experimental conditions and in real in-store purchases, and it persists even if the dominated alternative X is presented as an unavailable 'phantom' option, like an item on a menu or catalogue that cannot be purchased because it is out of stock. The implications of this phenomenon for games have not previously been investigated empirically or apparently even discussed. We conducted an experiment in which players ($N=72$), randomly assigned to three treatment conditions in pairs, made one-off choices in 12 symmetric games, with significant financial incentives assigned to the payoffs. In a control condition, players simply made choices in 12 2×2 games. In a second treatment condition, the same games were embedded in symmetric 3×3 games in which each player's strategy set was expanded to include an additional strategy that was strongly dominated by just one of the other two strategies. The third treatment condition was similar to the second, except that the additional strategies were 'phantom' strategies, visible but unavailable for choice by either player; hence, from a decision-theoretic point of view, the games in this condition were identical to those in the 2×2 versions, differing from them only in strategically irrelevant framing context.

As expected, asymmetrically dominated strategies were chosen only rarely, with a relative frequency of just over one per cent. We hypothesised that the inclusion of asymmetrically dominated strategies would tend to boost players' confidence in choosing the strategies that dominated them, even when the dominated strategies were visible but unavailable for choice by either player. In six games in which the asymmetrically dominant strategy in the expanded 3×3 version was already the strategy preferred by a majority of players in the 2×2 control condition, a ceiling effect prevented the asymmetric dominance effect from attaining significance, but in the remaining six games the results confirmed the hypothesis strongly. In these games, the relative frequency with which asymmetrically dominant strategies were chosen increased significantly, from a mean of $M=25$ per cent in the control condition to $M=54$ per cent and $M=44$ per cent in the conditions with asymmetrically dominated strategies available and unavailable for choice respectively, $F(2, 71)=11.826$, $p<0.0001$. Multiple comparisons using the Tukey-HSD procedure showed that these last two means do not differ significantly from each other ($p>0.05$) but that both differ significantly from the mean of the control condition. In the same six games, players' self-rated confidence in their decisions, on a scale from 0 ('not at all confident') to 10 ('totally

confident'), was significantly higher in the 3×3 treatment conditions with asymmetrically dominated strategies available for choice ($M=7.00$) and visible but unavailable for choice ($M=7.33$) than in the 2×2 control condition ($M=6.06$), $F(2,48)=5.55$, $p<0.007$. Once again, the first two means do not differ significantly, but confidence was significantly higher in the presence of an asymmetrically dominated strategy, whether or not the dominated strategy was available for choice.

Exploring the social support provided by members of a Huntington's disease computer-mediated support group

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Objectives: The primary objective of this study was to examine the nature and type of social support provided by members of a computer-mediated support group for individuals affected by Huntington's disease (HD).

Design: In order to quantify the type of social support provided a content analysis was performed on all posted messages.

Methods: A publicly accessible computer-mediated Huntington's disease bulletin board was identified for the purposes of the study. The board was not moderated and existed to discuss and comment on HD. The participants in this study were all members who posted messages during the study period (1997-2000). In total, 793 unique sender names were identified with 1313 posted messages representing the data for this study. The first stage of the analysis comprised a preliminary screening of all posted messages for evidence of social support. At this stage, social support was broadly defined as those offering caring, belonging, esteem or assistance to the recipient (Cushman & King, 1986). One coder applied this definition to all messages and it was revealed that social support was evident in 98.9 per cent of messages. Next, an adapted version of the Social Support Behaviour Code (Cutrona & Suhr, 1992) was used to undertake a content analysis of the posted messages. In total, five supracategories and 22 subcategories of social support were coded.

Results: The analysis revealed that group members most frequently offered informational (56.2 per cent) and emotional support (51.5 per cent) followed by network support (45.6) with esteem support (23.9 per cent) and tangible assistance (21.9 per cent) least frequently offered.

Conclusions: The computer-mediated group evidently provided a much needed source of information and emotional support to members. Implications for future research, methodological limitations as well as practical implications will be discussed.

Clarifying the clinical concept of 'complex case'

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Objectives: 'Complex case' is a frequently used term in clinical psychology, yet little empirical research has examined what it entails. This study sought to establish: (1) whether the main themes underpinning psychologists' meanings of 'complex cases' could be identified; and (2) whether there were significant 'objective' differences between 'complex' and 'non-complex cases'.

Design: The study involved an interview and between-subjects questionnaire design. It was felt that, with little previous research, it was appropriate to use a combination of qualitative and quantitative methods to triangulate upon the object of study.

Methods: All 15 qualified clinical and counselling psychologists within the local service took part in semi-structured interviews to elicit their views about 'complex cases'. A total of 18 psychologists, from both the local and a neighbouring service, completed questionnaires (Pearce Case Complexity Scale and Difficult Patient Scale) on patients that they had identified as either 'complex' ($N=33$) or 'non-complex' ($N=23$). These patients completed a range of self-report questionnaires (General Health Questionnaire - 28, Social Adjustment Scale - Self-Report, Automatic Thoughts Questionnaire - 30, Dysfunctional Attitudes Scale - 24, and Young's Schema Questionnaire: Short Form).

Results: Using grounded theory, three main themes were identified from the interviews with psychologists which differentiated between 'complex' and 'non-complex cases': (1) patient-based factors (the patient's characteristics, therapeutic aptitude, and presenting problems, and the nature of progress and outcome); (2) clinician- and service-based factors (the type of work, clinician issues, service issues, and the construct of a case); and (3) therapeutic relationship-based factors. The questionnaire findings indicated that 'complex' and 'non-complex cases' did not differ significantly in symptomatology or level of belief in dysfunctional assumptions. The 'complex cases' did, however, manifest poorer social adjustment, a higher frequency of negative automatic thoughts, and a greater belief in early maladaptive schemas. Their psychologists also assigned them greater complexity and difficulty.

Conclusions: As measured both qualitatively and quantitatively, 'complex cases' appeared to be a distinct, identifiable client group, arising from an interaction between client, clinician, and joint characteristics. The results of this study have implications for clinical practice, in terms of possible screening and appropriate interventions for 'complex cases'. Further research is required to establish the nature of the interactions between the characteristics identified.

Spirituality/religion and counselling psychology: Course directors' views

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The aim of this ongoing study is to explore the views of counselling psychology course directors around the possibility of integrating spirituality and religion into the training and practice of counselling psychologists. Despite an increased openness to addressing spiritual and religious issues in counselling psychology training, there seems to be a lack of theory and guidelines around if and how integration should take place (Kelly, 1994). Some studies carried out in American institutions have addressed the ethical, professional and political implications of including those issues in the course syllabi and others have engaged in surveying different counselling and psychotherapy training directors about the extent to which those issues are included in counselling and psychotherapy training (Brawer *et al.*, 2002, Cashwell & Young, 2004; Kelly, 1994; Young *et al.*, 2002). However, those studies are of a quantitative nature and fail to consider the underlying reasons for the inclusion or exclusion of spiritual and religious issues in counselling psychology training programmes. In response to a need for British counsellors and psychotherapists to be provided with training towards handling their own and their clients' spiritual and religious concerns, this study engages in an exploratory investigation around the extent to which counselling psychology course directors feel that the integration of such topics is relevant to counselling psychology training and practice. All the counselling psychology course directors of the nine BPS accredited programmes in the UK will be interviewed using a semi-structured interview method and data will be analysed through the use of grounded theory analysis (Glaser & Strauss, 1967).

Between the borders: Service responses to people with intellectual disability and mental health problems

C. DOBSON, Lancashire NHS Trust.

Government documents, *Better Services for the Mentally Handicapped* (DHSS, 1971) and *Better Services for the Mentally Ill* (DHSS, 1975) outlined radical changes in the organisation of services for people LEARNING disabilities and mental health problems in the UK. They marked a distinct transition from hospital-based to non-institutional, community-based modes of care. Despite apparently similar titles and intentions, lead agencies responsible for implementing changes differed; the National Health Service taking responsibility for implementation of policy for the 'mentally ill' and Local Authorities, (following the closure of hospitals) for the 'mentally handicapped'. Inherent in this division of labour are premises underlying the understanding of and theorising about the nature of 'mental illness' and 'mental handicap'.

Published within two years of each other, current policy directives for intellectual disability and mental health, *Valuing people: Strategy for the 21st century* (DoH, 2001) and *Mental Health National Service Framework* (DoH, 1999) maintain the same division of responsibility, yet both have at their core, attention to the needs of the individual, the family and carer.

The paper charts the separations and the comings together of policy, practice and organisation of learning disability and mental health services in the UK and presents a study of how services in a city in the north west of England have responded to people with the dual presentation of learning disability and mental health problems. Analysed from the perspective of Midgley's theory of boundary critique (Midgley, 2000), the study confirms the primacy of the boundary of 'mental health' over 'learning disability' but also demonstrates that between the boundaries, tensions and exclusions can be replaced by dialogue and shared practice.

Louisa: 1854–1936: A relationship through time

B.A. DOUGLAS, University of Exeter.

When reflecting on contextual, organisational and discursive influences in the practice of counselling psychology, how often do we consider the nature and influence of its historical contexts? This paper aims to examine one of these historical frames of reference, the institutional asylum response to mental distress of the 19th and early 20th centuries, through the rich narrative of one individual.

Louisa, third daughter and fourth child of a clergyman and his wife was born in rural Devon at the outset of the Crimean War (1854–1856), two years before the birth of Sigmund Freud (1856). After a childhood, described by Louisa as '10 happy years' there followed a series of family tragedies, with Louisa subsequently spending 45 years committed to an asylum. Certified as 'a person of unsound mind' and given a diagnosis of acute and subsequently chronic mania she remained in asylum care until her death in 1936 at the age of 81. Louisa wrote prolifically and we are fortunate in having a record of some of her writings, correspondence and poems. In addition to letters from family members, certification papers and case notes this offers a rich portrayal of one individual's life, her experience of mental illness and its treatment in an English Borough Lunatic Asylum/Mental Hospital during the years between the 1890 Lunacy Act and the 1930 Mental Treatment Act.

By taking us out of our own cultural context, into one of Victorian institutional response to social problems, the history of psychiatry can bring about a stark awareness of the power of medical discourse and its interweaving relationships. By examining our responses to such discourses of the past we are enabled to reflect on how our therapeutic relationships may evolve through, and be influenced by, the discourses of our own working contexts as counselling psychologists.

Mothers' coping with the discovery of a son's homosexuality – A new model

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Objectives: This study explores mothers' responses to their son's disclosing that they are gay. Ways of coping are described from the literature and clearly noted is the paucity of UK and Irish research in the area.

Design: A qualitative analysis using grounded theory is conducted of interviews with a sample of 11 mothers aged between 39 and 66 years.

Methods: Participants were recruited via local agencies who provided callers with information about the study and an introductory letter and consent form on return of which the researcher arranged to meet with them.

Results: Mothers' responses are reported under the headings, Mothers' reactions to disclosure and how the relationship evolved, Impact on mothers, Coming to terms/searching, A time of loss and Journey's end? It is in this section that the emerging STAR model is outlined. Authors debate its position as an extension to Kubler-Ross's Grief Model or a coping strategy in its own right. The

process of mothers' experiences is a cyclical phenomenon of Searching, Tolerance, Acceptance and Readjustment. It is not linear and sequential and presents another way of managing the grief of their sons' lifestyles. The work is novel in that it focusses on the experiences of 'typical' mothers, typical meaning mothers who do not have available support networks.

Conclusions: Conclusions drawn from the study are a mixture of the real and present situation for mothers of gay sons, the necessity for research that taps into the lives of gay people and their families and the importance of support in the realisation of a person's life choices.

Second to fourth digit ratio, testosterone and face shape

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Objectives: The testosterone-to-estrogen (T/E) ratio is often taken to affect a number of facial characteristics, and several studies have explained preferences for 'masculine' or 'feminine' facial features. Yet little is known about the association of these sex steroids with facial form in either males or females. The relative length of the index [2D] to ring [4D] finger (2D:4D), is accepted as a proxy for early (fetal) T/E, and recent studies using the ratio support claims of early androgen effects on facial features.

Design: This paper reports the results of two studies on the role of prenatal T and E levels (as studied via 2D:4D) and sex in the determination of facial form.

Methods: In Study 1, facial photographs of 130 Austrian males and females were characterised by 51 two-dimensional landmarks and face shape regressions upon 2D:4D ratios were calculated. In Study 2, facial shape of 30 British adult men was correlated to 2D:4D, salivary T, and to facial assessments by raters.

Results: Study 1 founds that prenatal T/E ratios (in terms of 2D:4D) and actual chromosomal sex dimorphism affects faces differently, and that chromosome gender explains more of shape variation than 2D:4D does. Study 2 founds that facial shape regressions upon perceived masculinity did not resemble those upon salivary T but rather those on 2D:4D, which is to say, on early T/E effects.

Conclusions: We suggest that future studies on the perception of facial characteristics should consider the differential effects of prenatal and pubertal hormone exposure in order not to confound either with actual chromosomal gender.

Reasoning deficits in ecstasy (MDMA) users

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Objectives: Previous research has shown that ecstasy users are impaired in thinking and reasoning. The present study sought to explore the possibility that syllogistic reasoning errors in ecstasy users were due to an inability to construct a model of the premises due to working memory limitations.

Design/Methods: 29 ecstasy users and 25 non-ecstasy user controls generated conclusions for abstract syllogistic reasoning problems varying in difficulty.

Results: On the easier problems both groups performed at well above chance although non-users achieved significantly more correct responses. Consistent with existing research, on the more difficult problems, errors by non-users were characterised by incorrect conclusions suggesting that while non-users have the working memory capacity to construct a single model of the premises, this is not an exhaustive representation and usually results in an erroneous conclusion. On the other hand for all problem types ecstasy users, rather than produce incorrect responses, were more likely to fail to generate a conclusion.

Conclusions: The present results are consistent

with the possibility that ecstasy users with their reduced working memory capacity may experience difficulty in constructing even a single model of the premises.

Effects of maths anxiety on performance and serial recall

S. FORD, P.A. STAPLES, D. SHEFFIELD & L. VANONO, Staffordshire University.

Objectives: This study investigated the role of maths anxiety on simple and complex arithmetic and also its effect on concurrent serial recall of letter strings.

Design: All participants completed three tasks: maths only, letter only, and a dual task combining both. Task difficulty (problem size and carry operation) was varied within the maths and dual tasks; letter load (two vs. six letters) varied in the letter only and dual tasks.

Methods: 52 undergraduates completed the short version of the Mathematics Anxiety Rating Scale (Alexander & Martray, 1989) and were split into low, medium and high anxiety tertiles. Participants carried out a series of 180 problems displayed on a computer screen using Superlab software. Measures of accuracy, error magnitude, response time, and serial letter recall were taken.

Results: Maths anxiety was found to effect accuracy, error magnitude and serial letter recall, but not response time. High anxiety participants made the most errors with complex problems and made the largest errors. High anxiety participants had poorest performance on serial letter recall but only in the dual task condition.

Conclusions: Maths anxiety may affect performance on arithmetical problems because intrusive thoughts compete for limited working memory resources and may disrupt the serial nature of arithmetic problem solving.

BoE in Counselling Psychology: Individual consultations with the registrar

A. FRANKLAND, Registrar for Qualification in Counselling Psychology.

This contribution to Conference was very popular at the 2003 event. The Registrar will be available for individual consultations (bookable on arrival) during two working periods of the conference, where you can talk over your current position or difficulties with the system and get direct and private information and advice on issues that concern you about the Qualification and working towards Registration as a Chartered Counselling Psychologist.

BoE in Counselling Psychology: DCoP registrar's workshop

A. FRANKLAND, Registrar for Qualification in Counselling Psychology.

This workshop is mainly for trainees considering the 'Independent Route' to the Qualification in Counselling Psychology or already embarked on it. It will consider the changes brought about by the shift to a more competence-led programme and give trainees and potential trainees the opportunity to network and to question the Registrar about the programme.

The differential effects of communication channels in online dating relationships

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Objectives: Many of the benefits of online relationships are attributed to the effects of visual anonymity and lack of identifiability, both of which may be differentially affected by the type of communication channels used by online partners. This paper therefore addresses two related questions: What forms of on- and offline communication do members of online dating sites use, and how do these communication choices affect relationship strength, as measured by depth, interdependence, understanding and commitment?

Design: Given the focus on online dating site users, an online questionnaire survey was utilised. **Method:** 229 members of two UK-based online dating sites completed the survey. The survey was

divided into three parts. The first requested demographic information, while the second and third required participants to think of an important online relationship and answer questions about the forms of communication used and to complete a modified version of Parks and Floyd's (1996) levels of online relationship development scale.

Results: The communication channels most often used were e-mail, telephone and mobile telephone text-messaging, all of which are text-based communication. There was negligible use of visual channels, such as webcam or file sharing. Regression analyses revealed that, of the online communication channels, the use of chat was the best predictor of relationship strength, while, in terms of offline communication, the exchange of gifts was most important. Despite e-mail being the most frequently used communication channel, it was not significantly related to any of the measures of relationship strength.

Conclusions: That no single form of communication was a significant contributor to all dimensions of relationship strength suggests that the various forms of on- and offline communication perform different functions in relationship development and are employed strategically by the user, depending on how he or she perceives the current and future relationship. For example, the role of e-mail in online relationships relates to a general sense of interpersonal attraction and maintenance of mental contact, while the use of more corporeal forms of communication such as the exchange of gifts is related to the desire to transfer an online relationship offline. When dating site members interact online, they prefer to restrict their communication to a narrow bandwidth of text-only, perhaps because its greater control and anonymity allows safer exploration of the potential partner. Rather than viewing channels of online communication collectively, they should be considered as discrete and their selective use in developing relationships be further examined.

Maintaining the status quo: The indirect influence of family and school interactions on career choice among young people

R.L. GERVAIS, University of Manchester.

Objectives: This study aims: (1) to assess if family and school interactions contribute to specific perceptions about the abilities of each gender among young people; and (2) to determine the association between gender and choice of career among students engaged in primary and secondary education.

Design: Self-report questionnaires were used to collect information to determine the extent that interactions within the home influenced sex role stereotyping, and thus indirectly potential career choice. In addition the main text-books of the primary school children were subjected to a content analysis of the pictorial representation of activities by gender.

Methods: The questionnaire for the secondary school students ($N=60$, mean age=17.03, $SD=0.58$, girls=50 per cent) comprised the Bem Sex Role Inventory (BSRI), a recall word inventory and they were asked to list the subjects that they selected for examinations at ages 16+ and 18+, their preferred choice of career, the jobs at which boys and girls were good, and the household chores that they and their parents completed. The questionnaire for the primary school students ($N=120$, mean age=8.70, $SD=1.56$, girls=50 per cent) consisted of the Sex Stereotype Measure II (SSM II), a gender-specific activities inventory, their preferred choice of career, the jobs at which boys and girls were good, the games at which boys and girls were good, and the household chores that they and their parents completed.

Results: Chi-square analyses showed significant differences between girls and boys in the chores that were done around the home by themselves, and by their parents (e.g. 100 per cent of the mothers were involved in some aspect of housework with only 20 per cent of the fathers similarly involved). Significant differences were realised also in terms of career choice at both the primary - $\chi^2(11)=43.21$, $p<0.001$, and secondary school levels - $\chi^2(9)=18.26$, $p<0.05$. There were also distinct differences by gender in stating the subjects chosen at ages 16+ and at 18+, and in

responding to the BSRI and the masculine attributes of the SSM II. There were no distinct differences between the sexes in listing the jobs at which boys and girls were good, with both sexes providing a job ratio in favour of boys (primary - 1.32:1; secondary - 5.4:1), nor on the feminine part of the SSM II scale. The content analysis of the books revealed that men (70 per cent) were represented more than women (30 per cent). **Conclusions:** The results suggest that gender remains a major influencing factor in career choice among students. Although equal opportunities exist for both sexes, the socialisation process that occurs through family interactions and also through the education system seems to be a major determinant in the selection of career paths among young people.

Self-medication among recreational substance users: A taxometric analysis of a European student sample

C.E. GINESTET, J. TOWNSHEND & N. WELLMAN, Thames Valley University.

Objectives: Epidemiological studies indicate high comorbidity between psychopathologies and substance-related disorders. This may reflect an attempt to self-medicate psychological symptoms with psychoactive substances. Two psychopharmacological specificity hypotheses were tested: the self-medication of anxiety (SMA) through the use of anxiolytic substances (i.e. alcohol, cannabis), on one hand, and the self-medication of depression (SMD) through the use of anxiogenic substances (i.e. caffeine, nicotine), on the other hand.

Design: A cross-cultural comparative study was conducted to unveil latent taxonomies of self-medication patterns among recreational substance users.

Methods: A sample of 1074 psychology students spanning nine European countries, were administered the Brief Symptom Inventory (BSI) to measure psychological symptomatology and the Total Drug Index (TDI) to gauge participants' lifetime consumption of the 10 most commonly abused psychoactive substances. All instruments were translated following the World Health Organisation double-translation protocol.

Results: Scalar equivalence was assessed using confirmatory factor analysis and did not reveal any major differences between countries. Three indicators were selected for each MAXCOV-HITMAX analyses. The SMA taxon was measured with lifelong estimates of alcohol and cannabis consumption and scores on the BSI anxiety scale, whereas the SMD taxon was measured with lifelong estimates of nicotine and caffeine consumption and scores on the BSI depression scale. A SMA taxon was identified with a base rate $p=0.15$. SMD, however, was found to be dimensional. Consistency tests were also conducted and supported the initial results.

Conclusions: This taxonomic structure reinforces other epidemiological findings showing a stronger relationship between anxiety and the consumption of sedatives than between depressive tendencies and the use of stimulants. Further research should concentrate on testing for a SMD taxon with population displaying higher levels of Schedule I (United Nations) stimulant consumption (e.g. cocaine, amphetamine) in order to increase the SMD base rate in the scrutinised sample.

The neuropsychological effects of radiotherapy in head and neck cancer patients

B.D. GOODALL, D.J. FRIZELLE & N. STAFFORD, University of Hull.

Objectives: To investigate the neuropsychological effects of radiotherapy on head and neck cancer patients and how the process of radiotherapy affects psychological distress. Head and neck cancers contribute three per cent to the cancer burden and while the numbers passing through clinics are small the disease and its treatment affects quintessential aspects of human life, such as breathing, eating, speaking and appearance. **Design:** Prospective clinical neuropsychological study utilising small numbers multiple baseline design.

Methods: A consecutive series of newly diagnosed laryngeal cancer patients attending a local

oncology clinic will be recruited over a ten month period. Regionally, 12 to 18 people are diagnosed with laryngeal cancer per year and it is aimed to recruit 12 of these in order to comprise a clinical replication series. Measures will be taken following diagnosis and prior to radiotherapy (baseline), post-radiotherapy and at six-weeks follow up. Outcome measures to include – HADS, General Health Questionnaire and neuropsychological tests of memory and attention (WAIS-III, Benton Visual Retention Test and Wisconsin Card Sorting Test). Process measures following each radiotherapy session will include – five-point Likert scales for subjective assessment of mood, anxiety and distress caused by radiotherapy side effects.

Results: Repeated measures data analysis will be used and data will also be explored on an individual case by case basis.

Conclusions: The study aims to highlight any gross cognitive change as a result of radiotherapy, but moreover any changes will be placed within the context of distress as patients undergo the process of radiotherapy. Results may have implications for psychosocial oncology support services.

Social support networks, loneliness and cognitive ageing

A.J. GOW, A. PATTIE, M.C. WHITEMAN & I.J. DEARY, University of Edinburgh.

Objectives: Social support and social network characteristics are thought to contribute to successful cognitive ageing. However, previous studies were rarely able to control for prior cognitive ability, which is necessary in order to determine separately the impact of lifestyle factors and prior mental ability on later-life cognitive change. The current study aimed to look at the effect of social networks and social support on cognitive function in late adulthood, after controlling for childhood cognitive ability.

Design: Longitudinal cohort study. The Scottish Mental Survey 1932 tested almost all 1921-born Scottish schoolchildren when they were aged 11. Surviving members of this national assessment were identified and recruited into the Lothian Birth Cohort 1921 Study (LBC1921) between 1999 and 2001, aged about 80. As part of this longitudinal follow-up, they were asked to complete the same test of mental ability they took when aged 11. This allowed the measurement of cognitive change from age 11 to 80. The current study is based on a 2001 questionnaire survey of the cohort members.

Methods: In 2001, almost 500 members of the LBC1921 (from the original cohort of 550) completed self-report measures about a range of current social support and social network characteristics. These included details of the level and adequacy of the social support they received, their age 11 and current (age 80) household composition, and items about feelings of loneliness.

Results: After controlling for childhood (age 11) mental ability and sex, feeling lonely was the only social network or social support characteristic which added significantly to the prediction of age-80 mental ability, explaining about two per cent of the variance in age-80 IQ scores. Increased loneliness was associated with lower cognitive function at age 80.

Conclusions: The level and adequacy of social support received did not have an impact on later life cognition once childhood ability was controlled for. However, feeling lonely (as opposed to living alone) was associated with poorer cognitive function at age 80, even taking into account prior mental ability, although it is not possible to infer causality from the current data.

Personality traits and health: How many items do you need?

G.E. HAGGER-JOHNSON & M.C. WHITEMAN, University of Edinburgh.

Objectives: It has been suggested that the strongest relationships between personality traits and health measures are found when the predictor and criteria are 'matched' at the same level of specificity. For example, short measures of health status would be optimally associated with short personality questionnaires. The present study re-examined and addressed this 'bandwidth-fidelity' hypothesis.

Design: The 'Health and Personality Processes: Links Explored' (HAPPLE) study is a longitudinal study of

personality traits and health in UK Internet users. A sub-sample ($N=61$) of questionnaire responses from the first wave of the study were selected for analysis.

Methods: Multiple regression analyses compared the ability of 'short' and 'long' versions of the International Personality Item Pool representation of the NEO-PI-R (IPIP NEO) to account for variance in 'broad' and 'narrow' measures of health behaviours and the SF-36 Health Outcome Survey scales.

Results: The long (broad bandwidth) version of the IPIP-NEO outperformed the short version, regardless of the specificity of measurement. The mean additional criterion variance accounted for by the long version was 10.73 per cent (range four per cent to 22 per cent) across 11 health measures.

Conclusions: The use of short personality questionnaires resulted in a loss of information, reducing the amount of criterion variance accounted for in the health measures. The potential implications of using short versions of personality questionnaires in health research are discussed, the predictive value of personality facets highlighted, and future analyses for the HAPPLE study outlined.

Memory for rhythm, short-term memory and phonological awareness in young children

D. HALL & S.E. GATHERCOLE, University of Durham.

Objectives: The objective of this study was to investigate links between memory for non-speech rhythms, short-term memory, and phonological awareness. On the basis of previous research it was hypothesised that performance on rhythm tasks would be more closely related to performance on serial verbal short-term memory tasks than serial visuo-spatial tasks, and that both rhythm and verbal short-term memory would be related to performance on phonological awareness tasks.

Design: An individual differences approach was adopted. Two age groups of children were tested in order to examine age related phonological awareness abilities.

Methods: Children aged between four and six were tested on rhythm measures, verbal short-term memory measures, non-verbal short-term memory measures, verbal and non-verbal complex span tasks, and phonological awareness measures. Participants were ($N=62$) five- to six-year-old children in Study 1 and ($N=62$) four- to five-year-old in Study 2.

Results: In Study 1, memory for rhythm, verbal short-term memory, and syllable awareness were closely associated with one another, although rhythm and visuo-spatial short-term memory tasks were not significantly correlated. Study 2 replicated the findings of Study 1, with the exception that performance on the rhythm tasks was associated with rhyme rather than syllable awareness. Factor analysis of the data indicates that memory for rhythms is a distinct factor that is significantly related to other verbal skills.

Conclusions: These findings indicate that memory for non-speech rhythms is closely related to verbal short-term memory and phonological awareness. The absence of a link between memory for rhythms and serial visuo-spatial short-term memory indicates that memory for rhythm is less dependent on general temporal encoding mechanisms than on specific verbal processes. These findings are discussed in relation to the role of verbal short-term memory and rhythm perception in early language acquisition, and development of phonological representations.

In my opinion: Using the therapeutic relationship as an expert witness in child-care proceedings

D.E. HAMMERSLEY, Independent Practitioner.

Objectives: This paper describes how a therapeutic approach which combines psychological assessment and therapeutic intervention has been developed in collaboration with a residential family assessment centre. It explores whether this combined approach is acceptable to clients and how useful and acceptable it may be to the courts and all the parties concerned. It also explores whether counselling psychology has a distinctive contribution to make to assessment and interventions with families who are in difficulties.

Design: The study uses a phenomenological approach, which draws upon the philosophical and value-base of counselling psychology, to describe working with families and children who are involved in child-care proceedings. The themes and issues which emerge are discussed in relation to the use of the therapeutic relationship and how this approach may facilitate the court's decision making process.

Methods: Three cases of families referred by the courts to a residential family assessment centre, had psychological assessment and input alongside the usual personal, social and skills training provided by a social work based team. The therapeutic work is structured to take place over 12 weekly sessions and may also include observation sessions with children and their parents. The outcome is a psychological report to the court which relies upon a theoretically informed synthesis of field-work notes, interview material and evidence which is derived from the therapeutic process.

Results: This study shows: (1) that it is possible to work with, rather than just identify the underlying psychological issues; (2) that clients feel more heard and less judged; (3) that defences can be worked with rather than confronted; (4) that assumptions which may have developed into 'facts' can be challenged and explored; and (5) that the court receives a richer, more interpretive account of the clients and their context on which to base decisions.

Conclusions: Using the therapeutic relationship in expert witness work is more sympathetic to the needs of clients, and recognises important issues of social justice which need to be taken into account in assessing families with child-care problems. It is facilitative of family reconciliation and reconstruction and may be a new area of practice to which counselling psychologists can make a different but complimentary contribution.

Cognitive and mood effects of caffeine and theanine alone and in combination

C.F. HASKELL, D.O. KENNEDY, A.L. MILNE, A.B. SCHOLEY, Northumbria University & K.A. WESNES, Northumbria University & Cognitive Drug Research Ltd.

Objectives: Theanine and caffeine are naturally present in tea beverages. There is a wealth of research into the psychopharmacology and neurocognitive effects of caffeine. Less is known about theanine although recent research lends some support to its traditional role as a relaxant. Despite the common co-consumption of theanine and caffeine, there is no research to date explicitly aimed at examining the interaction of the two substances. They may be mutually antagonistic or one may potentiate the other by increasing either sedation or stimulation.

Design: The present randomised, placebo-controlled, double-blind, balanced crossover study investigated the acute cognitive and mood effects of theanine and caffeine both separately and together using a comprehensive assessment battery.

Methods: 22 healthy young participants received a 250ml drink containing either 250mg theanine, 150mg of caffeine, a combination containing 150mg caffeine plus 250mg theanine, or a matching placebo, not less than seven days apart. Cognitive and mood assessments were undertaken at baseline and 30 minutes and 90 minutes post-drink and included the Cognitive Drug Research computerised test battery, two serial subtraction tasks, a sentence verification task and subjective visual analogue mood scales. Saliva samples were also taken at each time point.

Results: There were significant improvements following caffeine alone in simple reaction time; digit vigilance reaction time; RVIP accuracy; numeric working memory reaction time; and accuracy of spatial memory. Caffeine also decreased ratings of tiredness and headache. Theanine alone led to improvements in sentence verification reaction time but impaired reaction time of numeric memory and delayed word recognition. It also led to a decrease in alertness. However, when combined theanine potentiated the caffeine effect on a number of cognitive tasks and on two measures of alertness, the combination also led to highly significant improvements in delayed word recognition reaction time.

Conclusions: Theanine significantly potentiated the effects of caffeine on alertness and aspects of cognition, whereas there were few positive effects of theanine alone. Such effects, which are likely to be mediated by a number of neurotransmitter systems affected by theanine, suggest a synergy between theanine and caffeine.

Cognitive and mood effects of guarana (*Paullinia cupana*) and Panax ginseng alone and in combination

C.F. HASKELL, D.O. KENNEDY, A.B. SCHOLEY, Northumbria University & K.A. WESNES, Northumbria University & Cognitive Drug Research Ltd.

Objectives: Extracts from the plant guarana (*Paullinia cupana*) are consumed for their putative stimulant properties and feature as ingredients in a number of 'energy drinks' and confections. The extracts' stimulant properties are often attributed to caffeine content, although extracts also contain potentially psychoactive levels of tannins and saponins. No study to date has assessed the effects of guarana in humans. Extracts of Panax ginseng also contain high levels of saponins, and have previously been shown to modulate cognitive performance.

Design: The present randomised, placebo-controlled, double-blind, balanced crossover study investigated the acute cognitive and mood effects of guarana and ginseng both separately and together using a comprehensive assessment battery.

Methods: Guarana (75mg Pharnaton extract), Panax ginseng (200mg G115), and their combination were assessed in 28 healthy young (18 to 24) participants. On each day of the study (separated by a seven-day wash-out) cognitive performance and mood were assessed pre-dose and at 1, 2.5, 4 and 6 hours post-dose using the Cognitive Drug Research computerised test battery, two serial subtraction tasks, a sentence verification task and subjective visual analogue mood scales.

Results: In comparison to placebo, all three treatments resulted in improved task performance throughout the day. Analysis of Variance showed significant improvements in speed of attention, speed of memory and accuracy of secondary memory. Sentence verification reaction time was also significantly improved as was number of errors on the serial threes subtraction task and the serial sevens subtraction task.

Conclusions: These results provide the first demonstration in humans of potential psychoactive effects following the ingestion of guarana. Given the low caffeine content (9mg) of the extract, and time course of effects, the effects are unlikely to be attributable to caffeine content.

Self-rated prospective memory and central executive deficits in excessive alcohol users

T.M. HEFFERNAN, J. BARTHOLOMEW, Northumbria University & J. LING, University of Teesside.

Objective: Excessive alcohol use has shown to impair cognitive performance, including memory, in adults. Most of this research has focused upon laboratory-based tasks, with little on everyday memory processes. This study assessed self-reported prospective memory and related central executive processes in a group of excessive alcohol users and non-users. The aim was to assess whether excessive alcohol use is associated with impairments in these two sets of memory processes.

Design: An existing groups design was used. Eighty participants from the north-east of England were tested. Of these, 40 were excessive alcohol users (using above the recommended weekly 'safe' dose of alcohol) and 40 were low-dose/non-users. The cut off limit was 14/21 units per week for females/males.

Methods: Each participant was assessed using self-reports of prospective memory (PM) – measured using the Prospective Memory Questionnaire (PMQ) and central executive (CE) processes – measured using the Dysexecutive Questionnaire (DEX). Other drug use, age and strategy use were incorporated into the study as controls.

Results: After controlling for other drug use, age, and strategy use, excessive alcohol users reported

global impairments in everyday prospective memory and in their central executive processes, when compared to a low-dose/no-alcohol control group.

Conclusions: These findings suggest that excessive alcohol use has a detrimental impact upon everyday memory, which is a relatively unexplored area of research. PM and CE deficits should be added to the growing list of neuropsychological sequelae associated with chronic excessive alcohol use. Further research is needed to elucidate the relationship between alcohol and PM and CE deficits.

Don't send your teenagers shopping! The effects of excessive alcohol use on everyday remembering in 16- to 19-year-olds

T.M. HEFFERNAN, J. BARTHOLOMEW, Northumbria University & J. LING, University of Teesside.

Objective: Excessive alcohol use in teenagers is associated with poorer cognitive performance, for example, lower scores on memory tasks, as well as poor school performance. Little research to date has focused upon what impact excessive drinking might have upon everyday remembering in teenagers. This study addressed this issue by looking at the relationship between excessive alcohol use and self-reported prospective memory abilities in 16- to 19-year-olds.

Design: An existing groups design was used. Three hundred-and-thirty-three participants from the north-east of England were tested. Of these, 92 were excessive alcohol users (using above the recommended weekly 'safe' dose of alcohol), 222 were low-dose users and 19 were non-users. The cut-off limit was 14/21 units per week for females/males.

Methods: Each participant was assessed using a self-report measure of prospective memory (PM) – measured using the Prospective Memory Questionnaire (PMQ), which measures short-term, long-term and internally-cued PM. Other drug use, age and strategy use were controlled for in the study.

Results: There were dose-dependent increases in self-reported PM errors on all three sub-scales of the PMQ. However, only the long-term and internally-cued PM deficits were significant.

Conclusions: These findings suggest that excessive alcohol use in teenagers has a detrimental impact upon selective aspects of everyday memory, specifically on the long-term and internally-cued components of PM. These deficits cannot be explained by other drug use, differences in age, nor strategy use. Everyday PM deficits should be added to the growing list of cognitive problems associated with excessive alcohol use in teenagers.

Prospective memory deficits in ecstasy-users: A comparison of self-report and objective measures

T.M. HEFFERNAN, J. JARDINE, Northumbria University & G. BETNEY, Open University.

Objective: Chronic use of ecstasy/MDMA is associated with significant cognitive impairments, particularly in laboratory and field studies of memory for previously encoded material. Less is known about the effects of ecstasy on everyday aspects of memory – of which prospective memory (PM – remembering future activities) is one aspect. The aim of this study was to assess PM deficits in ecstasy users and non-users, using a self-report and an objective measure of PM.

Design: An existing groups design was used. Twenty-three ecstasy users and 30 non-users were recruited using the 'snowball' method from the north-east of England.

Methods: Each participant was assessed using the Prospective Memory Questionnaire (PMQ) – a self-report measure of long-term, short-term and internally-cued PM, and a video-based PM measure during which each participant had to remember particular activities at particular locations on a 10-minute video clip of a shopping area. Other drug use, age, mood (using the POMS questionnaire) and strategy use were also measured. There were no significant differences between the two groups in terms of age, the number of strategies used to aid memory, nor in their mood.

Results: After statistically controlling for other drug-use, a MANCOVA revealed significantly more forgetting reported in the ecstasy users on the long-term subscale of the PMQ, with no between-group differences on the short-term or internally-cued PMQ subscales. The ecstasy users also recalled significantly less items on the video-based PM task when compared to non-users.

Conclusions: These findings suggest chronic ecstasy users experience selective deficits in their everyday prospective memory, reflected both in the self-report PMQ and the objective video-based PM tasks. These deficits cannot be accounted for by differences in age, strategy use, mood, and were observed after controlling for other drug use. PM deficits should be added to the growing list of cognitive problems associated with ecstasy use.

Common visual defects and peer victimisation in children

J. HORWOOD, A. WAYLEN, D. HERRICK, C. WILLIAMS, University of Bristol & D. WOLKER, Jacobs Foundation and The ALSPAC Study Team, University of Bristol.

Objectives: To investigate whether wearing glasses, having a manifest strabismus or having a history of wearing an eye patch predisposes pre-adolescent children to being victimised more frequently at school and whether the impact may be different for boys and girls.

Design/Methods: Data were examined on 6536 children from the Avon Longitudinal Study of Parents and Children (ALSPAC) based in the UK.

At 7.5 years the children undertook a detailed eye examination by orthoptists, including a cover test and visual acuity assessment. At 8.5 years trained psychologists assessed the children's bullying involvement as either victim or perpetrator for overt and relational bullying using a standard interview. **Results:** Children with current glasses or a history of eye patches were 35 to 37 per cent more likely to be victims of physical or verbal bullying behaviour even after adjustment for social class and maternal education. No interactions between sex and visual problems in predicting bullying behaviour were found.

Conclusions: For those children who require glasses, opticians need to be aware of the risks of bullying and strategies should be developed and discussed that help reduce their vulnerability.

Do psychologists know enough about sex? An overview of common sexual problems that inhibit relationships

G. HUDSON-ALLEZ, Private Practice.

Many psychologists work with clients experiencing difficulties within their relationships, and sexual problems may be a common presenting feature of the difficulties. Sometimes the sexual dysfunction per se is creating the relationship disharmony, whereas at other times the sexual dysfunction is a somatic symptom of a different underlying issue. Sex is a feature of most people's lives, yet there appears to be little training on counselling psychology or clinical psychology courses on the specifics of sexual physiology, arousal and desire systems, or sexual problems. This paper will provide an overview of the most common presenting sexual problems to a psychologist working as a sex therapist both in primary care and in private practice. It will review erectile dysfunction; premature, retarded and retrograde ejaculation and Peyronie's disease in men, and anorgasmia, dyspareunia and vaginismus in women. It will also look at the differences between the sexual arousal systems between men and women, how they respond with loss of desire, and what happens in relationships when there is a discrepancy between frequencies of how often they want to make love. The paper will predominantly focus on heterosexual relationships and the common differences between the sexes in their approach to sex, although for some of the problems, there is little difference if the couple presenting are gay or lesbian. As the various difficulties are discussed, treatment options will be examined to demonstrate that sometimes a range of skills is needed rather than one specific therapeutic modality. It will include a discussion of medical approaches to some of these difficulties and will highlight the importance of inter-disciplinary teams in assessment and treatment for couples experiencing difficulties in a very vulnerable yet vital aspect of their lives.

Relationships, one origin of psychological disturbance?

P.E. JAMES, Liverpool John Moores University.

This is a discursive paper that focuses on theories and models that have relationships as central to both psychological disturbance and psychological therapy.

Purpose: To discuss relationships as possible and probable origins of psychological disturbance; this may be between parent/child, and/or amongst siblings; to also look at psychological therapies in relation to this disturbance.

Background: Two of the main branches of psychological therapy, humanistic therapy and psychodynamic therapy, have theories that place 'relating' as critical in the origins of distress, as well as in the reparation of that distress. Rogers places conditions of worth as effecting the development of the personality, in the restriction of the individual's self-belief and efficacy by 'oughts' and 'shoulds'. Object Relations Theory sees projective identification as manipulative in the development of the self, being replayed later in adult relationships. Theories of attachment describe the trauma of repetitive unexplained separation. Cognitive theory appreciates that the formation of schemas and perceptions in the development of core beliefs occur in the context of relating.

Methods/Key Points: The paper will be concerned with presenting problems in client work and the challenges that are placed on the therapist, working where time may be limited. If relationship difficulties are the main underlying factors in distress surely these should be the therapeutic theme. Examples from practice suggest that the issues are complex; understanding relational patterns does not always lead to the cure of psychological distress. In addition, the need for containment, consistency and care in relationships may be needed.

Conclusions: The support for working with a relational focus in the public sector is proposed, a rationale for the use of theories with a relational focus will be outlined, the place of symptom relief and symptom management will also be considered. There are implications for training therapists in theories that place emphasis on relationships; these are seen as a logical consequence not just a matter of preference.

Is locus of control a reliable and useful construct to assess during early pregnancy?

J. JOMEEN, University of Leeds & C.R. MARTIN, Chinese University of Hong Kong.

Objectives: The current study sought to establish the psychometric properties of the Multidimensional Health Locus of Control scale form C (MHLC-C) in early pregnancy to assess the potential usefulness of this measure within this clinical population.

Design: A cross-sectional study design was used with all observations taken at the 12-week antenatal booking clinic by a research midwife.

Method: The MHLC-C was administered to 129 women presenting at the antenatal booking clinic. Questionnaire-based measures of depression were also completed (Edinburgh Postnatal Depression Scale) and women were categorised on the basis of this into non-depressed ($N=96$) or depressed ($N=33$) groups.

Results: Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) was used to determine the factor structure of the MHLC-C and revealed the MHLC-C to be comprised of three distinct and correlated factors of 'internal', 'chance' and 'powerful others' locus of control. A fourth sub-scale 'doctors' was found to be sensitive to the non-depressed/depressed status of participants, independent t -tests revealing the non-depressed group to have significantly greater 'doctors' locus of control compared to the depressed group. The 'doctors' sub-scale was observed to lack acceptable internal reliability in this clinical group.

Conclusions: Further research is recommended to determine if developing the 'doctors' sub-scale into a longer measure could enhance the potential utility of this measure. The role of locus of control on the later development of psychological sequelae requires further consideration. The MHLC-C may be considered a valuable and valid measure of locus of control and suitable for use during pregnancy.

Children and adults' processing of implausible and anomalous thematic relations during reading

H.S.S.L. JOSEPH, H.I. BLYTHE, S.J. WHITE & S.P. LIVERSEDGE, University of Durham.

Objectives: Research into on-line written language comprehension has tended to focus on adult populations, thereby overlooking the process of reading development itself. The present study aimed to investigate the earliest point at which plausibility information influences children's as compared to adults' reading performance.

Design: Following Rayner, Warren, Juhasz and Livesedgè's (2004) adult study, the eye movements of a group of children (aged seven to 11) and adults were monitored as they read sentences containing plausible, implausible, and anomalous thematic relations.

- The man used a pan to boil the thin spaghetti yesterday evening.
- The man used a kettle to boil the thin spaghetti yesterday evening.
- The man used a feather to tickle the thin spaghetti yesterday evening.

Methods: In the implausible condition (ii), the theme (*spaghetti*) was incongruous with the combination of the instrument (*kettle*) and the verb (*tickle*) together. In the anomalous condition (iii), the theme (*spaghetti*) could not be an argument of the verb (*tickle*). It was predicted that the nature of the thematic violation in the anomalous condition would elicit more immediate disruption to processing as compared to in the implausible condition, which in turn would produce more immediate disruption than in the control condition, in both adults and children. However, disruption was anticipated for both implausible and anomalous sentences relative to the control condition. Importantly, it was expected that children would exhibit less immediate effects in the detection of thematic violations, as compared to adults, when reading both the implausible and the anomalous sentences.

Results: Preliminary data (from 15 adult and six child participants) indicate that anomaly and implausibility detection in children is delayed relative to that observed for adults. Detailed analysis of the eye movement records are reported to determine whether implausibility/anomaly effects occur during initial reading or later, and at the critical word or at subsequent sections of the sentence, for both adults and children.

Conclusions: On the basis of data analysed thus far, the delayed anomaly and reduced implausibility effects demonstrate reduced immediacy in the detection of thematic violations for children compared with adults. While children do compute thematic relations such that they are able to detect thematic violations, such processing is clearly delayed. Such delayed processing may either indicate less efficient thematic computation in children, or alternatively children may have different expectations regarding the plausibility of events in the real world.

Community psychology: Partnership working in community settings

C. KAGAN, R. LAWTHOM, Manchester Metropolitan University & D. BANKS, Tenants and Residents Association.

This workshop is based upon a long-term community psychology collaboration between community psychologists (in academic settings) and community activists, representing a residents' association in East Manchester. Community psychology is an approach to working psychologically with people who are marginalised, oppressed or excluded. The nature of working in a community psychology framework entails a radically different approach. Community psychologists are not experts who change settings, rather they work as resource collaborators, engaged in consultation, action research, social change and advocacy. Participants in this process (here the residents' association) are active stakeholders who contribute fully to the change process. This workshop aims are:

- to raise academic awareness around the practices of community psychology; and
- clarify how community psychologists can work with local people around CP (community psychology) interventions.

Through sustained engagement with a local tenants and residents association within Manchester, partnership working is demonstrated. A short drama presentation by a local residents' group will be given. This demonstrates the experience of community psychological approaches. Following this presentation, a discussion round the sharing of experience around participative and creative ways of working will be held. The drama presentation will be performed by the Daisy Bank Tenants and Residents Association. Community participants have already presented at National conferences (around community psychology). The workshop will be facilitated both by the community group and by two community psychologists engaged in the community setting. Professor Carolyn Kagan is the only Professor of Community Social Psychology in the UK and leads the only postgraduate provision for Community Psychology in the UK. She is also director of the Research Institute for Health and Social Change. Dr Rebecca Lawthom teaches community psychology at undergraduate and postgraduate levels and has research interests around community psychology. All workshop facilitators are experienced at managing workshop style environments.

How does insight in schizophrenia interact with social support and depression?

S.L. KAISER, University of Manchester & J.A. SNYDER, University of North Carolina at Chapel Hill.

Objectives: To explore the associations among insight, social support, and depression in schizophrenia. Research has found that as insight increases in schizophrenia, levels of depression tend to rise as does improved functional outcome. Thus, determining factors that are linked to improvement in insight which also minimise increases in depression may be crucial for improving functional outcome. One possible factor is social support, which can act as a buffer against depression in times of stress and has been found to be associated with increasing insight. We predicted that insight would be associated positively with depression, that insight would be positively associated with social support, and that social support would be negatively associated with depression. We also predicted that the link between insight and depression would be moderated by social support.

Design: This study employed a one-time questionnaire procedure for correlation analysis. Because insight may have curvilinear relationships to various factors (e.g. cognitive deficits; Startup, 1996), these types of associations were investigated.

Methods: 40 inpatients diagnosed with schizophrenia or a schizophrenia-spectrum disorder participated in the study. Each completed the short form of the Social Support Questionnaire (Sarason *et al.*, 1987), the Beck Depression Inventory (Beck, 1996), and the Insight Scale (Birchwood *et al.*, 1994) in a randomised order.

Results: Depression was not significantly correlated with either insight or social support. Only relabelling of symptoms was positively associated with satisfaction with support. Our analyses of non-linear relationships revealed a curved relationship between global insight and satisfaction with support, accounting for 24.4 per cent of the variance. Thus, both individuals with very low insight and very high insight were more satisfied with their support than those with medium levels of insight.

Conclusions: The curvilinear relationship may exist for two reasons. First, need for social support may differ according to level of insight, leading to dissatisfaction for those with moderate insight especially if these individuals' insight is unstable. Second, those with moderate insight may differ from high or low scorers on some fixed quality, potentially neurocognitive function. Research has found that those with poor neurocognitive function had low levels of social support seeking (Lysaker *et al.*, 2004) and moderate insight (Startup, 1996). Future studies should examine the relationship of social support and insight longitudinally, and also the links among insight, neurocognitive function, and social support seeking.

Anxiolytic and mood effects of single doses of sage (*Salvia officinalis*) in healthy volunteers.

D.O. KENNEDY, S. PACE & A.B. SCHOLEY, Northumbria University.

Objectives: *Salvia officinalis* (sage) has a long history as a medicinal herb with specific indications for memory disorders. Recent research has demonstrated not only that extracts possess cholinesterase inhibiting properties, but also that single doses of sage can enhance mnemonic performance and improve mood in healthy young participants. The current study explored the potential anxiolytic effects of sage further.

Design: A double-blind, placebo-controlled, balanced cross-over design was utilised.

Methods: 30 young (<35 y.o.) participants attended the laboratory on three separate days, seven days apart, receiving a different treatment in counterbalanced order on each occasion (placebo, 300mg, 600mg dried sage leaf). On each day mood assessments took place pre-dose and at one and four hours post-dose. Each mood assessment comprised completion of Bond-Lader visual analogue mood scales and the State Trait Anxiety Inventory (STAI) state subscale before and after 20-minutes performance of the Defined Intensity Stress Simulator (DISS) computerised multi-tasking stressor battery.

Results: Both doses of sage led to improved ratings of mood in the absence of the stressor (i.e. in pre-DISS mood scores) at both one and four hours post-dose, with the lower (300mg) dose reducing anxiety (STAI) and the higher (600mg) dose increasing 'alertness', 'calmness' and 'contentedness' on the Bond-Lader mood scales. The reduced anxiety effect following the lower dose was, however, abolished by performing the DISS, with the same dose also being associated with a reduction of alertness during performance. Task performance on the DISS battery (total score) was improved for the higher (600mg) dose at both post-dose sessions, but reduced for the lower (300mg) dose at the later (four hours post-dose) testing session.

Conclusions: The results confirm previous observations of improved mood following the administration of single doses of sage to healthy young participants.

Psychoactive effects of single doses of *Paullinia cupana* (Guarana) during intense mental demand

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Objectives: Previous research has demonstrated improved attention task performance following guarana. The aims of the present study were to assess any psychoactive effects of guarana alone and in combination with ginseng in humans.

Design: In this double-blind, placebo-controlled, cross-over study the effects of 75mg guarana, 200mg ginseng, two combinations of these (75/200mg, 75/40mg), and placebo, were assessed in 30 young (18 to 24) participants.

Methods: The effects of 75mg guarana, 200mg ginseng, two combinations of these (75/200mg, 75/40mg), and placebo, were assessed in 30 young (18 to 24) participants on separate days. One hour following the day's treatment participants completed a 10-minute 'cognitive demand' battery (Serial subtractions and Rapid Visual Information Processing) six times in succession (i.e. 60 minutes continuously).

Results: In keeping with its purported stimulant properties, guarana reduced self-rated mental fatigue. This effect was most pronounced towards the end of the demand battery. Guarana had little effects on the relatively under-loaded Serial Threes task, although here Ginseng (both alone and with guarana) appeared to reduce accuracy.

Guarana slowed response times during the RVP task at two time points – however, this should be viewed in the light of significantly improved accuracy, particularly when guarana was combined with ginseng.

Conclusions: We have previously found that guarana can benefit a number of cognitive functions following single doses – an effect which, in some cases was evident from one to six hour post-dosing.

The psychopharmacological profile of guarana is unlikely to be attributable to its caffeine content (here there was an estimated 9mg caffeine in the guarana products).

Further work is needed to identify the components responsible for guarana's psychoactive properties and their interaction with caffeine within the extract.

Combining ginseng with guarana produced elements of each of the single treatments but there was little evidence of additive or synergistic effects.

The role of personal development groups in counsellor training: A process of developing self-awareness in the trainee counsellor, researcher and person.

C. LENNIE, University of Manchester.

Objectives: The main focus of this research was to investigate the experience of, and relationship with, the Personal Development Group for trainees of counselling. The Personal Development Group is a method widely employed in counsellor training with the aim of heightening self-awareness in the trainee practitioner. Research suggests that, although these groups are widely used in counsellor training, they are under researched (Payne, 1999; Donati & Watts, 2000) and, therefore, possibly poorly understood.

Design & Methods: A mixed method approach was employed using focus groups with a cross section of 88 trainees of counselling, at different points in their training. These groups were held to establish those factors that were felt to contribute to developing self-awareness in the group. Identified factors were grouped under the headings of environmental, inter and intrapersonal factors and these responses were used to develop a questionnaire. The questionnaire measured the trainees' perception of their own self-awareness (Connor, 1980) and the extent to which the contributory factors, identified from the focus group, were felt to be present in their current Personal Development Group (the 'comfort fit').

Results: Statistical findings indicated that overall trainees are more comfortable in the Personal Development Group at the start of their training and less comfortable at the end no clear relationship was established between there being a better 'comfort fit' and increased self-awareness. Ambiguities in the findings along with notions of parallel processes and 'taboo' (West, 1996) resulted in a second stage of the research adopting a more heuristic stance to uncover 'what was not being said' both in the research and in the personal development group. Four further focus groups were held and the resulting data was analysed using grounded theory based on the work of Glaser and Strauss (1980). Findings indicated a core category related to issues of inclusion and exclusion of the relationship with the Self in groups (the counselling community, the Personal Development Group, the research focus group and the resulting 'refresher' group) and in the process of research.

Conclusions: Findings are explored in terms of communication in groups in research and education particularly when discussing moral, social or political issues

The outcomes of parenting programme in a child health service in Hong Kong using the group version of the Triple P (Positive Parenting Programme)

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Objective: The study examined the outcome evaluation of the group level of the Positive Parenting Programme with Hong Kong Chinese families in a child health service.

Design: Groups were conducted as part of the parenting programme by health professionals within Maternal and Child Health Centres and Child Assessment Centres for parents of preschool and primary school children. Data were collected as part of the continuous evaluation of the programme.

Methods: Participants were requested to complete measures on child behaviour problems (Eyberg

Child Behaviour Inventory), parental satisfaction and competence (Parenting Sense of Competence), parenting stress (Parenting Stress Index Short Form) and parental adjustment (Depression-Anxiety-Stress Scale-21 items) before and after intervention. About 800 participants completed the questionnaires.

Results: A series of dependent *t*-tests were conducted to examine the effects of intervention on child and parent outcomes measures.

Hierarchical multiple regression was also used to examine outcome variables including clinical improvement and programme completion. Positive clinical outcomes were achieved on measures of child behaviour, parenting and parental adjustment. Predictors of programme completion were identified.

Conclusions: The programme was found to be effective in achieving positive clinical improvement in terms of decreasing child behaviour problems, reducing parental stress and increasing parental competence in the local context. Predictors were identified which shed light on the implications for child health service.

The use of clarification requests in negotiation between children with impaired hearing and their typically developing peers

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Objectives: This study examined negotiation between children with impaired hearing (CWIH) and their typically developing (TD) peers, focusing upon the use of clarification requests. The aim was to identify communication strategies that can aid our understanding of the ways in which co-operative learning may be used successfully in inclusive classrooms.

Design: In referential communication research, map tasks have been used to elicit rich dialogue from children, and this approach has been used previously as a context for studying the use of clarification requests (e.g. see P. Lloyd, 1992, 1993). The present study used a methodology based on that of P. Lloyd.

Methods: 26 children with severe and profound, pre-linguistic hearing losses (mean age=9.7 years) were selected and paired with a TD peer to partner them in the map task. The CWIH-TD dyads' performance on the map task was compared to that of an age-matched TD control group. The task required the dyads to take turns in giving each other route directions. The sessions were videotaped and the dialogue was transcribed and analysed.

Results: The analyses focused upon measures of communicative success, and the type of dialogue that took place. A specific focus was the use of clarification requests. The CWIH-TD dyads' performance was inferior to that of the controls. However, a micro-analysis of performance over successive trials suggested that the CWIH-TD dyads improved over time, so that they were performing at a similar level to the controls in the later trials. The analyses suggested adaptive behaviours in the use of clarification requests and gestures by the CWIH-TD dyads may have contributed to these improvements in performance.

Conclusions: The findings demonstrated that learning and improved communication can take place between CWIH-TD dyads over a short period of time, and indicate some of the communication strategies that may be important in cooperative learning in the classroom. Furthermore, some of the strategies that were used to facilitate these improvements in communication can be interpreted using the Neo-Vygotskian concept of 'scaffolding' (e.g. Wood, 1998), and it is suggested that this theoretical approach may provide an important framework for future research on interaction between CWIH and their TD peers.

The career paths of tomorrow's psychologists: Formalising the career preparation of undergraduate students through coursework

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University of Cyprus.

Objectives: Psychology has become an increasingly specialised profession over the decades yet undergraduate psychology students seem to have little understanding of the various professional specialties. We examined factors that relate to the students' decision to pursue a particular graduate training path in psychology. We hypothesised that introducing a required relevant course on professional issues to the undergraduate curriculum may have a significant impact on the students' career choices and their perceptions about the various specialties. The course aimed to create learning opportunities for students to understand psychology as a career.

Design: We employed a mixed design, single and repeated measures, to address the problem of the limited number of participants who were exposed to the intervention, i.e. enrolled in the new course. Measurements were taken from participants before or/and after the new course.

Methods: 54 undergraduate psychology students volunteered to participate in the study. We constructed a 33-item self-report questionnaire in Greek for the purposes of this study. The participants completed the questionnaire before and after taking the new course. It contained structured, Likert-type or multiple choice, and semi-structured questions assessing domains such as career plans post graduation, awareness of and perceptions about the various specialties, and significant factors contributing to their career preparation.

Results: Repeated measures Anova analyses were applied to the data for each of the seven domains of the study. The pre-post factor was analysed on two levels as between-subjects variance. The responses in the various domains were analysed as within-subjects variance and further analysed with specific post-hoc comparisons. The results suggested that the majority of respondents reported plans to pursue psychology as a career through graduate training. There was a significant preference for the applied specialties of psychology, particularly clinical and school psychology, as compared to academic ones both pre- and post- the course. There was a marginally significant tendency for the students to perceive the academic and applied specialties of psychology differently before and after the course. Participants rated the applied specialties of psychology as significantly more useful to society and more person-centred. They rated the academic specialties as more research, statistically, and academically challenging than applied specialties. Certain factors contributed more significantly to the students' professional development and decision-making about career paths. The most important factor was specific coursework, including the added course, followed by out of class contact with psychology faculty.

Discussion: Although most students know that a career in psychology involves graduate studies, few understand the differentiation among the specialties. We conclude that the students' ignorance of many specialties and misperceptions about the nature of various specialties of psychology may be keeping them from pursuing particular training paths in graduate school. Formal courses intended to aid students with career preparation are beginning to appear in undergraduate programmes. However, this is still a small effort and the challenge remains for the undergraduate educators to take on a more active role in the career preparation of psychology students. We conclude that formalised courses such as the one proposed in this study appear empirically to be an important addition to the undergraduate psychology curriculum.

Complexity, reflexivity and discovery in relationship psychology: Q-Methodology as 'New Science' research in work-based, academic and professional learning

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The purpose of this paper is to influence policy on the future development and teaching of work-based practitioners in the area of 'relationship research'. The paper shows how research from a 'new science experimental' approach to relationships differs in methodological design, from more 'traditionally scientific' understandings. It reports on the results of a study which applied a qualitatively experimental research approach called Q-methodology, as a way of assisting work-based practitioners to discover the influence upon their practice, of race and culture in the counselling relationship. It explores the ethical, theoretical and methodological implications for their training, given that work-based practitioners are conventionally expected to 'frame' their research project from an 'empirical', rather than from an 'experiential' position. This translates to a requirement that practitioners learn to differentiate and select between methodological approaches which satisfy quantitative/deductive or qualitative/inductive criteria.

The paper draws on historical foundations of research in social psychology and applies social constructionism as a theoretical critique of how psychologists traditionally investigated race and culture, to propose the use of Q-methodology as an alternative, more grounded 'discovery' approach. The study investigates the experiential learning process of 12 practitioners in their attempts to make sense of the impact of race and culture on their relationship with clients. The factor-analytically derived data is evaluated by interpreting the 'narratives' that emerged between peers about the effects of 'sameness' and 'difference' in race and culture, upon their interventions. In terms of 'sameness', two 'linear' accounts emerged; one was person-centred, the other psychodynamic. When the practitioners were asked to consider the effects of 'difference in race and culture', the possibility emerged for some of them, that a more complex-dynamic understanding of 'relationship' might include a 'collaborative learning' factor.

Q-methodology is an example of a research approach which is designed to be reflectively-focused, which addresses the gaps in knowledge that are represented by the quantitative-qualitative divide and which utilises a quantum/chaos/complexity 'discovery' perspective to include an 'experimentally playful' element within relationship research. The paper concludes that it is possible to use quantitative methods in a 'qualitatively experimental' way to apply abduction (as opposed to either induction or deduction) as a methodological strategy to discover the more complex-dynamic, emergent features that underlie professional knowledge and experiential learning. The 'architectural processes' that underpin work-based practitioners' constructions of relationships can be modelled and analysed through 'experimental reflexivity'. By understanding relationships as 'stakeholder positions' in a work-based context, it becomes more possible to articulate how academic research impacts on the organisation of knowledge.

The factor structure of the schizophrenia quality of life scale revision 4 (SQLS-R4)

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Objectives: To investigate the factor structure of the schizophrenia quality of life scale revision 4 (SQLS-R4) in a UK clinical population. The SQLS-R4 is a promising development for clinical psychology applications in that it is a client acceptable, relatively short (33 items) and self-report measure of quality of life (QoL). However, the factor structure of the instrument has yet to be evaluated in a UK clinical cohort, yet this is principle to the psychometric integrity of the two SQLS-R4 sub-

scales (psychosocial QoL and vitality QoL).

Design: A cross-sectional study design was used with data accrued from one observation point. This approach was taken in order to determine the fundamental characteristics of the SQLS-R4 and to replicate methodology that was used in the original validation of the SQLS-R4 in Belgium.

Method: 100 clients with a primary diagnosis of ICD:10 schizophrenia participated in the study. None of the clients were assessed during an acute phase of psychosis. Measures of affective status were taken using the Hospital Anxiety and Depression Scale (HADS). The SQLS-R4 and HADS was administered to clients by the second author. **Results:** Confirmatory factor analysis (CFA) was used to determine the factor structure of the SQLS-R4 in this population. Consistent with the original validation of this measure, a two-factor (psychosocial QoL and vitality QoL) structure offered the best fit to the data. SQLS-R4 total and sub-scale scores were observed to be highly significantly correlated with HADS anxiety and depression scores.

Conclusions: The factor structure of the SQLS-R4 has been replicated in a UK clinical cohort with a primary diagnosis of schizophrenia and has been found to be consistent with the factor structure found in the original validation of this instrument. The SQLS-R4 offers significant clinical utility as an easily administered self-report QoL assessment and monitoring tool specifically developed for use in individuals presenting with a primary diagnosis of schizophrenia.

Health and well-being of school children involved in bully/victim problems: 'It's character building?'

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From the largest research study to date into the nature, prevalence, and correlates of bully/victim problems among pupils within the Northern Ireland school system ($N > 7000$), the current paper presents data regarding the physical and psychological well-being of pupils involved in such problems as either bullies, victims, bully/victims, or bystanders.

On indices of physical and psychosomatic health, happiness, self-esteem, depression, and psychological well-being, it was found that all actor groups directly involved in bully/victim problems recorded significantly impaired levels of physical and psychological well-being than those pupils not directly involved. Inter-group differences on these indices of physical and psychosomatic health are presented and discussed. Recommendations are also made in light of these data in relation to prevention and intervention program design and delivery.

Perception, expression and empathy: Emotional awareness in normal and behaviourally challenged school-children

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This project aimed to investigate differences in three component areas of emotional competence – emotional perception, empathic concern and emotional expressiveness – between normally functioning children and those showing behavioural problems within the primary school environment. Behavioural problems not only disrupt class functioning but have been shown to be linked to academic outcomes for the children involved. Self-report measures were chosen to examine the children's own perceptions of their functioning in these areas. Several previous self-report studies on childhood empathy used a validated questionnaire, the IECA (Index of Empathy for Children and Adolescents). As no similar self-report measures on perception or expression were available, two questionnaires were developed from validated adult tests using the same style as the IECA. The IECA was also adapted slightly for a British population. The two new questionnaires, the APT-C (Affective Perception Test – Child Version) and the EQ-C (Emotional Expression Questionnaire – Child Version) were designed to be readable by most primary aged children aged seven to 11 years in normal schooling. Children responded to a series of

statements with Likert scale choices. The questionnaires were administered by class teachers using full standardised instructions as part of an in-class activity.

A population of 268 children (147 boys and 121 girls) from two primary schools took part in the piloting of the three questionnaires. Of these, 203 were 'normal' sample – children not registered with the school for any behavioural or special educational needs difficulties. Of the remainder, 36 children were identified as having Special Educational Needs (SEN) and 29 as having Emotional Behavioural Disorder (EBD). Children were identified as EBD or SEN by means of the special needs register.

Principle components analysis showed single factor solutions for Perception and Empathy, both accounting for 17 per cent of the variance. A two-factor solution was found for Expression, accounting for 27 per cent of the variance. ANOVA with Post Hoc showed significant differences in mean scores for Perception between SEN and both other groups. No differences were found for gender. ANOVA showed no significant differences in mean scores for special needs status for either Empathy or Expression, but in both cases t-tests showed significant differences for gender, with girls scoring significantly higher than boys. Further analysis of individual questionnaire items showed EBD children admitting to significantly more expressed anger than either normal or SEN children.

In conclusion, SEN children felt they were less competent at identifying emotional states in themselves and others. In common with previous research strong gender differences were found for children's reports of empathy, with girls showing more empathy. Girls admitted to being more emotionally expressive than boys, with the exception of anger items, where EBD children showed significantly higher scores than the other two groups. Mean scores for reported perception, were higher for EBD than for 'normal' children, although not significantly so.

Pals after punch-ups? An interpretative phenomenological analysis of fighters and their friendships

M. MILTON, University of Surrey.

This paper draws on a study into the phenomenology of professional fighters and will present some of the findings that relate to the management of relationships – relationships between fighters and between fighters and others who are significant to them.

The study was undertaken as a pilot study to explore the phenomenology of those that fight professionally (e.g. mixed martial artists, boxers, etc.). In order to access participants experiences a qualitative methodology was required.

Participants were recruited through an Internet discussion forum used by professional fighters in the UK and abroad. Five participants were selected for interview using a semi-structured interview. Data was then analysed using Interpretative Phenomenological Analysis.

The findings presented here have not yet been published and relate to the quality of friendships available to the fighters. The study provides insight into the experience of these relationships and offers psychologists ideas of how they might assist fighters whether it be in the role of clinical or counselling psychologist or sports and exercise psychologist.

Shape discrimination in rats

L. MININI, J. WATTAM-BELL & K.J. JEFFERY, University College London.

Objectives: To explore whether rats process the whole of a shape, or only elements of it, when performing a visual shape discrimination task using computer generated stimuli and a touch screen apparatus.

Design: In a mixed model design, four Dark Agouti rats were randomly assigned to the Aspect-Ratio (AR) group and two to each of the control Simple-Discrimination-Horizontal (SDH) and Simple-Discrimination-Vertical (SDV) groups. In all groups, half subjects were rewarded for nose poking a square and half for nose poking a rectangle. **Methods:** In a discrimination box with a CRT monitor and a pressure-sensitive glass panel

(Elo TouchSystems), correct nose pokes were rewarded with a food pellet and incorrect nose pokes were followed by a black-out period and white noise. For all groups, each display consisted of a white rectangle and square on a black background, each shape presented at one of four possible locations on each hemiscreen. For the AR group, the dimensions of the stimuli ensured that only aspect ratio, but not relative height or width, could be used to solve the discrimination, thus forcing the rats to process both vertical and horizontal dimensions together. For the SDH and SDV groups, squares were paired with rectangles that differed only in width or height, respectively. Luminance and position were also controlled in all groups to rule out the possibility that these variables could have accounted for correct performance. After training, all rats were tested with a series of probe stimuli.

Results: All subjects in the control groups reached criterion within an average of 37 sessions, however, rats in the AR group, albeit performing above chance level, did not reach criterion even after a large number of trials. For the AR group, two generalisation tests revealed that these subjects were able to solve the task with new stimuli, suggesting that they used aspect ratio and were not merely responding to specific dimensions of the training set. Control trials confirmed that luminance was not used to solve the discrimination. Rats in the control simple discrimination groups (SDH and SDV), that only needed to make comparisons along one spatial dimension, were also able to solve the task with new stimuli suggesting that, as expected, they learned to make a relative judgment and were not merely responding to the dimensions used in the training set. The results from probe tests further confirmed this by ruling out the possibility that area or aspect ratio were used to solve the task with these stimuli. More surprisingly, probe tests in which the size difference laid in the formerly irrelevant dimension suggested that these rats were able to make a relative judgement in the irrelevant dimension too, when no size discrepancy was available in the relevant dimension, but that this latter was preferentially used when possible.

Conclusions: The results from the probe trials in the AR group suggest that these subjects used aspect ratio to solve the discrimination and, therefore, that rats can be capable of this simple form of shape perception. However, a large number of trials was needed to reach a level of performance well below criterion, suggesting that aspect ratio (and by implication, form) is not naturally used by this species when solving a discrimination task of this kind. By contrast, the results from the control groups (SDH and SDV) suggest that, as expected, rats readily learned to make relative unidimensional judgements in both the horizontal and vertical dimensions and that this skill can generalise to a dimension not relevant in training. Taken together, these results have implications for studies that use visual discrimination in rats as they suggest that low-level features are more likely to be used when solving these tasks.

Ruminative thought in social anxiety: A link with autobiographical memories?

J. MORGAN & R. BANERJEE, University of Sussex.

Objectives: The primary objective of this study was to determine whether ruminative thought (post-event processing) in socially anxious individuals raises the activation of autobiographical memories associated with past anxiety-provoking social encounters. It was hypothesised that socially anxious individuals who engaged in negative ruminative thought would recall social memories rated as more negative, anxious, and shameful. **Design:** Autobiographical memories were rated by socially anxious and non-socially anxious individuals on three dimensions (positive-negative, calming-anxious, proud-ashamed) using a 38-item life-events questionnaire. Recall of these memories was then examined following a speech performance task.

Methods: Participants were screened using the Social Phobia and Anxiety Inventory (SPAII) and selected for either the socially anxious group ($N=39$) or non-socially anxious controls ($N=35$). Participants completed the life-events

questionnaire and were then asked to prepare and give a five-minute speech. Following the speech participants ruminated on either positive feedback or negative feedback about their performance on the speech, or they engaged in a distraction task. Participants were then asked to free recall memories from the life-events questionnaire. **Results:** The results were analysed using a mixed design MANOVA and showed that regardless of the feedback condition, socially anxious individuals recalled memories rated as more negative, anxious and shameful than the non-anxious group. In addition, the anxious group tended to recall memories rated as more anxious after engaging in negative rumination compared to the non-anxious group.

Conclusions: The implications of these findings for understanding the role of ruminative thought in maintaining social anxiety, and in examining the link between autobiographical memory and rumination, are discussed.

Improved psychomotor function in children following a mid-morning snack: A semi-naturalistic study

T. MULLINGER, D.O. KENNEDY & A.B. SCHOLEY, Northumbria University.

Rationale: A number of studies have shown that cognitive function is better following consumption of breakfast in adults and children. Less is known about the behavioural consequences of a mid-morning snack, despite the fact that such snacks are commonplace in school settings.

Objectives: The present randomised, placebo-controlled, double-blind, balanced crossover study investigated the acute psychomotor effects of eating a banana, a cereal bar or no snack during a mid-morning school break. In order to increase ecological validity, no restrictions were placed on breakfast consumption.

Method: 48 healthy schoolchildren (mean age 10.1 years, range 8.6 to 11.5) were tested on three occasions. Each consumed their normal breakfast before school. During a break in lessons (starting at 10.20) they underwent a baseline assessment and consumed one of the snacks, or nothing, depending on the day's condition. Thirty minutes later their psychomotor performance was assessed using the Digit Symbol Substitution task, a Letter Cancellation task and Trailmaking versions A and B. They also rated their subjective hunger and 'awakeness' using simple visual analogue scales. The following two days were similar except that the other snacks (or nothing) were consumed. Treatment order was fully counterbalanced across participants.

Results: Compared with no mid-morning snack consuming either a banana or a cereal bar improved psychomotor performance and reduced ratings of hunger. The snacks also tended to improve subjective ratings of 'awakeness'.

Conclusions: These findings suggest that aspects of children's mental performance are sensitive to dietary manipulations even without prior dietary restriction. Such results may have important implications for performance during the school day. Further work is needed in order to extend these findings to other aspects of behaviour.

Learning objects: A new approach to teaching observation skills

J. OATES, V.A. LEWIS & S.E. MARTIN, The Open University.

A three-year project, Observation Skills in Psychology, funded by the Higher Education Funding Council for England (HEFCE) and the Department for Employment and Learning (DEL) under the Fund for the Development of Teaching and Learning, has been developing novel multi-media materials for observation skills learning. Led by the Open University, the consortium of five universities has developed sets of learning units for skill development by undergraduate psychology students and postgraduate clinical psychology trainees.

The notion of 'learning object', currently gaining currency in the field of e-learning, has provided a useful framework for helping to organise and develop these learning materials. Learning objects comprise units of learning that are self-contained, independent 'packages' of closely integrated assets, supporting clearly specified learning outcomes.

This approach has helped us move towards our goal of delivering materials that are easily incorporated into a variety of teaching contexts and curricula. To date, learning units have been produced for undergraduate methods teaching on the topics of coding schemes, and reliability and validity. For clinical trainees, units have been produced on clinical note-taking, and opening and closing sessions with clients. Further units are in development. Each of these units integrates a set of hypertext, digital video, coding scheme and observation record files within a software environment which allows hands-on experience of detailed analysis of video data. A software 'shell' was specially designed for this type of application by the Open University in collaboration with the BBC and Psycle Interactive, and won the European Academic Software Award 2000 for the social and behavioural sciences.

The units are designed to guide learners through a succession of practical applications of observation concepts to specific analysis tasks and the units conclude with activities designed to aid skill transfer and generalisation.

As part of the piloting and evaluation of these units, which has to date involved more than 20 HEIs, a study is being conducted of the relative merits of individual and small group work with the materials.

Glucose and memory function: A role for insulin?

L. OWEN, D.O. KENNEDY & A.B. SCHOLEY, Northumbria University.

Rationale: It is known that consuming a glucose drink can improve aspects of mental performance including memory. The mechanisms underlying this effect are unknown but may involve the release of insulin and activation of central receptors involved in memory processing. Furthermore it has been argued that tasks which involve a higher level of mental effort may be more sensitive to glucose enhancement.

Objectives: The present randomised, double-blind, placebo-controlled parallel groups study investigated the effects of a glucose load on implicit and explicit learning of word lists both in the presence and absence of a secondary task. Levels of blood glucose, insulin, adrenaline, HbA1c and cortisol were also measured.

Method: 72 healthy young adults were randomly allocated to one of four conditions where they received a drink containing 25g glucose, or a matching placebo in the presence or absence of a secondary task (Serial Threes). All participants performed two computerised tasks; an implicit learning task (where they were asked to state whether word pairs rhymed) and an explicit learning task. In both cases free recall, cued recall and recognition were assessed.

Results: Explicit memory performance was improved by the glucose drink in the presence of the secondary task only. Individuals with faster insulin responses tended to have better cognitive performance. Cortisol was significantly higher when co-performing a secondary task (suggesting that the 'demand' manipulation was successful).

Conclusions: These data suggest that a task's susceptibility to glucose are a combination of both domain and demand. Furthermore individuals' physiological reactions to a glucose load, including their insulin response, may be important mediators of these effects.

'I'm sure everybody cheats': A discourse analysis of diet in Type 2 diabetes

E. PEEL, Aston University, J. LAWTON, University of Edinburgh, O. PARRY, NEWI & M. DOUGLAS, Lothian NHS Board.

Objectives: This paper uses discursive psychology to explore how people with Type 2 diabetes discuss the managing – and failing to manage – their diet.

Design: Semi-structured repeat-interviews were conducted with 40 people clinically diagnosed with Type 2 diabetes across Lothian (Scotland) in the previous six months. Using thematic discourse analysis, we examine dietary management talk in repeat-interviews with 40 newly-diagnosed Type 2 diabetes patients.

Methods: The data were coded and analysed using thematic discourse analysis.

Results: Women in our study tended to construct

dietary practices as an individual concern, whilst men presented food consumption as a family matter. Participants accounted for lapses in their dietary regimen and 'cheating' in complex ways that aim to accomplish, for instance, a compliant identity.

Conclusions: Discursive psychology may facilitate fluidity in our understandings of dietary management, and challenge fixed notions of 'compliant' and 'non-compliant' diabetes patients.

In the nick of time

R.R. PLANT, N. HAMMOND & G. TURNER, University of York.

Purpose: The primary objective of this paper is to make active researchers and the community at large more aware of the need to help ensure that computer-based experiments are conducted with the utmost rigour. The second objective is to make teaching staff more aware of the dangers in placing an over reliance on computer-based experimental designs. We feel that undergraduates should be made more aware of the issues and be taught to mitigate them where possible.

Background: Within many areas of experimental psychology researchers regularly make use of commercial experiment generators and custom written software to administer paradigms.

Increasingly such paradigms make use of complex multimodal stimuli interacting with hardware which would have been unimaginable just five years hence, e.g. fMRI. As an adjunct to such in-built complexity, some studies have gone to great lengths in order to seek out ever smaller effect sizes. Widespread use of modern technologies within the field has left some assuming they no longer need be concerned with the intricacies of millisecond presentation, synchronisation and response timing. However, through empirical investigation, we have discovered numerous sources of timing error within live studies (Plant *et al.*, 2002, 2003, 2004).

Key Points: We advocate that if an experimental paradigm is administered, or controlled by computer, and data is reported in units of a millisecond that the researcher should, as a matter of course, self-validate their own timing accuracy. On most occasions researchers are unaware of the severity of any inherent error, but as many can attest to, replication of certain paradigms can be problematic at best.

Conclusions: In common with other disciplines, where equipment is calibrated yearly, (e.g. physics departments), it can only be of benefit for the field of psychology to take a more rigorous approach to the use of advanced technologies. We envisage that within the next few years academic journals will begin to request authors not only to submit their raw data but that they also carry out some degree of validation of results in relation to the equipment and paradigm they used. Early embedding of such practices within teaching and research is seen as crucial. We offer a methodology and practical approach to help aid this process.

Promoting inner stillness: The value of a school-based self-discovery programme designed for children with emotional and behavioural difficulties

L.A. POWELL & J.H. BARLOW, Interdisciplinary Research Centre in Health, Coventry University.

Objectives: The purpose of this exploratory study was to assess the benefits of a school-based self-discovery programme (SDP) for younger children (age range six to seven years) attending one mainstream primary school.

Design: The SDP is a new development, thus an exploratory study was deemed appropriate using a simple pre-test post-test design.

Methods: The study took place in one primary school in Wiltshire. Eighteen children with special education needs (SEN), behavioural and learning difficulties and vulnerable children who were on the boundaries of being excluded from school were selected to participate in the project by the Head and teachers. Teachers allocated children into two groups: Intervention ($N=9$) and Control ($N=9$). The children in the Intervention group were then divided into two groups of four and five. Parental consent was obtained prior to the programme commencing. A room to deliver the SDP was made

available by the school for the duration of the SDP. The primary themes of the SDP include sensory awareness, touch therapy (e.g. self and peer massage), communication and relaxation. Within these themes, a range of topics were covered and a range of activities implemented involving positive touch, music, colour, feelings, positive thinking, choices and reflections. Delivery and content were adapted to the age and level of ability of the children. The sessions are designed to facilitate children's self-discovery (i.e. senses, feelings, psychological and physical well-being).

Measures: Demographic information was collected at baseline only. Behavioural profiles included information such as self and social confidence, communication and interaction abilities, the ability to control themselves within the school/classroom and attention span. A Strengths and Difficulties Questionnaire was used to supplement the Behavioural profiles. In addition, observations of the SDP were conducted at baseline and on completion of the SDP.

Results: Compared to children in the Control group, children in the Intervention group had greater social confidence with teachers, improved eye contact, contributed more in class, were calmer and fidgeted less in class, were better able to consider others' feelings, shared more readily and were more willing to help their peers. By the end of the SDP, the body language of children was more open and far less aggressive than displayed in the first session. There were more smiles from children, and they constantly made eye contact with the tutor for direction. Peer massage was introduced toward the end of the SDP. Children enjoyed this: it appeared to instil some confidence in the giver in addition to the experience of positive touch by both the giver and the receiver. This was a major step forward for one child whose background suggests little experience of positive touch.

Conclusion: The changes in the children were small but nonetheless can be considered important steps forward. Further programmes may help children maintain and extend positive changes in behaviour and may enable the transfer of skills learned on the SDP into the wider environment.

Raven's Progressive Matrices: The 'Flynn Effect' continues, but the test's properties are stable

J. RAVEN, Consultant.

Objective: To present recently compiled data suggesting that the 'Flynn Effect' (which many believe has stopped) is continuing but simultaneously showing that the test's properties have been remarkably stable over time and across a wide range of cultural and social groups.

Method: The data were collected using the Coloured, Standard, and SPM Plus versions of Raven's Progressive Matrices test from samples of several hundred to several thousand children and adults covering a wide range of ages among several birth cohorts in many countries. However, that reported in the present paper comes mainly from the UK, Poland, Korea, Romania, the Netherlands, Hungary, Kuwait, India, Qatar and Argentina.

Results: (i) Flynn Effect: The continuing increase in scores may be illustrated by saying that the 50th percentile for six-year-olds has increased from 17 in the UK and many other countries around 1982, to 19 in Poland in 1991, and to 24 in Korea and Poland in 2001–2003. (ii) Stability in Test Properties: The correlations between the Item Response Theory (IRT)-based item statistics derived from data collected in a number of countries having very different languages, writing systems, and educational systems range from 0.96 to 1.00.

The stability in the properties of the SPM Plus, which was introduced to restore the discriminative power that the SPM had before it was eroded by the 'Flynn Effect', is particularly impressive. The application of three variants of IRT (that originally used by Raven in 1935 and modern computer-based one-parameter and three-parameter models) to these data showed: (i) that Raven's original variant generated more useful information than the modern mathematical variants; and (ii) that the normal practice of fitting a one-parameter model to data which really require a three-parameter model can yield seriously misleading results.

Conclusions: (i) So far as can be judged from the available data, the 'Flynn effect' is continuing; (ii) most psychologically-based 'explanations' of

that effect are discredited by the stability in the norms across cultures having very different languages, calligraphies, and educational systems at any point in time; (iii) the stability in the test's properties over the years and cultures is remarkable; and (iv) the normal practice of fitting a one-parameter IRT model to data that really require a three-parameter model can yield extremely misleading results.

Single doses of Panax ginseng (G115) produce an opposing glucose response and enhance cognitive performance during sustained mental activity

J.L. REAY, D.O. KENNEDY & A.B. SCHOLEY, Northumbria University.

Objectives: Single doses of the traditional herbal treatment Panax ginseng have recently been shown to improve performance of a mental arithmetic task, with a concomitant reduction in blood glucose levels. The mechanisms responsible for these effects are not known. However, cognitive improvements may be related to the glycaemic properties of Panax ginseng. The present study aimed to investigate the effect of a single dose of Panax ginseng, administered alone and in conjunction with a glucose load, on cognitive performance and blood glucose levels.

Design: A placebo-controlled, double-blind, balanced, randomised, crossover design was utilised.

Methods: 27 healthy young adults completed a 10-minute test battery at baseline, and then six times in immediate succession commencing 60 minutes after the day's treatment (placebo, 25g of glucose, 200mg of G115, 25g glucose + 200mg of G115). The 10-minute battery comprised a Serial Threes Subtraction task (two minutes); a Serial Sevens task (two minutes); a Rapid Visual Information Processing task (five minutes); and a 'mental fatigue' visual analogue scale. Blood glucose was measured prior to the day's treatment, and before and after the post-dose completions of the battery.

Results: Both Panax ginseng and glucose enhanced cognitive performance of a mental arithmetic task and ameliorated the increase in subjective feelings of mental fatigue experienced by participants during sustained intense cognitive processing. Accuracy of performing the Rapid Visual Information Processing task (RVIP) was also improved following the glucose load. There was no evidence of a synergistic relationship between Panax ginseng and exogenous glucose ingestion on any cognitive outcome measure. The results, however, did reveal an opposing glycaemic response following Panax ginseng, when ingested alone and in combination with a glucose load.

Conclusions: Overall these data suggest that both Panax ginseng and glucose can improve performance and subjective feelings of mental fatigue during sustained mental activity. The results also demonstrate the opposing glucose modulating properties of Panax ginseng.

The effect of Panax ginseng (G115) on mood and cognitive performance following acute and sub-chronic daily dosing

J.L. REAY, D.O. KENNEDY & A.B. SCHOLEY, Northumbria University.

Objectives: It has been repeatedly demonstrated that acute ginseng administration can enhance cognitive performance, as well as modulate electroencephalogram brain activity and circulating blood glucose levels in healthy young volunteers. However, less is known about the effect of ginseng following daily dosing. The current study aimed to investigate the acute and sub-chronic effects of Panax ginseng on mood and cognitive performance.

Design: A placebo controlled, double blind, balanced, randomised, cross over study was utilised.

Methods: 30 healthy young adults were recruited. Participants completed a 30-minute cognitive battery at baseline and then at one hour, 2.5 hours and four hours post-treatment (placebo, 200mg of G115, 400mg G115). Treatment continued for six consecutive days. On day seven participants returned to the laboratory where they completed the cognitive battery once before day seven's

treatment and then one hour, 2.5 hours and four hours post-treatment. The battery comprised the Bond-Lader visual analogue mood scale, Immediate word recall, Corsi block tapping task, N Back task, Random Number Generation task, Delayed word recall and Delayed word recognition.

Results: Planned comparisons comparing each treatment to placebo at each post dose time point revealed acute post dose improvements in mood on both day one and day seven. With regards cognitive performance, a significant slowing in performing a verbal working memory task following 200mg and an improvement in the accuracy of performing the same task following 400mg on day one and day seven was demonstrated.

Conclusions: These data suggest that the cognitive enhancement reported following acute ginseng ingestion is also found after sub chronic daily dosing. The exact nature of the type of cognitive functioning, which is susceptible to ginseng administration, remains to be elucidated. Our laboratory currently investigating this.

Depression in teenagers: Developing and evaluating a CD-Rom and website

C. RICHARDS & N. COGAN, Young People's Unit, Royal Edinburgh Hospital.

Objectives: Community studies have estimated incidence of depression in young people to be around three per cent in the UK, representing one of the most prevalent forms of psychopathology among this age group. Early recognition and intervention are important factors in improving clinical outcome. The aim of the www.depressioninteenagers.com is to raise awareness of the problem of depression in young people; to encourage young people themselves to identify the symptoms of depression, suggest effective methods of coping, encourage professional help seeking and offer information about sources of help and support.

Design: A generic multimedia package was designed to be fully compatible with conversion to a web-based format with the potential to be used for other health education packages. Piloting of the draft multi-media package was undertaken with pupils ($N=87$) across five schools, service users ($N=10$) and professionals working with adolescents ($N=12$).

Results: Free copies of the CD-ROM have been distributed to 467 Secondary Schools in Scotland as well as professional and voluntary groups. Preliminary analysis of feedback forms indicate that while 71 per cent of pupils report no previous education on adolescent depression, 87 per cent of pupils rated the information on the CD-ROM to be just right or easy to understand. Ninety-nine per cent of professionals reported they would use the resource in their workplace.

Conclusion: The CD-ROM and website continue to be evaluated, promoted and developed further. The template is being applied to address stress and anxiety problems in young people.

I get by with a little help from my friends: An exploration of young maltreated children's development whilst engaged in pair play therapy

C.L. RUSSELL & C. PROTOGEROU, University of Bath.

Objectives: Research shows that maltreated children experience problematic peer relationships, where their interactions tend to be characterised by either aggressive or avoidant behaviours. In turn, peers are discouraged from associating with these children, which limits further the child's opportunities to develop healthy peer relationships (Darwish *et al.*, 2001). Longitudinal assessments of early interventions whose purpose is to foster positive peer relationships by supporting children's interactions are limited. Consequently, theoretical explanations that account for the impact of interventions upon maltreated children's social development are wanting. This remains a challenge, especially during the toddler and preschool years when children's social lives with peers are emerging. By exploring the interactions of young maltreated children engaged in an intervention, the aim of this research was to build a theoretical model that considers how social development takes place in the context of support from others.

Design: This was achieved through the longitudinal analysis of 15 children's interactions whilst they were engaged in an intervention called 'pair play therapy' (PPT) for an average duration of 10 weeks. In PPT, two therapists use play as a vehicle to support a pair of children to develop effective peer relationships and interpersonal competence.

Method: The participants attended inner-city day care centres in Boston, US, and were selected for the intervention based on substantiated cases of maltreatment and demonstrably ineffective peer relationships. There were eight boys and six girls whose ages ranged from two to four years. In total, 15 videotaped therapy sessions were transcribed verbatim and coded, using the Interaction Coding Scheme (ICS) (Russell, Ayoub & Raya, 1999). The ICS facilitates the organisation and measurement of children's interactions into domains such as conflict, co-operation, friendship and perspective-taking behaviours. Unlike many measures of children's behaviours, the ICS also enables other's behaviours (in this case, play partners and therapists) to be taken into account when coding children's interactions. In order to assess peer interactions and change over time, the analytical strategy included descriptive statistical procedures, tests of association and time-series analyses. In addition, pre- and post-measures of social competence with the California Pre-School Social Competence scale (Levine, Elzey & Lewis, 1969) were recorded.

Results: The findings showed a statistically significant difference between pre- and post-social competence scores. As children progressed through PPT, their ability to co-operate and manage conflict increased over time.

Conclusion: The findings contribute towards the development of a theoretical model that encompasses Selman's theory of social co-ordination and Vygotsky's and Rogoff's notions of scaffolding and guided participation respectively. This theoretical model elucidates upon the ways in which therapist support represents a critical factor in assisting maltreated children to function within their developmental capability so that they restructure negative methods of interacting in favour of effective peer interaction and lay the foundations of early friendships.

Depression, anxiety and stress: A necessary consequence of rising student debt?

A.J. SCOTT, University of Bath.

Objectives: There is increasing public concern surrounding mental health problems in the student population. This paper investigates whether students' financial circumstances at university have a detrimental impact on three aspects of mental health (depression, anxiety and stress) and two aspects of university life (academic performance and social experiences).

Design: A cross-sectional questionnaire design utilising a quota sample and multivariate analyses was employed.

Methods: A five per cent quota sample of 268 direct entry students from a university in the southwest of England completed a questionnaire providing information on demographic characteristics, mental health, and financial circumstances. Three measures of financial circumstances were used in the analysis; namely, subjective interpretations of student debt, perceived financial difficulties and net balance. Mental health was assessed using the short form of the Depression Anxiety Stress Scales.

Results: The results highlight the importance of perceived financial difficulties in determining the incidence of depression, anxiety and stress. Subjective interpretations of student debt were significant determinants of whether students believed their current financial situation had a detrimental impact on their academic performance and social experiences. Term-time employment and financial difficulties were also perceived as having a detrimental effect on academic performance while a poor net balance was perceived as having a negative impact on social experiences.

Conclusions: Perceived financial difficulties and subjective interpretations of student debt had a greater impact on the incidence of depression, anxiety and stress, and perceptions of academic performance and social experiences than the 'objective' measure of net balance. While financial

difficulties are not the primary cause of depression, anxiety or stress among students, they represent an additional burden to the other pressures of university life.

Early cognitive outcome in children treated for brain tumours in comparison with matched normal controls

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Objectives: To measure cognitive outcome in children with brain tumours one month after diagnosis.

Design/Methods: Longitudinal prospective study of children with brain tumours admitted to the Regional Neuroscience Centre compared with normal children matched for age, sex and socio-economic status. Intellectual outcome was assessed using the Wechsler Intelligence Scale for Children (WISC III UK), the Wechsler Primary and Pre-school Scale of Intelligence - Revised. Attention was assessed using the Test of Everyday Attention (TEAch). Memory was assessed using the Children's Memory Scales (CMS). Academic status was assessed using the Wechsler Quicktest.

Results: 22 tumour patients and 22 matched controls have been studied to date. The mean age was 10.7 yrs, range 3.8 to 16.73. Twelve were boys, 10 girls. There was no significant difference between tumour patients and controls for Verbal IQ (VIQ) ($p=0.063$) or Performance IQ (PIQ) ($p=0.132$) but there were significant differences between tumour patients and controls with respect to processing speed index of WISC ($p=0.002$), selective attention (Sky Search, $p=0.019$), the general memory scale of the CMS ($p=0.046$) and the Wechsler Quicktest Composite score ($p=0.025$). There were no significant differences between tumour patients and controls with regard to other aspects of cognitive function.

Conclusion: Children newly diagnosed with brain tumours have significant impairments in cognitive function that could negatively impact on their performance in the school setting and which appear to be due to the tumour and surgery. Follow-up of these patients will permit the contribution of radiotherapy/chemotherapy to long-term cognitive outcome to be defined.

Age-related decline in digit-symbol performance: Eye-movement and video analysis

R. STEPHENS, Keele University.

Objectives: The primary objective was to examine age-related decline in substitution test performance. Variables obtained from a slow-motion analysis of a first person perspective video filmed during performance of the Wechsler Adult Intelligence Scale III Digit Symbol Coding Test (WAIS-3 DSCT), including superimposed cross-hairs indicating eye movements, were examined. It was hypothesised: (i) that a group of older adults would obtain reliably lower scores on the WAIS-3 DSCT compared with an undergraduate group; and (ii), that the older group would show poorer performance on a range of performance indicators.

Design: Standard WAIS-3 DSCT scores and the video-derived variables were compared across age groups, employing family-wise control of Type I error inflation.

Methods: Participants: Nine undergraduates of mean age 20 years (SD 2.7, four females) and nine older adults of mean age 59 years (SD 8.8, eight females), were recruited via advertisements placed on campus and at the Newcastle Volunteer Bureau. Eye movements assessed using the Applied Science Laboratories Model 501 Head Mounted Optics Eye Tracking System, and writing time were recorded during completion of the second row of items of the WAIS-3 DSCT.

Results: A reliable difference between the age groups' WAIS-3 DST test scores was found, $t(16)=-2.359$, corrected $p=0.031$, such that the older group completed 17.7 fewer items (older mean=71.1, pooled SD=15.9). The older group took

longer than the younger group with respect to symbol writing time per item, $t(16)=2.894$, corrected $p=0.033$, but there were no differences in upper matrix gaze time per item, $t(16)=1.362$, uncorrected $p=0.138$, and upper matrix gaze frequency per item, $t(16)=0.881$, uncorrected $p=0.392$.

Conclusions: Predictably, the older adults' overall performance was reliably slower. Additionally, these data implicate motor slowing (writing time) as the primary factor underlying the age decrement in substitution test performance.

Longlasting effects of MDMA on impulsivity

L. TAURAH, M. HESLIN, C. CHANDLER, London Metropolitan University & S. PAL, King's College Hospital.

Objectives: Recent evidence has linked MDMA exposure (3,4-methylenedioxymethamphetamine) to elevated impulsivity. However there is currently a lack of data demonstrating whether this increased impulsivity is long lasting. Research indicates this elevated impulsivity maybe linked to serotonin. On the other hand, other data suggests that impulsive disorders could be mediated by a variety of other neurotransmitter systems including dopamine. This suggests that other recreational drugs of abuse involving dopamine may cause this elevated impulsivity in MDMA drug users for example cannabis, cocaine, and amphetamine. Current studies investigating MDMA exposure and impulsivity have failed to adequately control for such recreational drugs.

Design: Whether current MDMA polydrug users (consumed MDMA in last six months) report similar/different impulsivity scores as ex-MDMA polydrug users (abstained from MDMA for minimum one year) using self-reported Barrett Impulsivity Scale controlling for dopamine related recreational drugs of abuse.

Method: 997 participants: 182 non-drug users, 172 nicotine/alcohol users, 163 cannabis/nicotine/alcohol users, 169 polydrug users (non-MDMA user), 154 current MDMA polydrug user (consumed MDMA within mean of four weeks), 157 ex-MDMA/polydrug user (abstained for mean seven years). All groups were matched for sex, age, and educational background. Participants were required to complete a detailed drug history as well as completing the Barrett Impulsivity Scale.

Results: There was an overall significant difference in mean Barrett Impulsivity Scores between the four control groups (mean score=115, 114, 114, 125 respectively) and the current/ex-MDMA users (mean score=147, 148 (ANOVA, $p<0.001$)). There was no significant difference in the overall Barrett Impulsivity score between current MDMA polydrug users (mean score=147) and ex-MDMA polydrug users (mean score=148 (Bonferroni test, $p>0.05$)).

Conclusion: Current and abstained MDMA polydrug users self report similar increased impulsivity scores in comparison to non-drug control groups suggesting exposure to MDMA can result in long lasting changes which maybe linked to neural damage. Elevated impulsivity scores for MDMA users can not be linked solely to other recreational drugs including alcohol, nicotine, dopamine, cannabis and amphetamine.

The neuropsychological impact of cardiovascular disease: The functioning of patients both before and after coronary artery bypass graft surgery

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Objectives: To assess the neuropsychological functioning of patients with severe coronary heart disease (CHD) requiring coronary artery bypass graft (CABG) surgery, prior to their operation and then following their progress at points during the post-operative period.

Design: This study had a prospective, double-blind design.

Methods: 63 patients were administered a brief 45-minute neuropsychological battery (five domain scores) the day prior to their CABG operation. They were then administered an alternative version of this battery prior to discharge (day six), and a more

comprehensive neuropsychological battery (22 test scores) at week six and week 30 post-operatively. All neuropsychological tests were administered in a standardised manner and had normative data available. Demographic and medical information was also collected while patients were in hospital. **Results:** Examination of the demographic and medical data demonstrated that the present sample of CABG patients were representative of the general CABG population. Results from the cognitive testing showed that in comparison to estimated pre-morbid ability (using the NART) these patients were significantly impaired pre-operatively, particularly in the visuospatial and attention domains. At day six, patients continued to perform below pre-morbid levels and had actually declined further on the delayed memory and language tasks. At week six, performance was still impaired, particularly in the areas of learning, immediate memory, verbal delayed memory, processing speed and psychomotor and executive abilities. By week 30, 12 of the 22 test scores had exhibited significant improvement, with patients performing in the average range or just below in the majority of areas suggesting a near return to pre-morbid levels.

Conclusions: The findings from this study suggest that patients with severe cardiovascular disease requiring CABG surgery experience some degree of neuropsychological deterioration pre-operatively. Immediately after their operation, their functioning remains at an impaired level, and possibly worsens, but over the following months, most patients appear to show some cognitive improvement. These outcomes contradict previous research findings which have suggested that the reduction in cognitive functioning only occurs after surgery. This suggests that at least some of the cognitive impairment results from the disease process rather than it's treatment.

Co-ordinator of Training: Negotiating the triangular relationships

S. VAN SCOYOC, Board of Examiners for Counselling Psychology & A. FRANKLAND Registrar for Qualification in Counselling Psychology.

The Co-ordinator of Training for the Qualification in Counselling Psychology is participant in a triangular relationship with the trainee and the Board of Examiners (most frequently in the form of the Registrar). This workshop will explore the relationships and obligations the Co-ordinator of Training has to negotiate in order to fulfil their role in the Qualification process.

Purpose: To clarify the relationships of the Co-ordinator of Training within the Qualification in Counselling Psychology.

Outcome: To enable the participants to be more confident in their role, to enable the participants to negotiate the relationships between the exam board and the trainee.

Ten, nine, ate, seven, sicks! The effect of counting backwards and naming homophones on semantic interference during picture naming

M. VITKOVITCH & E. PYE, University of East London.

Earlier research has demonstrated that naming a word (e.g. vase) several trials before naming a related object (e.g. JUG) can result in semantic interference. Two naming experiments are reported which examine the possible causes of this interference. Both experiments use a priming paradigm, in which a word prime is presented three trials before a target picture. Participants were volunteer students from the University of East London. In Experiment 1, prime relatedness was manipulated (related versus unrelated words) as well as a prime task - half of the word prime trials required participants to count backwards after naming the prime. In Experiment 2, the prime words were homophones, which were either directly related to the picture target (e.g. sun and picture MOON), indirectly related (e.g. flour and picture LEAF), or unrelated (e.g. pear and picture KNIFE). Target picture naming latencies were analysed using ANOVA procedures. For Experiment 1, compared to unrelated conditions, related word primes slowed the naming of target pictures,

irrespective of whether the counting task was required or not. An effect of the counting task was found, however, in an episodic recall test. In Experiment 2, there was some indication that naming indirectly related homophone words resulted in semantic interference during picture naming, but only when word frequency was high. This set of results suggest that the interfering effect of a word on subsequently naming a picture is not the result of processing the word in the inter-stimulus interval, and that it may in part be due to residual activation remaining in phonological representations shared by both words and pictures.

Eyewitness testimony: The interaction effect of 'field dependence' and time of recall upon accuracy and suggestibility

N.M. WAGER & A. WILLIS, Buckinghamshire Chilterns University College.

Objectives: The vulnerable and reconstructive nature of human memory was investigated in the context of eyewitness testimony, in delayed recall. It was proposed that individual differences in cognitive style would significantly impact upon the accuracy of recall and suggestibility in relation to misleading questions.

Design: This was an experimental study employing both within and between subjects designs.

Method: An opportunistic sample of 55 undergraduate students were drawn from three distinct student populations; Technology ($N=17$), Social Science ($N=24$) and Policing ($N=14$). Field dependence/ independence status was determined by performing a median split of the number of items identified on a Witkin's (1950) Embedded Figures Test in a fixed time span of two minutes. The higher scorers were classified as field independent ($N=29$) and the lower scorers as field dependent ($N=26$). Participants were shown a short video clip and then asked to answer 10 questions designed to test the accuracy of their memory of the filmed event. Following a 50-minute delay the participants were requested to answer another set of 10 questions. Both sets of questions contained two misleading questions. Thus, both fallibility and malleability of memory were assessed.

Results: The results from a two-way mixed ANOVA revealed a main effect of time of recall upon accuracy ($F_{1,53}=7.411, p=0.009, h_2=0.123$), but no significant main effect of field dependence/ independence ($F_{1,53}=0.302, p=0.585, h_2=0.006$). Although a non-significant interaction effect was found between field dependence/independence and time of recall ($F_{1,53}=3.745, p=0.058$), the moderate effect size of the interaction ($h_2=0.066$), warns against the possibility of making a Type II error. With regard to suggestibility, the two-way mixed ANOVA did not reveal significant main effects between either time of recall ($F_{1,53}=0.354, p=0.555, h_2=0.007$) or field dependence/ independence ($F_{1,53}=1.695, p=0.199, h_2=0.031$). However, a significant interaction effect ($F_{1,53}=5.951, p=0.018$) between these two variables was found, which demonstrated a moderate effect size ($h_2=0.101$). Overall the results suggest that there might be a trend whereby field dependent individuals have considerably reduced accuracy following a 50-minute delay between event and recollection. Furthermore, whilst there is very little difference in the number of correct answers given to leading questions between field dependent and field independent participants at the immediate recall stage, delayed recall results in a deterioration of field dependent participants' resistance to the effects of leading questions over and above that of field independent participants. **Conclusion:** Whilst this is only a preliminary investigation on a relatively small group of undergraduate students, the findings may have some real world value. It is conceivable that 50 minutes is a likely duration between a witnessed event and active engagement of police officers gathering information from the witnesses. Consequently, the findings add further support to interviewing guidelines that warn of the negative consequences of using misleading questions. In particular, the study highlights that certain groups of people, by dint of their cognitive style are likely to be more suggestible.

A thematic analysis exploring the online realities and social support in breast cancer computer-mediated support groups

A. WALKER & N.S. COULSON, University of Derby.

Objectives: The primary objective of this study was to explore the online realities of living with breast cancer through employing a thematic analysis on data retrieved from two computer-mediated support groups. Based on previous research it was anticipated that psychological outcomes, coping difficulties, self-identity complications and social support would emerge as prominent themes. Furthermore specific attention was directed to techniques that were enforced when generating and providing online social support.

Design: This study undertook an Internet-based thematic analysis of postings extracted from two breast cancer computer-mediated support groups within a designated time period. Thematic analysis was deemed suitable for use within the study, as this methodology allowed systematic patterns within the data to be identified, thus enabling the formation of specific themes.

Methods: Participants were selected through an opportunity sample, however as participant's real identities were generally protected through the use of a username, demographic and social economic information became difficult to collect. Therefore, the emphasis was placed upon the participant's postings rather than the participants themselves. Approximately 1000 postings were collected and viewed. Thematic analysis was then undertaken on the data collected. Furthermore to examine the techniques used to request and offer social support the study employed a social support behavioural code.

Results: Thematic analysis produced six themes, these included social support, impact of breast cancer, coping styles, treatment dilemmas, medical issues and the aftermath of breast cancer. Each of these themes contained various related sub themes. Additionally various techniques were identified in regard to how social support was requested and provided.

Conclusions: It became apparent through thematic analysis that online social support was continually present within the breast cancer computer-mediated support groups, hence this was developed into an extensive theme. The remaining themes identified focused upon the challenges and consequences that can occur for those affected directly or indirectly by breast cancer. Despite the study's successful findings various implications arose. The chief implication concerned the use of an Internet-based sample which made generalising results problematic whilst emphasising various reliability and validity issues.

Emotional intelligence among psychology undergraduates – a competitive edge?

A. WEINBERG & A. PEARSON, Directorate of Psychology, University of Salford.

Objectives: This paper explores the potential for undergraduate psychology degrees to play a key role in providing students with an advantage in the development and use of competencies related to emotional intelligence. The development of a measure validated with undergraduate students in the UK and the findings from a comparative study of students on psychology and non-psychology programmes are presented.

Design: A between-subjects design was used to compare the levels of five main emotional competencies between a level one student cohort on a psychology undergraduate programme – which provided learning and teaching experiences in these competencies – and a cohort on an art and design undergraduate programme in their first year. The test-retest reliability and internal validity of a new scale were explored within the psychology student cohort. **Methods:** An opportunity sample of 22 first-year psychology undergraduates completed the Emotional Intelligence Self-Assessment Questionnaire at four points during their first year of studies. At the end of this year, their scores were compared with those from another level one cohort of 17 art and design undergraduates attending the same university.

Results: The test-retest reliability and internal validity of the measure were established and comparison of the mean scores between the two undergraduate cohorts revealed no overall significant difference. However, differences approaching significance showed that psychology undergraduates were better at regulating their emotions and they were less motivated by ambition. Correlation tests highlighted statistically significant relationships between gender (female) and empathy, as well as between increased age and self-regulation of emotion.

Conclusions: The psychometric properties of the measure have been supported by the data. Furthermore there is evidence to suggest that psychology students possess baseline levels of emotional competencies which could be built upon during the course of their studies to maximise their marketability in the workplace.

The effectiveness of ZT-1 and donepezil in reversing scopolamine-induced cognitive impairment in elderly volunteers

A. ZANGARA, HCNU, University of Northumbria, C. EDGAR, K. WESNES, Cognitive Drug Research, P. SCALFARO & H. PORCHET, Debiopharm SA, Switzerland.

Objectives: The Cognitive Drug Research (CDR) computerised assessment system has proven sensitivity in the scopolamine model of dementia and also to compounds designed to treat cognitive impairment in the dementia's. The aim of this study was to determine potential actions of ZT-1, a precursor of the alkaloid Huperzine A (a novel cholinesterase inhibitor), in reversing scopolamine induced cognitive and mood decrements in healthy elderly volunteers compared to Donepezil, the 'lead' drug for Alzheimer's disease.

Design: This was a double-blind, randomised, placebo and positive controlled, cross-over study of ZT-1.

Methods: In each period, 12 healthy elderly volunteers received 0.5mg subcutaneous scopolamine. CDR tasks and a self-assessed mood scale were administered to all volunteers pre- and 45 minutes post-scopolamine. The volunteers were then dosed with either placebo, ZT-1 1.0mg, ZT-1 1.5mg or donepezil 10mg. CDR tests were re-administered at 0.5, 2, 4.5 and 6 hours to determine the extent to which the treatments could reverse the scopolamine impairments.

Results: All active treatments significantly reduced the impairments produced by scopolamine. Measures of attention, working memory, episodic secondary memory, eye-hand co-ordination and self-ratings of mood confirmed benefits for ZT-1 in reducing the magnitude of the peak scopolamine impairment, and improved recovery. The recovery scores showed a significant main effect of treatment, with a statistically significant benefit for ZT-1 1.5mg over placebo. There was also more limited evidence of a benefit for ZT-1 1.0mg. Benefits of donepezil were seen on both speed and accuracy measures. Thus, ZT-1 was able to reduce the impairment produced by scopolamine in a dose-dependent fashion, the size of the reduction with the 1.5mg dose being equivalent to that of donepezil.

Conclusions: ZT-1 demonstrated superior power compared to placebo in antagonising the scopolamine-induced cognitive impairments, and was comparable in direction and often magnitude to donepezil on some measures. There were also some indication of a better recovery profile than donepezil, in terms of earlier onset, longer duration of action and greater magnitude of recovery. These data indicate further clinical research with Huperzine A and related substances, such as ZT-1, should be undertaken.

Tone, the stamp on the envelope?

B. ZENG & S. MATSYS, University of Bristol.

Objectives: Tone as a supra-segmental source of information challenges current word-recognition models. The present cross-linguistic study investigates the characteristics of tone perception in Mandarin and compares the tone processing differences between native Chinese and English speakers.

Method: In a rhyme-judgment experiment, Mandarin and English speakers heard two

consecutive monosyllables, e.g. 'dan4' – 'san3' (where the number denotes the tone level) and were asked to judge whether the two syllables rhymed or not, regardless of tonal differences. The syllables within a pair had either the same onset or a different onset (the Onset factor), e.g. 'kou4' – 'kou1', 'lou4'. Likewise, the syllables had either the same tone or a different tone (the Tone factor), e.g., 'dun4' – 'shun4', 'dun1'.

Results: Latency results showed main effects of both Onset and Tone: Rhyme judgment was faster when the onset of the two syllables was the same and when their tone was the same. Furthermore, Onset and Tone interacted, indicating that the size of the tone effect was larger in the same-onset than different-onset condition (146ms vs. 69ms). Accuracy results mimicked latencies, except that, in the same-onset condition, English speakers were more sensitive to whether the tone was the same or different than were Chinese speakers. In a subsequent tone-judgment experiment, participants were required to decide whether the tone of two consecutive syllables were the same or not, regardless of the segmental information. As before, the onset was varied (the Onset factor). The rhyme was varied as well (the Rhyme factor). The latencies showed an interaction similar to that in the first experiment, in which same-rhyme facilitation was particularly large in the same-onset condition (414ms vs. 202ms). Accuracy results showed that the rhyme effect was larger in the same-onset than different-onset condition only for English speakers.

Conclusion: These findings suggest that tonal and segmental sources of information are processed interactively in both Chinese and English groups, with onsets playing an initial role in the perception of rhyme and tone, and rhyme tending to bind with tone. In addition, Chinese speakers may separate tone and rhyme more automatically than English speakers during speech perception, which has implications for whether tonal information and segmental information are represented separately in the Chinese mental lexicon.

Independence of executive control processes involved in prospective memory and task switching

S.A. ZLOTOWITZ, S. CHANNON, S.J. GILBERT & P.W. BURGESS, University College London.

Objectives: The present study investigated the relationship between two potentially dissociable sets of executive control processes: (a) those involved in remembering to carry out an intended action in the future (i.e. 'prospective memory'); and (b) those involved in switching from one task to another (i.e. 'task switching'). In standard task switching paradigms (e.g. Rogers & Monsell, 1995), participants are provided with an external cue telling them which task to perform. By contrast, prospective memory requires self-initiated switching from an ongoing task to an intended future behaviour. Thus, we investigated whether the executive control processes involved in self-initiated switching behaviour (i.e. prospective memory) could be dissociated from those involved in externally-cued task switching.

Design & Methods: 32 undergraduate participants performed an arithmetic verification task in a 2 x 2 within-subjects factorial design, independently manipulating two factors: (a) the requirement to maintain and act upon prospective memory instructions, and thus carry out self-initiated task switches; and (b) the requirement to switch between tasks (i.e. alternating between addition and subtraction problems).

Results: Both prospective memory and task switching had reliable effects on reaction time in the arithmetic verification task. However, the effects of these two factors combined additively (i.e. there was no significant interaction).

Conclusions: These results suggest that there may be little overlap between executive control processes involved in prospective memory and those processes involved in externally cued task switching. Prospective memory may depend on self-initiated task switching, which may be more common in everyday life than the externally-cued switches conventionally studied in the task switching paradigm. The results are discussed in relation to previous neuropsychological data.

POSTERS

Themes: Cognitive, Developmental and Educational

Inclusion in Australia: What teachers say they need and what educational psychologists can offer

C.J.K. ANDERSON, South Gloucestershire Psychology Service & R.M. KLASSEN, University of Alberta, Edmonton, Alberta, Canada.

Sleep characteristics of patients attending a pain management programme

K. BROOKFIELD, S. TEDMAN, E. GHADIALI, P. MURPHY, Pain Management Programme, Department of Neuropsychology, P. CRESSWELL, Department of Clinical Neurophysiology, Walton Centre for Neurology and Neurosurgery & I. HART, Department of Neurosciences, University of Liverpool.

Alcohol-related attentional bias and problem severity is negatively correlated in problem drinkers: A new finding using the flicker paradigm for inducing change blindness

G. BRUCE, S. LIVINGSTONE, M. FRAME, A. BOYD, B.T. JONES, Psychology Department, Glasgow University & E. REED, Department of Clinical Psychology, Lothian National Health Service Trust.

Encoding of matched emotional expressions reveals repetition blindness

H. BUTTLE, Massey University, New Zealand.

The relationship between physiological measures of heart rate and electrodermal activity and self-regulation in typically developing and hard to manage pre-school children

G. CASE, Northumbria University.

Repetitive Behaviour, Sensory Processing and Weak Central Coherence in Children with Autism Spectrum Disorder

Y. CHEN, J. RODGERS & H. McCONACHIE, University of Newcastle-upon-Tyne.

Spirituality/Religion and counselling psychology: course directors' views

A. DE ACUTIS, University of Surrey.

Reasoning deficits in ecstasy (MDMA) users

J.E. FISK, C. MONTGOMERY, Liverpool John Moores University, M. WAREING & P.N. MURPHY, Edge Hill College of Higher Education.

Maintaining the status quo: The indirect influence of family and school interactions on career choice among young people

R.L. GERVAIS, University of Manchester.

The neuropsychological effects of radiotherapy in head and neck cancer patients

B.D. GOODALL, D.J. FRIZELLE, Department of Clinical Psychology, University of Hull & N. STAFFORD, Postgraduate Medical Institute.

Social support networks, loneliness and cognitive ageing

A.J. GOW, A. PATTIE, M.C. WHITEMAN & I.J. DEARY, University of Edinburgh.

Memory for rhythm, short-term memory, and phonological awareness in young children

D. HALL & S.E. GATHERCOLE, University of Durham

Cognitive and mood effects of Guarana (Paullinia cupana) and Panax Ginseng alone and in combination

C.F. HASKELL, D.O. KENNEDY, A.B. SCHOLEY, Human Cognitive Neuroscience Unit, Northumbria University & K.A. WESNES, Human Cognitive Neuroscience unit, Northumbria University & Cognitive Drug Research Ltd.

Cognitive and mood effects of caffeine and theanine alone and in combination

C.F. HASKELL, D.O. KENNEDY, A.L. MILNE, A.B. SCHOLEY, Human Cognitive Neuroscience Unit, Northumbria University & K.A. WESNES, Human Cognitive Neuroscience Unit, Northumbria University & Cognitive Drug Research Ltd.

Don't send teenagers shopping! The effects of excessive alcohol use on everyday remembering in 16 to 19-year-olds

T.M. HEFFERNAN, J. BARTHOLOMEW, Northumbria University & J. LING, University of Teesside.

Self-rated prospective memory and central executive deficits in alcohol users

T.M. HEFFERNAN, J. BARTHOLOMEW, Northumbria University & J. LING, University of Teesside.

Prospective memory deficits in ecstasy-users: A comparison of self-report and objective measures

T.M. HEFFERNAN, J. JARDINE, Northumbria University & G. BETNEY, Open University.

Common visual defects and peer victimisation in children

J. HORWOOD, A. WAYLEN, D. HERRICK, C. WILLIAMS, University of Bristol & D. WOLKER, Jacobs Foundation Williams & The Alspac Study Team.

Children and adults' processing of implausible and anomalous thematic relations during reading

H.S.S.L. JOSEPH, H.I. BLYTHE, S.J. WHITE & S.P. LIVERSEDGE, University of Durham.

Anxiolytic and mood effects of single doses of sage (Salvia officinalis) in healthy volunteers

D.O. KENNEDY, S. PACE & A.B. SCHOLEY, Human Cognitive Neuroscience Unit, Division of Psychology, Northumbria University.

Psychoactive effects of single doses of Puallinia cupana (Guarana) during intense mental demand.

D.O. KENNEDY, A. ZANGARA, C.F. HASKELL, J. REAY, A.B. SCHOLEY & S. PACE, HCNV University of Northumbria.

The use of clarification requests in negotiation between children with impaired hearing and their typically developing peers

J. LLOYD, Newman College of Higher Education, Birmingham and University of Manchester, E. LIEVEN & P. ARNOLD, University of Manchester.

The career paths of tomorrow's psychologists: Formalising the career preparation of undergraduate students through coursework

A. LOUSIOU-LADD & G. PANAYIOTOU, University of Cyprus.

Shape discrimination in rats

L. MININI, J. WATTAM-BELL & K.J. JEFFERY, University College London.

Improved psychomotor function in children following a mid-morning snack: A semi-naturalistic study

T. MULLINGER, D.O. KENNEDY & A.B. SCHOLEY, Human Cognitive Neuroscience Unit, Northumbria University.

Learning objects: A new approach to teaching observation skills

J. OATES, V.A. LEWIS & S.E. MARTIN, The Open University.

Glucose and memory function: A role for insulin?

L. OWEN, D.O. KENNEDY & A.B. SCHOLEY, Human Cognitive Neuroscience Unit, Northumbria University.

Promoting inner stillness: The value of a school-based self discovery programme designed for children with emotional behavioural difficulties

L.A. POWELL & J.H. BARLOW, Interdisciplinary Research Centre in Health, Coventry University.

Single doses of panax ginseng (G115) produce an opposing glucose response and enhance cognitive performance during sustained mental activity

J.L. REAY, D.O. KENNEDY & A.B. SCHOLEY, Human Cognitive Neuroscience Unit, Northumbria University.

The effect of panax ginseng (G115) on mood and cognitive performance following acute and sub-chronic daily dosing

J.L. REAY, D.O. KENNEDY & A.B. SCHOLEY, Human Cognitive Neuroscience Unit, Northumbria University.

I get by with a little help from my friends: An exploration of young maltreated children's development whilst engaged in pair play therapy

C.L. RUSSELL & C. PROTOGEROU, University of Bath.

Early cognitive outcome in children treated for brain tumours in comparison with matched normal controls

R. SHORTMAN, R.J. McCARTER, Frenchay Hospital Bristol, A. PENN, Frenchay Hospital, Bristol Royal Hospital for Children, University of the Witwatersrand, S. LOWIS, Bristol Royal Hospital for Children, A.L. CURRAN, Frenchay Hospital & P.M. SHARPLES, Frenchay Hospital & Bristol Royal Hospital for Children.

Long-lasting effects of MDMA on impulsivity

L. TAURAH, M. HESLIN, C. CHANDLER, London Metropolitan University & S. PAL, King's College Hospital.

The neuropsychological impact of cardiovascular disease: The functioning of patients both before and after coronary artery bypass graft surgery
S.K. VALENTINE, K. PEACE, R.B. BUNTON & P.J. DAVIS, G. McCRYSTAL, University of Otago and Dunedin Public Hospital, New Zealand.

Ten, nine, ate, seven, sick! The effect of counting backwards and naming homophones on semantic interference during picture naming

M. VITKOVITCH & E. PYE, University of East London.

The effectiveness of ZT-1 and donepezil in reversing scopolamine-induced cognitive impairment in elderly volunteers

A. ZANGARA, HCNU University of Northumbria, C. EDGAR, K. WESNES, Cognitive Drug Research, P. SCALFARO & H. PORCHET, Debiopharm SA.

Tone, the stamp on the envelope?

B. ZENG & S. MATTY, University of Bristol.

Independence of executive control processes involved in prospective memory and task switching

S.A. ZLOTOWITZ, S. CHANNON, University College London, S.J. GILBERT & P.W. BURGESS, Institute of Cognitive Neuroscience, University College London.

South West Branch Careers Convention

South West Branch Careers Convention, University of the West of England, 16 April 2005.

Postgraduate Research Oral Presentations

The lads, the tourist and the philanthropist. Men's accounts as consumers of lap dancing

S. BOOKER, University of the West of England.

The majority of critical writings about the sex industry focus on women sex workers. There are only a handful of studies examining men as consumers of the sex industry. The reasons for this are clear: men are less likely to disclose themselves as consumers of the sex industry and risk the condemnation that may bring. For this dissertation I wanted to explore the views, opinions and experiences of men who are consumers of lap dancing. I interviewed five men who self reported visiting lap dancing clubs and buying private dances from women who worked there as dancers. I also carried out an interview with the male manager of a lap dance club. The interviews were semi-structured, transcribed verbatim and analysed from a critical feminist position using critical discourse analysis. The discursive accounts provided by the men are described extensively here and subsequently unpicked in relation to social and cultural positionings. I also explore my role as a researcher/woman and the impact I believe that may have had on the interviews and the stories that the men told me.

Disentangling the Implicit Association Test: Attitudes or attitudes + extra-personal associations?

W. DEVLIN, University of Bristol.

The Implicit Association Test (IAT; Greenwald, McGhee & Schwartz, 1998) was developed as an unobtrusive measure of associative strength and has been utilised in a multitude of attitudinal research. However, recent work suggests that the IAT may be contaminated by extra-personal associations which distort its measurement of personally held attitudes. The current experiment examined differences between homosexual and heterosexual men's implicit associations with, and explicit attitudes towards homosexuality. Participants completed a traditional IAT, a personalised variant of the IAT, and a series of self-report indices of homophobia. The results support the notion that the traditional IAT taps societal associations as well as personal attitudes. Although all of the measures (both explicit and implicit) significantly differentiated between homosexual and heterosexual participants, the personalised version of the IAT provided greater differentiation than the traditional measure. In addition, the relationship between such attitude measures and implicit self-identification with homosexuals is explored.

Cross-cultural study of the psychological factors influencing young people's choice to use condoms

C.M. PROTOGEROU & J. TURNER-COBB, University of Bath.

This study aimed to identify potential psychological factors that influence young people's condom use, in different cultural cohorts (British and Greek). Two models were employed as the theoretical framework: the theory of planned behaviour (Ajzen, 1985) and the theory of time perspective (Zimbardo & Boyd, 1999). Participants were recruited from British and Greek Universities ($N=112$), and were administered two measures: a standard theory of planned behaviour (TPB) questionnaire, and the Zimbardo Time Perspective Inventory. Relationship Status (RS) was also established (i.e. exclusive or non-exclusive). Three hypotheses were generated: (1) The Time Perspective (TP) construct (future vs. present) would enhance the predictive ability of the TPB and TP might account for the 'intention-behaviour gap'; (2) The Greek sample would be more present-oriented (e.g. hedonistic), and the British sample would be more future-oriented (e.g. considerate of future outcomes); and (3) A present orientation was expected to be associated with less condom use. The results revealed an 'intention-behaviour gap'. Overall, a present orientation was associated with less condom use ($r=0.19$, $p<0.05$), but a future orientation was not associated with less condom use. The TP construct did not enhance the

predictive ability of the TPB. Interestingly, relationship status influenced condom use and moderated the intention-behaviour [$F(1,107)=7.19, p=0.008$], and the attitude-behaviour relationship [$F(1,107)=3.92, p=0.05$]. Participants in exclusive relationships reported less condom use. Cultural differences were found.

It is advocated here that Health Psychologists have placed too much emphasis on rational-cognitive variables in sexual risk research. However, the investigation of emotional, non-conscious, and contextual factors, might lead to more realistic findings and more successful sexual health campaigns.

Research: the human factor

J. ROOS & R. SHORTMAN, University of Bristol.

Research informs social and health policy, the education system, and the way we think about each other. In today's world of sophisticated science there is a strong encouragement to utilise evidence-based practice in our work. Here we examine the importance of the human factor: the essential essence of producing sound reliable research.

Three fundamental components of engaging in research are identified: (i) the moral and ethical responsibilities of the psychological researcher; (ii) who we are as participants in psychological research; and (iii) what we bring, individually as researchers in the field of social science.

Drawing on a variety of sources, the interaction of these three complex components are examined.

The question of whether we can ever really conduct value-free research in a society of autonomy and freedom of expression is contentious; important issues such as the effect of power and status on research and, the possibility that these potential confounds might be overcome by reflexivity, must be considered.

In this presentation, potential barriers and opportunities are discussed, in light of developing realistic and valuable research in the field of social science.

Cognitive Behavioural Case Management (CBCM) in first episode schizophrenia and related psychotic disorders – The Eurphrosia Pilot Study

S. SULLIVAN, Academic Unit of Psychiatry, University of Bristol.

Aim: To carry out a pilot study to test the feasibility of running a multicentre randomised controlled trial (RCT) to evaluate a manualised cognitive-behavioural treatment delivered within a therapeutic case management framework, for young people with first episode psychosis.

Background: Effective intervention in the early stages of psychosis may help to prevent the biological, psychological and social deterioration that can occur in the early years of the illness (Birchwood & Macmillan, 1983). Previous studies have evaluated multicomponent early intervention programmes (Addington *et al.*, 2003; McGorry *et al.*, 1996; Nordentoft *et al.*, 2003) but have been inconclusive since treatments given were not manualised and insufficient attention was paid to treatment fidelity. The early psychosis field now needs RCTs using more highly specified interventions, delivered in real clinical settings.

Hypothesis: The hypothesis is that the group receiving (CBCM) will report lower levels of psychopathology, better psychosocial functioning and quality of life, greater service satisfaction and be more engaged with treatment than the group receiving treatment as usual (TAU).

Method: This is a pilot study using a RCT to compare CBCM with TAU.

Results: This study has only just started and has not yet produced any results.

Welsh Branch 35th Annual Student Conference

Welsh Branch 35th Annual Student Conference, University of Glamorgan, 22 April 2005.

KEYNOTE SPEAKER

Dancing hot on Ecstasy: The neuropsychobiological implications of taking MDMA at dance clubs and raves

PROFESSOR A. PARROTT, Swansea University. MDMA 3,4-methylenedioxyamphetamine or 'Ecstasy', is a ring-substituted amphetamine derivative which is used recreationally by young people, particularly at dances and raves. Around 80 to 95 per cent of dancers/ravers report using Ecstasy/MDMA, compared to five to 15 per cent of young people in general. This paper will consider the possible contribution of stimulatory environmental conditions, to the neuropsychobiological effects of MDMA. Animal research shows that heat and crowding potentiate the acute effects of MDMA. Social interaction and intravenous drug self-administration in rats, are both enhanced when MDMA is given under hot ambient temperatures. Loud noise and physical activity also contribute to the general overarousal. Furthermore MDMA impairs homeostatic thermal control in rats, leading them to overheat in hot environments. The human implications of these findings, are that the hot, noisy and overcrowded conditions at raves, may be providing the ideal environment to heighten the acute drug response. The acute medical dangers of MDMA comprise a constellation of hyperthermia-related abreactions, which generally only occur when it has been taken in hot and crowded environments. MDMA is well established as a serotonergic neurotoxin in laboratory animals, but heat and overcrowding further increase the degree of distal axon terminal loss in rats. If this also occurs in humans, then the

stimulatory environments of clubs and raves, may heighten the likelihood of adverse neuropsychological sequelae in recreational Ecstasy/MDMA users. Other factors will also be discussed, including the potential contributory roles of other psychoactive drugs, such as cannabis, nicotine, alcohol and amphetamine.

INDIVIDUAL PAPERS

The effects of collective self-esteem and status on psychological commitment to group

G. HALL, University of Glamorgan.

For most sports fans their self-concept is also related to their identity as a supporter of a specific sport team (Wann, 1996). The Collective Self-Esteem Scale (CSES) (Luhtanen & Crocker, 1992) was evaluated as a predictor of supporter identification with their team, and their commitment to the group. Measures taken on sub-scales of the CSES (group membership, private self-esteem, public self-esteem, and identity) were correlated with a recently developed psychological commitment scale (Thomson, 2004) with four subscales (Loyalty, Attendance, Individualism, and identification). A negative correlation was found between public self-esteem and loyalty sub-scale ($R=-0.537, p<0.001$), a positive correlation was found between private self-esteem and group membership ($R=0.636, p<0.001$), and a positive correlation was found between group membership and attendance ($R=0.695, p<0.001$). Correlations suggested a strong link between attitudinal factors that contribute being a supporter with actual behavioural responses of the supporters. Results also suggest supporters gain some perceived identity value from being associated to their team but this is displaced in response to identity threat although commitment remained the same. Results will be discussed in

terms of identity theories links with self-esteem, status, and commitment within social groups.

Paranormal beliefs, reasoning ability and scientific education: An exploration of the cognitive deficits hypothesis

E. KRISTIN ANDERSSON, University of Glamorgan.

This study aimed to investigate the negative relationship between paranormal belief and reasoning ability observed in the literature (e.g. Blackmore & Troscianko, 1985; Brugger *et al.*, 1990). Belief in the paranormal, education and task content was proposed to influence reasoning performance on a conditional reasoning task and a scientific reasoning task. In a sample of 91 science and non-science undergraduates, no support was found for the predictions. Science-students tended to perform better on scientific reasoning but not conditional reasoning. Non-believers performed better on conditional reasoning but were less critical than believers on the scientific reasoning task. No content effects were found in either of the reasoning tasks. The findings may be explained by limitations in the method such as task difficulty, belief measure used and experimenter effects. In addition, the findings may question the cognitive deficits hypothesis.

How individuals manage identity representation with perceived threat: A qualitative study using both sports team and non-sports team members

P. NASH, University of Glamorgan.

This investigation aimed to assess the attitudes held by individuals and the identity management strategies they used when they perceived a threat to their identity. Based on social identity theory (Tajfel & Turner 1986) this investigation posited

that sports groups would have beliefs, values and attitudes that are more explicitly evident than non-sports groups and would thus use different strategies to manage identity. The participants were three males and three females from the University of Glamorgan rugby team and three males and three females not from the rugby teams. The investigation was a one-to-one semi-structured interview focusing on team and social identification and prevailing attitudes towards measures of diversity. Potter's discursive discourse analysis was used to analyse the interviews. Four themes were identified (direct experience, locus of identification, task vs. social dichotomy, and progression) with three strategies implemented to manage identity (tokenism, use of specific examples, and appeal to 'other'). Gender differences in sports team context was illustrated as well as differences between sports team and non-sports team members. The central theme arising was the importance of identification as part of identity and also in predicting the use of management strategies to protect shared group interests.

Are you a good liar: An investigation to explore the personality variables associated with lying success

J. NICHOLLS, University of Glamorgan.

This was an exploratory study to examine personality variables associated with lying success. Existing research on the notion of deception was consulted and consequently this study took the perspective that deception is a social skill and that this skill develops as social competence increases. Self-monitoring was chosen as a measure of investigating this social skill; as it is about the control of automatic behaviour and self-presentation. The study took on a qualitative approach, cueing individuals to really think about specific situations. A strategic advantage should be seen in the high self-monitoring group. Thirty undergraduates (attending Glamorgan University) were given a questionnaire, in which they had to complete an adaptation of Snyder's (1974) self-monitoring scale and provide truthful and deceptive responses in four hypothetical situations: two low and two high-stake (a replica of those used in Lakhani & Taylor, 2003). A thematic analysis revealed four prevalent themes: level of detail, attribution of responsibility, distraction/deflection and self-presentation. These were used differently by low and high self-monitors and in the low- and high-stake situations. Results were discussed in terms of the role of emotion in deception and the cues involved, and then related to the construct of self-monitoring.

Antisocial adolescents and their ability for deception

L. PYE, University of Glamorgan.

The feedback hypothesis suggests that certain groups in society may have regular feedback from deception due to their involvement in crime, that enhances their awareness and ability to detect lies (Granhaag *et al.*, 2004; Hartwig *et al.*, 2004). Antisocial adolescents were compared to prosocial controls using a within subjects design. Their ability to lie was considered, analysing non-verbal content, (Vrij, 04), and also verbal content with Reality Monitoring (Undeutsch, 1967; Johnson & Raye, 1981). Detection ability was examined for accuracy, cues and confidence, using stimulus videoclips containing prosocial and antisocial actors. Results indicated changes in leg, distracter and trunk movements, visual details and voice pitch within groups, and differences in leg movements, visual details, auditory details and voice pitch between groups, yet no improved accuracy in detection, suggesting the feedback hypothesis is not supported. Accuracy rates improved to 77 per cent when the prosocial judges viewed prosocial actors.

Does stress affect mood and health related behaviours?

K. SAUNDERS, University of Glamorgan.

Research suggests stress can increase unhealthy behaviours, decrease healthy behaviours and cause deterioration in mood. Other research suggests there is no relationship between stress and health

related behaviours. The present study investigated this phenomenon. Students completed questionnaires at a low stress time and at a high stress time to assess whether there were any changes in mood and health related behaviours as participants moved from one time to the other. However, a longitudinal study found there was 'no significant differences' in perceived stress between the anticipated high stress and low stress times. A cross-sectional analysis compared those high in perceived stress and low in perceived stress and found 'no significant differences' in cigarette smoking, sleep patterns or exercise. There was a 'significant difference' in alcohol consumption, with those lower in perceived stress consuming more alcohol than those high in perceived stress. Significant cross-sectional differences in mood were found with the high stress group reporting a more negative mood.

Mirror, mirror ... body image across the lifespan. A reflection of society?

K. SHORD, University of Glamorgan.

This study examined the brief effect of viewing magazine photographs of attractive models on a female's body image, compared to landscapes. A sample of 60 females aged 12 to 75, split into three age groups, completed body image satisfaction questionnaires, before and after viewing the photographs, with a larger change in scores indicating less body image satisfaction. The results were that the youngest group in the experimental condition had a lower body image after viewing the images. The hypothesis was not supported. This study also content analysed qualitative data relating to media influence on body image. Participants consistently cited age appropriate role models. Provides support for the role of social comparison, in the development of body image, particularly for the adolescent.

Space or space-time representation

P. STYRKOWIEC, University of Glamorgan.

Navigation through any space always takes time. Very often people use a measure of time taken for movement for judging a distance. The aim of this research was to investigate whether there is a link between spatial representations and time information processing, i.e. do humans use time in their spatial behaviour. The experiment used spatial orientation task (quadrangle completion) in a virtual environment with different speed conditions as a method of providing different time conditions while navigating. Accuracy of performance was measured. Results showed no difference in performance in different time conditions. In particular performance was not impaired when speed of navigation was varied (vs. constant speed) these results are discussed in terms of spatial representations, time representations and path integration model. Implications for further investigation are provided.

The effectiveness of practice in playful and formal conditions

L. THOMAS, University of Glamorgan.

Play is seen by many theorists as an important element of development. Without learning through play Bruner (1972) believed children would be unable to achieve their full potential. There is little empirical support for the relationship between play and learning. This study investigates the relationship between play and the effectiveness of practice using a problem solving task (Jigsaw puzzles) under formal and playful conditions. Children aged three to seven years (mean age 4.6 years) participated in this study. This procedure has four stages: (1) initial time taken to complete test puzzle; (2) use of the test puzzle and others in either condition; (3) immediately timed on test puzzle; and (4) timed on test puzzle a week later. The results demonstrate that practice is significantly improved under playful conditions both at immediate post test and a week later.

'Like a fine wine we improve with age' – does age impact on the reliability of an eyewitness testimony and do self-reported confidence scores correlate with accurate accounts?

N. TRYSKA, University of Glamorgan.

Previous research has highlighted some of the problems associated with eyewitness testimony, in particular the reliability of the witness accounts. The focus of this study is to determine whether age has an effect on the accuracy of a witness's ability to recall an event and if confidence is a predictor of accuracy. Participants were exposed to a film clip and presented with three questionnaires over a period of a month. The percentage of accurate recall and the mean reported confidence levels suggested that the older participants showed a significant decrease in accuracy of recall. In addition, confidence levels were shown to decrease over time and within subjects. A significant correlation was established between the confidence of participants in their own recall and the actual accuracy of their recall. Results suggest that the elderly are not reliable witnesses and, therefore, their credibility in court is undermined. However, individual cases suggest that this cannot be generalised, in some cases elderly participants performed significantly better than younger ones. Future research should develop a system that accurately predicts what makes a witness credible, both to prevent further misidentification of innocents and also to give all witnesses a fair trial without discrimination and prejudice.

POSTERS

Patriotism and intergroup discrimination

N. McANDREW & S. MANFIELD, University of Glamorgan.

Influenced by studies from Hunter (2003) on intergroup discrimination and self-esteem in Australia/New Zealand and Schwioren *et al.* (2002) on national discrimination in Denmark/Germany a study of national discrimination was conducted, relevant to the English/Welsh nations considering the influence of social identity and proximity to the border, predicting that both factors would significantly predict discrimination and that a direct relationship would exist between identity and discrimination. Questionnaires measuring identity and discrimination using a Likert scale were given to 168 students in three universities, finding a direct relationship between identity and discrimination in the Welsh, but not the English. Also identity was a predictor of discrimination in the Welsh, but not the English. Proximity, however, was not significant for either nation.

The effect of 12-minute periods of relaxation juggling or step-ups on speed and accuracy

M. NEWTON-HILL, University of Glamorgan.

The purpose of the present study was to measure the effect of a short bout of intense exercise on cognitive functioning and arousal. A repeated measures pre-test/post-test design randomly assigned participants ($N=36$) to experience, five minutes of relaxation, juggling and step-ups. Tests of mathematical ability were used to assess cognitive function and heart-rate measurements were used to assess arousal. Separate MANOVA of both data sets failed to provide significant results, as did a correlation of data for mathematical ability and heart-rate. A correlation of mathematical ability and heart-rate for step-ups indicated a strong negative relationship between the measures ($F=-0.352$, $p<0.05$) and a significant effect of step-ups was evident for mathematical ability (Mann-Whitney $U=64.500$, $p<0.05$). With regard to the effect of conditional manipulations on arousal, a paired-samples t -test for relaxation data showed significance ($t=2.471$, $p<0.05$). None of the experimental hypotheses were confirmed. However, further analyses identified counterintuitive trends and these could, if supported by future research, be usefully applied to educational institutions to improve academic achievement.

Facing the Truth: The relationship between macro and micro-facial expression recognition and confidence with lie-detection accuracy

J. PLOWMAN, M. KHAN & H. STRAITON,
University of Glamorgan.

A mixed-design correlational study was conducted in order to examine the relationship between two between-subjects predictor variables, macro and micro-expression recognition, and the within-subjects predictor variable of confidence ratings with the criterion variable of lie-detection accuracy. Thus three hypotheses were generated. H1: Confidence will not be significantly related to lie-detection accuracy, consistent with past research. H2: Micro-expression recognition, simulated by eye-blinks as per Ekman's guidelines (2003) will be significantly related to lie-detection accuracy as indicated by past research. Related to this, this study also examined the novel hypothesis that micro-expression recognition must be built on macro-expression recognition, and thus macro-expression recognition will be significantly correlated with lie-detection accuracy (H3). Our study did not find support for H2 or H3. H1 was supported. Our findings suggest that macro and micro expression recognition may be mediated by different cognitive and perceptual processes comparable to implicit and explicit lie-detection.

Rule learning and moral development in young children

K. THOMAS & B. ELIAS, University of Glamorgan.

When children enter school one objective from the early years curriculum states they must understand what is right, what is wrong and why (QCA, 2003). Stern and Peterson (1999) found with increasing age children are more likely to recognise negative consequences associated with moral misconduct. This study explores rule learning and moral development in young children examining differences between knowing and understanding rules and whether these are gender or age orientated. Four- and five-year-old children identified and gave moral-based responses to a picture book depicting commonly enforced rules. Results indicated interactions between gender and age revealing children aged five were significantly more moral than children aged four suggesting important developmental changes in rule learning and morality within the early years.

Northern Ireland Branch Annual Conference

*Northern Ireland Branch Annual Conference,
Portrush, 22-24 April 2005.*

INVITED SPEAKER

Capacity: From Client to Commons

G. POWELL, President, The British Psychological Society

Since at least 1998 the BPS has been submitting evidence to the Commons on how to make decisions on behalf of people who cannot make decisions for themselves, resulting in the Draft Mental Incapacity Bill of 2002. Also in 2002 there was an important test case on capacity, which gave rise to the 'Masterman-Lister criteria'. The precedents created in the Masterman-Lister case and the responses to the Draft Incapacity Bill contributed to the new Mental Capacity Bill which successfully passed through the Commons in April 2005. This paper describes some of the evidence on capacity presented on the client and to the Commons.

SYMPOSIA

Symposium: Exploring the many facets of identity in Northern Ireland

Convenor & Chair: C. STEVENSON,
Queen's University Belfast.

Background: Since the initial application of the Social Identity framework to the conflict in Northern Ireland the concept of identity has remained central to the explanation of intergroup perceptions and behaviour in this area. As intergroup relations here have unfolded and developed, so too have psychological understandings of identity processes and the various ways in which they can be studied. **Aims:** This symposium aims to bring together a range of current theoretical perspectives and methodological approaches to identity in Northern Ireland with a view to reappraising the enduring explanatory utility of the concept.

Main Contributions & Conclusions: In the opening paper McLaughlin examines young respondents accounts of their identities and of the process of socialisation. Using qualitative methods, she examines how the psychological boundaries of division and exclusion map onto the geographical proximity to the physical division of the border. Schmid also focuses on identities on both sides of the border, but adopts a quantitative approach in

her examination of large-scale survey of people's experiences of the conflict. Elucidating the relations between the different aspects of collective identity, she points to the centrality of the perception of threat to the processes of identification. Stevenson returns to a qualitative perspective examining the construction of identity in the speeches of the Orange Order. He asks if the longstanding issue of whether each of the communities in Northern Ireland 'is' a minority or a majority might be better viewed as question of 'when and how' status is invoked by group members. Schermbucker closes the symposium with a review of the various dimensions of identity that have recently come to the fore in broader Social Identity research. He examines how research has employed the chronic-acute, implicit-explicit and emotional-cognitive distinctions in studying identity processes and reviews the implications for the understanding of identities in Northern Ireland.

Young people's experiences of identity in border towns of Northern Ireland

K. McLAUGHLIN, O. MULDOON & K. TREW,
Queen's University Belfast.

Background: Whilst there has been much research into ethnic divisions within Northern Ireland a broad understanding of young people's identity has yet to be reached.

Aims: To explore young people's experiences of identity and to examine the way in which geographical proximity to the border might influence experiences and perceptions of identity.

Method: Essay questions were administered to 261 young people aged between 14 and 16 years old living in the border area of Northern Ireland. Data was analysed following the principles of Grounded Theory (Glaser & Strauss, 1967).

Results: Socialisation practices ranged from parents encouraging their children to develop their own opinions concerning their identity, to not permitting them to interact with individuals from the other community. The research also revealed the array of meanings young people attach to their identities ranging from culture and sport, to Governmental policies and folklore.

Conclusions: The paper concludes by highlighting the need for more inclusive identities rather than the exclusive identities that are still largely prevalent.

The changing nature of social identities in psychological research

I. SCHERMBUCKER, Queen's University Belfast.

Background: The original conception of the social identity, established by Tajfel, was necessarily a simplification of a complex aspect of human nature. In recent years psychologists have moved away from this original conception to broaden the definition of the social identity, and to explore new perspectives from which this construct can be viewed.

Aims: To provide a brief overview of recent research into various aspects of social identities.

Main Contribution: To examine research on chronic and acute aspects of social identities, implicit and explicit manifestations of social identity processes and research on cognitive and emotional aspects of social identities.

Conclusions: That the study of social identities is at a very early stage, and that there is a need for broadening our conceptions of the nature of social identities if we are to fully characterise their complexity.

Perceived identity threat and collective identity: A cross-border comparison

K. SCHMID, Queen's University Belfast.

Background: While collective identity has long been found to play a pivotal role in the Northern Ireland conflict, less research to date has focused on the underlying role of perceived identity threat.

Aims: This paper explores perceptions of identity threat and collective identity in view of people's experience of the Northern Ireland conflict, both sides of the border.

Method: A telephone survey was administered to 3000 respondents' representative of Northern Ireland and the border counties in Ireland, and included measures of perceived identity threat, self-categorised national identity, prototypicality, self-evaluation, importance, values and experience of conflict.

Results: Results highlight the relationship between perceived identity threat and collective identity, as well as between the different dimensions of identity and experience of conflict.

Conclusions: Findings of the study highlight the relative importance of perceived identity threat in Northern Ireland and point to the need for inclusion in the social-psychological literature.

The minority-majority conundrum in Northern Ireland: An Orange perspective

C. STEVENSON, Queen's University Belfast.

Background: Social Identity research has faced longstanding difficulties in establishing the 'minority' or 'majority' status of each community in Northern Ireland. This has been further complicated by a predominant focus on the student population rather than groups more central to the conflict.

Aims: The present research examines the strategic deployment of identities in speeches delivered by the Orange Order.

Method: Recordings of speeches delivered from the Belfast 12th July platform from 1993–1998 and 2000–2004 were transcribed and analysed from a 'discursive' perspective.

Results: Speakers flexibly use status to describe intergroup relations, though this differs according to the political or religious ideology being invoked. **Conclusions:** In these speeches, status and ideology are demonstrably 'identity-resources' rather than determinants of behaviour. Thus, constructions of intergroup relations in Northern Ireland can be viewed as a bid for the 'symbolic power' to define the conflict to the ingroup's advantage rather than being simply a product of their status.

Symposium: Experiences of growing up Irish

Convenor & Chair: C.A. LEWIS, University of Ulster at Magee College.

Background: The experiences of young people in Ireland are currently under-researched by psychology.

Aims: The symposium contained six empirical papers that examined some of the experiences of young people growing up in Ireland.

Main Contribution: In paper one, Quinn and Lewis examined the prevalence of worries. In paper two, Feeney, Cruise, and Lewis investigated some of the contemporary role models. In paper three, Quinn and Lewis attempted to measure self-objectification among young adolescents. In paper four, Mullan and Lewis examined the role of various groups of adults on shaping adolescents' values. In paper five, Houston examined the relationship of bullying behaviour to age, sex, and personality. Finally, in paper six, McGuckin and Lewis examined the relationship between a wide range of bullying behaviours and personality measures.

Conclusions: This symposium attests to the breadth of ongoing research concerned with young people growing up in Ireland.

How much Irish adolescents worry? Prevalence rates on four measures

H.J. QUINN & C.A. LEWIS, University of Ulster at Magee College.

Background: Despite an extensive international literature examining children's worries, no comparable work has been undertaken in Ireland.

Aims: The aim of the present study was to examine prevalence of worries of Irish school children using four commonly used measures of worry.

Method: 450 Irish 11- to 16-year-olds completed the Kelly's Worry Index, the Student Worry Questionnaire, the Penn State Worry Questionnaire for Children, and the Worry Domains Questionnaire.

Results: The prevalence data indicated that the sample had comparable levels of worry in line with the international literature. In addition, there was a decrease in the prevalence of worry with greater age, and females expressed more worries than males. There was strong positive association between each of the measures of worry.

Conclusions: The present study demonstrated the prevalence of worries among a sample of Irish school children, and located these within the international literature.

Who appeals to Northern Irish adolescents?

L.M. FEENEY, S.M. CRUISE & C.A. LEWIS, University of Ulster at Magee College.

Background: There is a growing interest in celebrity adoration, especially the appeal of celebrity figures in media entertainment and popular culture. The adoration of celebrities is potentially of interest to both practitioners and

researchers in Northern Ireland; as such individuals may have cross-community appeal, they hence may facilitate cross-community contact among young people.

Aims: The present aims were first, to measure the appeal of various celebrities idolised among a sample of Northern Irish adolescents, and second, to examine how much commonality there was between Catholic and Protestant respondents.

Method: Catholic and Protestant adolescents completed both qualitative and quantitative measures of celebrity adoration.

Results: A high level of celebrity adoration was found, and there was a great deal of overlap between Catholic and Protestant adolescents in the appeal of those celebrities idolised.

Conclusion: Cross-community contact among Northern Irish adolescents may be facilitated when centred on shared interest in celebrities.

Measures of self-objectification among younger Northern Irish adolescents: Revision of two popular measures

B. QUINN & C.A. LEWIS, University of Ulster at Magee College.

Background: There has been little attempt to look at the assessment of self-objectification among young samples. In part, this is because there are no suitable self-report measures for use among younger people (Quinn & Lewis, 2004).

Aims: To develop junior versions of the Self-Objectification Questionnaire (Fredrickson & Roberts, 1997) and the Objectified Body Consciousness Scale (McKinley & Hyde, 1996) for use among younger adolescents.

Method: 11- to 13-year-old Northern Irish adolescents completed a revised version of the Self-Objectification Questionnaire where the scoring was changed from ranking to Likert type scoring, and a revised version of the Objectified Body Consciousness Scale where a number of items were depersonalised and rephrased.

Results: Data suggest that both these measures, in their revised forms, were more suitable for use among younger adolescents, than the original measures.

Conclusions: Implications of this study are discussed and suggestions for future research are proposed.

Who plays a part in shaping adolescents' values? A study among 15- to 16-year-olds in Northern Ireland

M. MULLAN & C.A. LEWIS, University of Ulster at Magee College.

Background: There is growing interest in trying to understand what factors may impact on the shaping of adolescents' values.

Aims: The present study empirically examined the role that adults may have in shaping adolescents' values.

Method: Over 2100 15- to 16-year-olds in Northern Ireland completed measures of values, alongside questions about the opinions of others, including various groups of adults, they valued.

Results: The data demonstrates that the opinions of parents were most valued, followed by friends, peers, grandparents, teachers, and church leaders. In contrast celebrities held little influence with the sample.

Conclusion: The present data demonstrate the importance of parents as role models in the life of children. Moreover, they also suggest the influence of friends, peers, is considerable, and that of other adults is relatively unimportant, and the influence of celebrities is minimal.

Bullying behaviours in two post-primary schools in Northern Ireland: A study of age, gender and personality

J.E. HOUSTON, University of Ulster at Magee College.

Background: The Department of Education for Northern Ireland has reported that 30 per cent of post-primary pupils had recently been bullied, and 28 per cent had recently bullied another pupil.

Aims: To examine bullying behaviours with regard to age, gender, and personality.

Method: An opportunistic sample of 135 pupils from years 8, 9, and 10 were asked questions

regarding their experiences of bullying at school, as well as questions measuring the Eysenckian personality dimensions of Psychoticism, Neuroticism, and Extraversion.

Results: Findings indicated that boys were significantly more likely to bully than girls, and year 8 pupils were significantly more likely to be bullied than year 9. With regard to personality, bully/victims scored significantly higher on Extraversion than the 'neither' group, as well as significantly higher than 'victims' on Neuroticism. **Conclusions:** Results are consistent with previous research, with the exception of personality, and are discussed in terms of limitations and ideas for further research.

'Who's the psycho?' Personality profiles of children involved in bully/victim problems

C. MCGUCKIN, Dublin Business School & C.A. LEWIS, University of Ulster at Magee College.

Background: Relatively little of the prevention/intervention literature has focused upon building personality profiles of those children directly involved in bully/victim problems as either a bully, a victim, or as a bully/victim. Knowledge of the personality profiles of these actor groups would enable the development of bespoke prevention/intervention programs that could better help these children develop more positive peer interactions.

Aims: To explore the personality profiles of pupils categorised as bullies, victims, or bully/victims.

Method: 7000 Northern Irish primary and post-primary school pupils completed the seven most popular bully/victim instruments and four leading personality measures.

Results: Whilst consistent patterns were often uncovered between a number of the bully/victim instruments utilised and each of the personality instruments utilised, no consistent pattern emerged across all of these personality measures.

Conclusions: These findings highlight the value of exploring the personality profiles of those pupils directly involved in bully/victim problems.

WORKSHOP

Publishing and disseminating research

Chair & Discussant: D. HANNA, Queen's University Belfast.

N. SHEEHY, Queen's University Belfast; C.A. LEWIS, University of Ulster at Magee College.

Findings have always been an important part of academic life. Increasingly, however, publications are viewed as essential to survival in academia. This workshop introduced postgraduates to the variety of issues that arise when attempting to secure publication in peer reviewed journals. The two presentations in the session covered a range of issues related to publication. In the first presentation, Noel Sheehy, Co-editor of *Current Psychology* outlined the publication process, the peer review process and factors that increase the favourability of editors' views when they are considering submitted manuscripts. In the second presentation, Christopher Alan Lewis, Co-editor of *Mental Health, Religion and Culture*, outlined strategies for securing publication, how best to respond to reviewers' comments, and outlined some of the wider issues potential authors should consider when submitting a journal article. He also outlined the value and limitations of Journal Citation Reports. The workshop concluded with a question and answer session.

INDIVIDUAL PAPERS AND POSTERS

Mental health and psychosocial well-being in a student population

B. AYLWARD & S. MCGILLOWAY, NUI Maynooth, Ireland.

Background: There has been growing concern about the progressive increase in the number and severity of mental health problems amongst students.

Aims: The aims of this study were to assess the mental health status, psychosocial functioning, self-esteem and alcohol abuse in a student sample and to identify potentially contributory factors.
Method: Currently, 108 participants (18 to 25 years) have been recruited from the student population of two urban- and rural-based universities. Participants completed: a Background Questionnaire; the Multidimensional Health Profile-Psychosocial Functioning (MHP-P); the GHQ-12; the CAGE; and the Rosenberg Self-Esteem Scale.
Results: Preliminary findings indicate that 14 per cent of students have/had a mental health problem whilst the same proportion was unsure about their mental health status. Almost half (46/108) were identified as 'cases' on the GHQ-12, whilst a similar proportion obtained scores on the MHP-P suggestive of mental health problems.
Conclusion: The findings, to date, suggest alarmingly high levels of mental ill health amongst students which has important implications for university support services and for academic staff. Further analysis will consider the influence of background factors and undertake relevant sub-group comparisons.

The role of emotional intelligence in speech anxiety and self-focused attention

M. BARKLEY & M. McRORIE, Queen's University Belfast.

Background: Claims made about the influence of Emotional Intelligence (EI) on personal and social functioning remain, to some extent, untested.
Aims: This study examines the claim that high EI scorers are better able to manage negative affect, in this instance speech anxiety, than low EI scorers.
Method: EI and speech anxiety measures were administered. Focus of attention was manipulated during a speech task in a non-clinical sample of 30 pairs of undergraduates.
Results: As hypothesised, a negative correlation was observed between EI and speech anxiety. Focus of attention was found to increase anxiety, however, no relationship was found between EI and self-focus.
Conclusions: Results suggest that high EI may play a protective role against speech anxiety. Self-focused attention appears to play a causal role in exacerbating speech anxiety. However, no support was found for a relationship between EI and self-focused attention, surprising given EI is proposed as a set of emotional cognitive abilities.

Stress and social support in traditional and non-traditional students

H. BRAIDEN & K. TREW, Queen's University Belfast.

Background: Many college students find the academic experience stressful, however for non-traditional students combining both student and parenting roles may lead to additional stress. The stress buffering hypothesis suggests that high levels of social support may be protective against stress.
Aims: To examine differences in stress and social support experienced by traditional and non-traditional students.
Method: 76 non-traditional students, i.e. students and parents simultaneously and 73 traditional students completed a postal questionnaire containing The Perceived Stress Scale (Cohen *et al.*, 1983) and the Short Form Social Support Questionnaire (Sarason *et al.*, 1983).
Results: Non-traditional students have significantly higher levels of stress and lower levels of social support and satisfaction with social support than traditional students. Regression analyses indicated that the main predicting factor of stress for non-traditional students is satisfaction with social support, whereas for traditional students it is gender and satisfaction.
Conclusions: Implications for future research will be discussed.

Manipulating relative motion information during modelling to assess its role in the acquisition of co-ordination

G. BRESLIN, Queen's University Belfast, N.J. HODGES, University of British Columbia, A.M. WILLIAMS, Liverpool John Moores University & Florida State University, W. CURRAN & J. KREMER, Queen's University Belfast.

Background: It has been claimed that relative motion (RM) information constrains the acquisition of co-ordination during modelling. This hypothesis was assessed in three separate experiments.
Aims: The aim was to identify the specific perceptual information used to guide observational learning of a cricket bowling task.
Method: Several visual manipulations were made in order to highlight, isolate or remove between- and within-limb RM. The time frame for presentation of this information was also manipulated.
Results: Analyses of kinematics (i.e. co-ordination and control features), outcome scores and gaze behaviours reveal that participants focus on the end-effector rather than on whole-body RM *per se*, as indicated through accurate replication of the bowling arm over and above other movement features (such as between-limb co-ordination).
Conclusions: Learners adopt a local and somewhat restricted perception-reproduction strategy in order to reproduce the action while attaining outcome success. It may be that the specific RM co-ordination pattern between the limbs (i.e. the arms) emerges through practice as opposed to being specified *a priori* through perceptual information.

A psychometric evaluation of prayer measures

M.J. BRESLIN & C.A. LEWIS, University of Ulster at Magee College.

Background: Although prayer is the most often practiced form of religiosity (Meisenhelder & Chandler, 2000), its use in scientific research has often been employed as a background variable, a single item question on frequency. More recently however, multi-dimensional measures of prayer have emerged.
Aims: To conduct an empirical psychometric evaluation of existent prayer measures, and to investigate respondents' prayer type and to whom they pray.
Method: 452 respondents, ranging in age from 13 to 85, from the Republic of Ireland and Northern Ireland, completed 14 instruments designed to measure various aspects of prayer activity.
Results: Although reliability of all measures was satisfactory, hypothesised factor structures failed to emerge. Petitionary prayer was engaged in most frequently. Thanksgiving prayer was perceived to be most important. A dead relative was the third most frequently prayed to 'divine being', with Jesus and God prayed to most frequently.
Conclusions: There is benefit in the development of a single multi-dimensional measure of prayer that is psychometrically robust, which incorporates most aspects of existing measures.

In-group bias among adolescents: The role of in-group identity, cross-group contact and segregation

A. CAMPBELL, E. CAIRNS & J. MALLETT, University of Ulster at Coleraine.

Background: There remains a lack of consensus concerning the relation of in-group and out-group affect. This ambiguity has recently been noted in the developmental literature.
Aims: The present study set out to examine the relation between in-group and out-group affect among adolescents and subsequently explore the role of in-group identity, cross-group contact, desired segregation and socioeconomic status in in-group bias.
Method: The study involved secondary analysis of data from the Northern Ireland Young Life & Times survey 2003. Nine-hundred-and-two 16-year-old children participated in the survey.
Results: The results were consistent with previous research on adults suggesting a modest but positive correlation between in-group and

out-group affect. This relationship was also moderated by strength of in-group identity. Further analysis revealed that in-group identity, cross-group contact and desire for segregation were significant predictors of in-group bias.
Conclusions: The limitations and usefulness of the study will be discussed, as will the implications for further investigations.

Social inclusion: Undergraduate attitudes towards employment in the Northern Ireland Civil Service

N. CARRAGHER, T. CAMMOCK, University of Ulster at Jordanstown & G. PRENTICE, Dublin Business School.

Background: The Northern Ireland Civil Service (NICS), a major employer, has reported partially favourable fair participation data and stressed its continuing commitment to promoting equality of opportunity.
Aims: Using the extended theory of planned behaviour (ETPB) to identify issues for affirmative action, the study investigated gender, religion and verbal intelligence differences in respect of students' intentions to apply for NICS posts.
Method: 618 students completed the Grammatical Reasoning Test and an ETPB questionnaire.
Results: The ETPB direct components accounted for 50 per cent of the variation in intention. ANOVAs, utilising gender, religion and verbal intelligence as predictor variables and ETPB direct measure components as criterion variables, revealed only one significant difference indicating more favourable female evaluation of NICS employment outcomes. Overall, the participants were unimpressed with NICS employment outcomes and were indifferent to applying.
Conclusions: The NICS may have successfully consigned its problem of social inclusion to history, but it lacks appeal as a potential employer.

Exploring emotionally coloured discourse

C. COX & R. COWIE, Queen's University Belfast.

Background: Emotion plays a significant part in human interaction. Thus far, most research addressing the effects of emotion on interaction, particularly speech, have used actors to generate samples of emotional data to study. It has, however, become apparent that research applications based on acted material do not transfer to natural speech.
Aims: In response to this, the HUMAINE team at QUB are developing a 'Sensitive Artificial Listener', SAL. SAL is modelled on an ELIZA scenario.
Main Contribution: The user interacts or 'converses' with a computer simulation consisting of four characters. The object is to capture a broad spectrum of day to day emotional states, expressed in 'emotionally coloured discourse' (ECD) likely to be displayed in everyday conversation, rather than the classical approach which emphasised data collection of episodic emotion, e.g. fear, anger, joy, etc.
Conclusions: The SAL approach has been used to generate audio-visual databases involving 20 speakers, totalling approximately nine hours of discourse.

No sex (differences) please – we're Irish!: The role of gender orientation in self-estimated intelligence

S.M. CRUISE & C.A. LEWIS, University of Ulster at Magee College.

Background: It has been suggested that observed sex differences in self-estimated intelligence may reflect gender orientation differences. However, limited results have been conflicting.
Aims: To examine sex differences in self-estimation of intelligence, and to assess the role of gender orientation, in a sample of Irish adolescents.
Method: 253 secondary students completed measures of self-estimated intelligence and gender orientation (Personal Attributes Questionnaire).
Results: Significant sex differences were confined to females who rated themselves higher in body-kinesthetic and interpersonal intelligence. Significant differences were observed between gender orientation groups, with masculine and androgynous participants scoring higher in the majority of intelligences. Higher ratings by

feminine participants were confined to female domains of intelligence.

Conclusions: Contrary to previous research, these results indicate that males do not always rate themselves significantly higher in intelligence. Additionally, these findings further highlight the role of gender orientation, especially in ratings of male and female domains of intelligence.

Does similarity of accent, gender and location influence empathetic concern, helping and blaming behaviour

S. DOHERTY, University of Ulster at Magee College.

Background: Little attention has been given to the influences of similarity of gender, accent, or location on the processes of helping and blaming, especially in the area of psychophysiology.

Aim: To investigate these processes, by examining levels of GSR in students.

Method: Students listened to stressful event and completed the Helping Attitude Scale and Victim/Attacker Abuse Scales. High GSR was indicative of empathetic rather than distress reactions. Accents and locations were manipulated. **Results:** Attacker blame demonstrated two significant interactions of gender/accent and gender/location. Victim blame showed a main effect of location. Helping behaviour yielded a significant main effect in favour of females. Although males were more physiologically aroused than females for Belfast pub victim, they self-reported less empathy; the reverse was so for females.

Conclusions: Further research is needed to explain the precise role that GSR plays in helping behaviour, emotional expressiveness and regulation.

The detection of dissociative identity disorder by Northern Irish clinical psychologists and psychiatrists: A clinical vignettes study

M.J. DORAHY, N&WBHSST & Queen's University Belfast, C.A. LEWIS, University of Ulster at Magee College & C. MULHOLLAND, Queen's University Belfast.

Background: Previous work has found that while most Northern Irish psychiatrists and practicing psychologists believe in the existence of Dissociative Identity Disorder (DID), they generally view the condition as rare, with iatrogenesis and misdiagnosis accounting for recent increases in prevalence rates.

Aims: To assess whether Northern Irish clinicians could accurately detect DID when presented in clinical vignettes.

Method: Northern Irish clinical psychologists ($N=27$) and psychiatrists ($N=29$) completed three clinical vignettes which consequently presented more characteristic and discriminating symptoms of DID.

Results: Psychiatrists and clinical psychologists were better able to detect DID when discriminating and characteristic symptoms were present.

However, the majority of clinicians still failed to diagnose DID as the most likely condition in a clear-cut case.

Conclusions: The lack of DID information given to clinical psychologists and psychiatrists during training is considered a central problem in the failure to accurately detect cases of DID.

Post-traumatic stress disorder among survivors of war and political violence: A review

C. DOWNES, O. MULDOON & K. TREW, Queen's University Belfast.

Background: Post-traumatic stress disorder (PTSD) is a relatively new diagnostic category, which was added to the Diagnostic and Statistical Manual of Disorders (DSM) in 1980. For the first time, it was accepted that extremely traumatic and stressful events could lead to a clinical anxiety disorder in otherwise normal individuals.

Aims: The aims of this review are to provide an overview of the history of the disorder, to discuss the symptoms associated with PTSD and to discuss prevalence rates in situations of war and political violence.

Main Contribution: A special focus will be given to research on PTSD in Northern Ireland.

Conclusions: Further research in the area of PTSD in Northern Ireland is necessary in order to inform the public and mental health practitioners of the severity of this disorder among otherwise normal individuals.

Recognition of facial expressions of emotion in children with an intellectual disability

S. DUNLEAVY & J. WYLIE, Queen's University Belfast.

Background: Individuals with an intellectual disability have difficulty recognising facial expressions of emotion. As disability increases, ability to recognise facial expressions decreases. This ability plays an important role in social/emotional competence which is vital for integration and learning in social situations.

Aims: To investigate the effect of intellectual disability on children's recognition of facial expressions of emotion. It was hypothesised that ability to recognise expressions of emotion would influence social interactions.

Method: Children (seven- to 18-years-old) were assessed through a recognition and production task. A questionnaire was administered to the class teacher to measure social interactions.

Results: Individuals with a mild intellectual disability were better able to recognise the emotions of happiness and fear and had better overall ability to recognise expressions of emotion than those with a moderate intellectual disability. Further, males were better able to recognise facial expressions of emotion than females. Ability to recognise or produce expressions of emotion had no effect on social interactions.

Conclusions: Implications and future directions are discussed.

The influence of olfactory enrichment on cats in an animal rescue shelter

S. ELLIS & D.L. WELLS, Queen's University Belfast.

Background: Recently there has been growing interest in the area of sensory enrichment for captive animals. Wild felids have been shown to benefit from olfactory enrichment but to date, the effect of olfactory enrichment on the behaviour of domestic cats remains unknown, despite literature suggesting it is needed.

Aims: To examine the effect of olfactory stimulation on the behaviour and welfare of domestic cats housed in an animal rescue shelter.

Method: Cats were exposed to four conditions of olfactory stimulation (control, catnip, lavender and the body odour of a prey animal). Each odourant was tested for a five-day period. The cats' behaviour was recorded using a time-sampling technique at 10-minute intervals for three hours, on days 1, 3 and 5 of each condition.

Results: The data will be analysed using ANOVA to determine the effect of olfactory stimulation on the cats' behaviour and welfare.

Conclusions: The findings will be discussed in relation to enrichment and welfare of cats confined in an animal rescue shelter.

Community integration after brain injury: General public perceptions of community involvement

J. GEDDES, R. RAUCH, N. SHEEHY & M. LINDEN, Queen's University Belfast, Community Brain Injury Team, Down Lisburn Trust and Royal Hospital for Neuro-disability, London.

Background: Community integration measurement following brain injury has highlighted a number of concerns with the domain. Further investigation is required in this area.

Aims: To explore the term 'community' amongst the general public and to determine how people see themselves and others as being either included or excluded in the community.

Method: A qualitative approach examined how the participants viewed individuals who they saw as either included or excluded from their community. Participants were also asked to rank order a number of dimensions, taken from a range of community integration measures, in order of most importance to their community involvement.

Participants were drawn from a convenience sample of 60 members of the public.

Results: Thematic analyses of the results will be reported and their theoretical implications discussed.

Conclusions: Through understanding how the public views their own sense of community, and community involvement, we may ascertain how survivors of brain injury could be more fully integrated into such communities.

The impact of visual impairment on the developing child

C. GRAY & J. McILMOYLE, Stranmillis University College.

Background: The last decade has witnessed a four-fold increase in the number of pre-school children identified as having a Visual Impairment (VI).

Whilst the impact of a VI on the child's development is often profound, research affords the subject scant attention.

Aims: To inform the debate the present study sought to determine the number of preschool children in early years settings in NI, the extent and nature of their VI and the impact that VI has on the child's development.

Method: Quantitative (a postal questionnaire survey to 550 pre-school settings) and qualitative (interviews with early years, $N=12$ and health professionals, $N=8$) were employed.

Results: ANOVA revealed a highly significant increase in the number of young children with a VI in day care, playgroup and nursery school settings ($F(2,234)=25.103, p<0.001$), especially in the playgroup sector. The types of VI reported, though wide ranging, included disorders such as myopia, cancer of the eye and blindness. Physical development was thought to be more severely affected than social or emotional development, whilst cognitive development was rarely thought to be affected. The findings are of relevance to those interested in child development, inclusive education and the early years.

Single-sex classes as a strategy for raising male underachievement

C. GRAY & J. WILSON, Stranmillis University College.

Background: Evidence throughout the last decade documents a shift from female academic underachievement to male underachievement.

Various attributed to the introduction of a gender neutral Common Core Curriculum in NI in 1989, the impact of Equality Legislation and to Fair Employment Legislation, research reveals that girls from Key Stage 1 to tertiary level are now outperforming boys. To redress this imbalance, a number of strategies have been employed by schools.

Aims: This paper reports the perceptions of one strategy aimed at reducing the gender gap. In particular, views on the success of single-sex classes in a co-education school are explored.

Method: Quantitative (parent and teacher questionnaire) and qualitative (interviews with teachers) methods were employed to explore perceptions and attitudes to single-sex classes.

Results: Findings suggest that teachers do not support the single-sex class initiative. They prefer to teach co-education classes (71 per cent), believe the initiative has not raised levels of academic achievement and would like the strategy abandoned. In contrast, the majority of parents (especially those of girls) support the single-sex class initiative, and believe it has raised achievement (43 per cent). ANOVA revealed a significant difference in parental perceptions, with parents of top band children believing the initiative has had a more positive impact on performance than parents of middle or low band children ($F(2,155)=3.28; p<0.05$).

Evaluation of the Parents Plus Early Years programme (PPEY)

C. GRIFFIN, S. GUERIN, J. SHARRY & M. DRUMM, University College Dublin & Mater Hospital, Dublin.

Background: The PPEY was developed as a broad parent training intervention that could be relevant for both children with behavioural problems and children with a range of mild developmental difficulties.

Aims: To evaluate the effectiveness of the PPEY in addressing the needs of parents and their pre-school children.

Method: A repeated measures design was used to identify significant changes in behaviour and functioning after treatment.

Results: Results showed a significant drop in conduct problems and hyperactivity and decreased parental stress. In addition, before and after video observation of parent-child interaction showed an increase in positive parent-child attention and a decrease in parent-child instructions as measured by independent observers. Gains were maintained at five-month follow-up.

Conclusions: In order to make any firm conclusions about treatment effects, the results of the PPEY would have to be compared with a matched group of children who receive no treatment and/or a group who receive alternative treatment. A multi-site controlled study of PPEY is currently addressing this issue.

The role of social support in stress prevention: Buffering effects or main effects?

B.M. HUGHES, NUI Galway & B.A. CASKA, Dublin Business School.

Background: Research examining the mechanisms through which social support impacts life stress has provided mixed results.

Aims: In this study, we tested a buffering model vs. a main effects model of social support.

Method: Demographic and health indicators were measured during a survey assessment of a small Dublin commuter town.

Results: To establish the impact of marital status and gender on perceived stress, the sample was divided into single ($N=153$) and non-single ($N=451$) respondents. An analysis of covariance revealed that single females reported higher stress than non-single females or males in general, irrespective of age, social support, or life satisfaction ($p=0.027$). Age, social support and life satisfaction were inversely correlated with life stress ($p<0.001$). There was no interaction effect involving social support; a main effects model was supported.

Conclusions: Rather than acting as an independent buffer, social support appears beneficial to persons regardless of risk for stress.

An evaluation of the appropriateness among different religious faiths of schizotypy measures

J. JOHNSTONE & C.A. LEWIS, University of Ulster at Magee College.

Background: Previous research examining the relationship between religiosity and schizotypy among Christian samples has generally found a positive association. In order to examine if these findings are generalisable to non-Christian samples, it is incumbent on researchers to first examine the religious-sensitivity of commonly used schizotypy measures.

Aims: To examine the religious-sensitivity of commonly used schizotypy measures among various religious faiths.

Method: A sample of religious experts evaluated the perceived appropriateness among different religious faiths of four commonly used schizotypy measures (O-Life, STA, STB, and SPQ-B).

Results: For the most part, each of the schizotypy measures was perceived to be appropriate for use among members of various religious faiths. However, concerns were raised with respect to a number of components of schizotypy in their appropriateness for use among Muslims and New Religious Movements.

Conclusion: Implications of the findings are discussed within the context of transcultural psychiatry.

Orthographic processing, spelling and reading ability in 10-year-olds

J.A. JORDAN & J. WYLIE, Queen's University Belfast.

Background: Homophones have been used to investigate the role of phonology and orthography in the process of word recognition. A homophone effect refers to longer response times to homophones (e.g. blue and blew) than to non-homophones.

Aims: This study examined the relationship between reading ability and word recognition in a lexical-decision task with high and low frequency homophones.

Method: 50 10-year-olds were assigned to either the high or low frequency homophone group. The computer-based task comprised 40 trials. The groups were matched for reading and verbal ability.

Results: Reaction times were significantly faster for high frequency homophones, and participants were more accurate. Mean reaction times correlated with the reading and verbal ability for the high but not the low frequency homophone group.

Conclusions: There is a relationship between word recognition and reading ability but this relationship is dependent on word frequency. Evidence suggests that homophone effects occur due to feedback from phonology to orthography.

The family lives of children: Are their rights being met?

R. KILPATRICK, C. DAVEY, C. DWYER & S. McALISTER, Institute of Child Care Research, Queen's University Belfast.

Background: Research conducted for the Northern Ireland Commissioner for Children and Young People examining Children's Rights in Northern Ireland against the United Nations Convention on the Rights of the Child (UNCRC). The paper reports on one aspect of this large study namely, children's perceptions of their family lives.

Aims: To identify areas where children perceive their rights within the family are underplayed or ignored in Northern Ireland.

Method: Children in mainstream and special schools across Northern Ireland were asked to write stories, draw pictures or group posters on what they see as unfair in their family life.

Results: Children identified several issues which they felt were unfair in their family including: not having enough say in family decisions, issues with siblings and parents, and divorce and separation issues.

Conclusions: These issues can be seen as contravening Articles as laid down in the UNCRC and will be discussed in this context.

Benefits of assistive software for students with reading difficulties

A.A. LANGE, M. McPHILLIPS, G. MULHERN & J. WYLIE, Queen's University Belfast.

Background: Assistive software programmes are commonly used to help people with reading difficulties overcome their weaknesses. However, many of these programmes have not been tested empirically.

Aims: The present study analysed the benefits of using an assistive software package for 14- to 15-year-old students with reading difficulties.

Method: The three groups involved included a group trained on the software, a group trained on a word processing programme, and a control group without training. Some of the elements measured in pre- and post-tests included proof-reading, reading comprehension and word meanings.

Results: The assistive software and word processing groups both showed an improvement in performance.

Conclusions: Assistive software and word processing programs have benefits to those with literacy difficulties, but clear instruction is required to ensure proper use.

Developing and evaluating data capture formats

C. LOUGHLIN, G. ADAMSON & M. SHEVLIN, University of Ulster at Magee College.

Background: Data capture formats refer to the response formats or scales (e.g. Likert, visual analogue) used by respondents to record their responses to items in the context of quantitative data collection. The decision regarding which type of response format to use is important as different formats may affect data in terms of reliability and validity. More recently, there has been an increased use of research projects using computerised response formats, which allow for more dynamic display options.

Aims: To use various methodologies to assess the utility of computer-based response formats in maximising reliability and validity.

Main Contribution: Development and evaluation of response format characteristics, identifying conditions leading to optimal data quality.

Conclusions: The issue of data reliability and validity is of vital importance in every piece of research. The identification of response format characteristics for optimal data quality will inform and improve research practice, particularly in the area of computerised administration.

Is computer-based treatment for anxiety and depression in primary care an effective alternative to face-to-face intervention?

D. MAIRS, E. McCULLOUGH, B. McCURM & M. GALLAGHER, Homefirst Community Trust.

Background: The treatment effectiveness of Cognitive Behaviour Therapy (CBT), delivered in a traditional face-to-face method for anxiety and depression, is well supported by research evidence. NICE (2002) considered evidence from studies using computer-based CBT, concluding it 'supported the potential value'. Previous exploratory research in primary care had indicated it was effective in the treatment of both anxiety and depression.

Aims: To explore the effectiveness of cognitive behavioural therapy provided by a computer-based intervention across three primary care settings in patients with mild to severe anxiety and depression.

Method: Opportunity sampling - participants were referred by their general practitioner. Individuals were then screened for suitability based on their responses to a structured interview, standardised inventories and questionnaires.

Results: Pre- post- and follow-up treatment scores indicate a statistically significant improvement in both depressed mood and anxiety.

Conclusion: These results indicate the effectiveness of a computer-based therapy in a primary care setting.

Children's temporal understanding: What does it mean to have a concept of time and when does it develop?

K. McCOLGAN & T. McCORMACK, Queen's University Belfast.

Background: There is a diverse body of literature that has examined temporal understanding, and how a concept of time develops in children.

A concept of time is not an automatic process, but is actually a rather complex set of abilities.

Aims: This review outlines previous research into the development of an understanding of time, and in particular, focuses on one promising line of research - young children's temporal-causal understanding. This is the ability to reason about the causal relations between events.

Main Contribution: There have been a limited number of studies into children's ability to make temporal-causal inferences. These have demonstrated that this ability emerges sometime around the age of four.

Conclusions: Whilst research into young children's temporal-causal understanding promises to shed light on children's overall temporal understanding, the majority of research has focused on events in the past. The issue of temporal-causal understanding of future events has thus far been ignored. A possibility for future research is to look at young children's ability to make temporal-causal inferences for future events, and to compare children's temporal-causal understanding for past and future events.

Neurobehavioural effects and incidence of trauma following domestic fires

N.C. McCONNELL, K.E. BOYCE, FireSERT, University of Ulster at Jordanstown & T.M. RUSHE, University of Manchester.

Background: Many survivors of domestic fire refuse to attend hospital despite potentially harbouring neurobehavioural effects of carbon monoxide (CO) through the medium of smoke inhalation.

Aims: (1) To indicate potential neurobehavioural effects of inhaling smoke in domestic fire incidents; and (2) To estimate the incidence of post-fire trauma symptomatology.

Method: 35 smoke inhalation survivors of domestic fires for 2003-2004 consented to take part in the

study. Participants, matched for age and demographics, were recruited for a control group. Participants were assessed using Repeatable Assessment of Neuropsychological Status, Trails-Making Test, and subtests of the Test of Everyday Attention. Trauma symptomology was assessed by the Impact of Events Scale.
Results: Visuospatial/construction and executive function abilities were significantly poorer in comparison to a control group. Moderate/severe post-fire trauma was displayed in 40 per cent of participants up to 1.5 years post-fire.
Conclusions: Smoke inhalation survivors can potentially be left with subtle neurobehavioural and traumatic issues to manage long after the fire has been extinguished.

Problems with cannabis in adolescence

P. McCRYSTAL, A. PERCY, K. HIGGINS & M. THORNTON, Queen's University Belfast.

Background: Young people who experiment with drugs are a very vulnerable group for drug abuse. Cannabis is currently the most frequently used substance in many parts of the world, particularly among young people in adolescence.
Aims: An examination of young people's experience of regular, high level cannabis consumption to identify lessons that be learned for addressing this behaviour in adolescence.
Method: The study will draw upon the experience of the Belfast Youth Development Study, a longitudinal study of adolescent drug use, which is tracking a cohort of 4000 young people who entered secondary education in the autumn of 2000.
Results: A substantial proportion of young people may be developing high level cannabis use patterns and behaviours.
Conclusions: The findings suggest that a group of young people vulnerable to the development of drug abuse is developing relatively unnoticed in early adolescence.

Children's everyday experiences and well-being: Relationships with poverty and political conflict

N. McCULLOUGH & O. MULDOON, Queen's University Belfast.

Background: Children's social circumstances are believed to be fundamental in determining life experiences and well-being.
Aims: To investigate the unique effects of poverty and political conflict on children's everyday experiences and mental health.
Method: 302 children aged eight to nine years (mean = eight years nine months) from affluent and deprived areas in Northern Ireland (presence of political violence) and Scotland (no political violence) completed self report measures of experience and perceptions of negative life events and self esteem, and teachers rated each child's behavioural adjustment.
Results: Children growing up in circumstances of poverty reported more experience of misdemeanour events than children from middle income backgrounds. However, it was females from Northern Ireland who found these events to be most distressing. Experience of these events were found to be negatively correlated to self perceptions of physical and behavioural competencies and positively correlated to teacher reports of behaviour.
Conclusions: The predictive value of these findings will be discussed.

An application of the theory of planned behaviour to chronic obstructive pulmonary disease and asthma client's dietary behaviour

A. McDAID, Quayside Medical Practice, Londonderry, G.R. PRENTICE, Dublin Business School, C.J. McDAID, University of Ulster at Magee College & C. MCGUCKIN, Dublin Business School.

Background: A perennial and perplexing question for health professionals is: 'How can we know if an individual intends to perform the behaviour required to evidence a positive change in their health (e.g. eating behaviours)?'. Applications of psychological theories and empirical tools such as the theory of planned behaviour (TPB; Ajzen, 1991) have been reported as successful.

Aims: This investigation aims to apply the TPB model to the criterion behaviour of relevance (i.e. chronic obstructive pulmonary disease and asthma client's ability/willingness to change dietary behaviours) in an effort to enhance the prediction of behavioural intentions and actual behaviours over a 12-month reference period.
Method: A preliminary baseline analysis of the questionnaire data ($N=77$) was conducted.
Results: The contribution of the baseline TPB model (attitude, subjective norm and control) in explanation of variation in behavioural intentions was significant.
Conclusions: In addition to the further evaluation of TPB, psychological and clinical data are addressed and discussed.

A risk management approach to occupational stress

E. MCGEE, C. McCLENAHAN & M. GILES, University of Ulster at Magee College.

Background: Traditional approaches to stress management have tended to focus on the individual, attempting to treat the problem and its effects and largely ignoring the sources of stress. The risk management approach, focused on prevention, proposes that the sources of stress can be tackled through improvements to the design and management of work and empowers individuals to identify what these improvements should be.
Aims: To provide an overview of the risk management approach to occupational stress, highlighting the importance and relative merits of adopting this systematic and comprehensive approach.
Main Contribution: To offer an alternative approach to managing occupational stress that benefits both the individual and the organisation. Risk management was developed with the aim of making a difference to employee's working conditions and well-being and to enable organisations to find a practical and feasible way to comply with their legal duty of care.
Conclusions: While stress at work will remain a major challenge, our ability to manage that challenge is improving with the adoption of such models.

What influences self-esteem? A study of body image dissatisfaction, exercise and nutritional beliefs in young adults

L. MCGOWAN, A. FORSYTHE & R. LOWRY, Queen's University Belfast.

Background: Research documents increasing pressures to attain the ideal body and the consequences it exerts on individual self-esteem. Related variables including exercise participation and nutritional beliefs have also been implicated as important in this area.
Aims: The rationale for this study was to increase understanding of self-esteem in young adults in order to facilitate the development of interventions that increase self-esteem and – by consequence – combat potential secondary problems that may arise.
Method: 178 undergraduate students completed a questionnaire examining self-esteem, body image dissatisfaction, nutritional beliefs and exercise habits.
Results: Regression analyses showed body dissatisfaction, discrepancy between current and ideal figures and other positive health-behaviour variables explained a modest amount of the variance of self-esteem (25.3 per cent for all 178 cases). Body dissatisfaction made the strongest unique contribution for both genders.
Conclusions: Gender differences and the differing importance of variables for males and females are discussed with implications and future research.

Undergraduates' presentation anxiety in the career decision-making process

D. McILROY, Liverpool John Moores University & L. TAGGART, University of Ulster at Coleraine.

Background: The study was designed within the context of Social Cognitive Career Theory (SCCT) and addressed an emotional aspect of career decision-making.
Aims: To provide initial validation for an 11-item Presentation Anxiety Measure (PAM); to identify a

potential barrier for students in the career decision-making process; to highlight a learning activity that links educational and occupational pursuits.
Method: Participants ($N=362$) were psychology and nursing students from two universities, and both groups were required to bring formal presentations in their study programmes.
Results: An exploratory factor analysis demonstrated acceptable factor loadings supported by high reliabilities. A series of relevant background measures provided criterion validity in identifying students likely to have high presentation anxiety.
Conclusions: The study has provided a validated measure that could be a reference point in career counselling, and results are discussed with reference to their potential applied value.

The relationships between emotion, cognition and action: A review

E. McMAHON, Queen's University Belfast.

Background: Traditional thought regarded emotions as primitive impulses that compete with reason. Modern psychology tends to regard it instead as a form of cognition.
Aims: However, it seems necessary to add that emotion interacts with traditional cognitive functions – notably attention, perception, and judgment, and, therefore, shapes ongoing activity.
Main Contribution: The empirical literature describes some types of interaction. Neurobiological research indicates that emotional systems share hardware with systems involved in cognition, suggesting a corresponding overlap in terms of function. There is also a substantial literature on how emotion affects attention, and some aspects of memory. Revisiting older sources highlights other consequences of emotion which have not been studied in the modern era, e.g. 'impulsive' action.
Conclusions: These are difficult to study using traditional laboratory methods, but driving provides a context where they can be studied, and methods of experimenting in that context are outlined.

Quality of life and the response shift phenomenon in liver patients

S.E. MILLEN, Queen's University Belfast.

Background: During the last two decades there has been a recent surge within the field of quality of life (QoL) research. It is now standard to include QoL measures in health-related research. In fact, the impact on QoL may be the primary indication of the effectiveness of a therapy, especially in chronic patients.
Aims: However, it is now recognised that QoL research often produces unexpected findings, for example, chronic liver patients who have recently received a transplant often report similar or higher QoL to that of a control group consisting of a healthy population. The emergence of the 'response shift' phenomenon may explain these discrepancies.
Main Contribution: The definition of response shift states that when individuals undergo a change in health state, they may change their internal standards, their values or their conceptualisation of QoL.
Conclusions: The assessment of response shift can, therefore, enhance and develop our understanding of how people perceive their QoL over time and could explain and add more value to QoL research.

The impact of education on pupils' moral development and attitudes to forgiveness

W. MOORE & U. NIENS, University of Ulster at Coleraine.

Background: Previous research on forgiveness in Northern Ireland focused on attitudes to intergroup forgiveness from people from both religious communities. This research aims to investigate how education may impact upon Northern Irish pupils' attitudes to forgiveness.
Aims: It explores the possible impact of education in Northern Ireland on the relationship between intergroup attitudes, moral development and forgiveness.
Method: A school-based questionnaire survey was piloted to a sample of 35 secondary school children.
Results: High identification with the ingroup is associated with a lower propensity to forgive the outgroup. Level of moral development in pupils is

positively associated with forgiveness. According to pupils, History and Religious Education are the most important school subjects, which influence attitudes towards the other community. **Conclusions:** Though the sample for this pilot study was small it has provided encouraging results. Therefore, the oral presentation concludes with possible indications for further research regarding the role of forgiveness in education.

The mental health consequences of spontaneous miscarriage

M. O'DONOGHUE & S. MCGILLOWAY, NUI Maynooth.

Background: Spontaneous miscarriage occurs in 12 to 24 per cent of pregnancies and can often be very distressing.

Aims: This study was undertaken to assess the mental health status and grief symptomatology of women who had suffered a spontaneous miscarriage during the previous six to eight weeks and to explore, for a smaller sub-group, the overall effects of this event on their lives.

Method: A cross-sectional survey was administered using: the Hospital Anxiety and Depression Scale (HADS); the GHQ-12; the Post-Traumatic Stress Disorder Checklist Scale (PCL); and the Perinatal Grief Scale (PGS). In-depth interviews were conducted with a smaller sub-sample.

Results: Preliminary findings ($N=37$) showed that whilst mean HADS scores were within the 'normal' range, 40 per cent (15/37) were identified as 'cases' on the GHQ-12. Mean scores on the PGS indicated that participants displayed more symptoms of active grief than of difficulties in coping or despair. Almost 20 per cent (7/37) reported symptoms of PTSD.

Conclusions: The final results ($N=60$) and, in particular, the qualitative findings will provide an important insight into the psychological impact of miscarriage.

Admissions in higher education: A role for critical thinking tests as predictors of degree success?

L. O'HARE & C. MCGUINNESS, Queen's University Belfast.

Background: Increasingly universities are using aptitude tests to select students for courses as they feel A-levels are not discriminating between students effectively. Aptitude testing has become especially prevalent in high demand courses (e.g. Medicine) and high demand institutions (e.g. Cambridge University).

Aims: To investigate the ability of critical thinking tests to predict degree success over and above that which is predicted by A-levels.

Method: A Hierarchical Regression was applied. The independent variables were total A-level points and scores on critical thinking tests on entry to a psychology degree. The dependant variable was final degree mark awarded to the students.

Results: A-levels predicted approximately 10 per cent of the variance whereas scores on a critical thinking skills test predicted an additional five per cent.

Conclusions: Critical thinking tests can significantly improve the prediction of success in psychology degrees. Further research with other forms of critical thinking assessment and in other subjects is required to have a more general impact on admission practices.

Career-family attitudes, gender-role ideology and self-efficacy in new entrants to the workforce

D. O'SHEA & M. KIRrane, Dublin City University Business School.

Background: While much research has looked at attitudes towards work/life balance when they are well established in the workforce, very little research has focused on when and how these attitudes were formed, nor whether they are linked to self-efficacy or gender-role ideology.

Aims: The purpose of this study was to fill in the gap in the literature with regards to the relationship between career-family attitudes, gender-role ideology and self-efficacy in new entrants to the workforce.

Method: A once-off questionnaire-based survey was conducted in three third-level institutes around Ireland. Two-hundred-and-eighty-three

final year undergraduate students completed the questionnaire (a response rate of 79.2 per cent).

Results: Findings generally supported the hypothesised relationships, and attitudes towards career and family were found to be well established in the sample, despite the fact that they are new entrants to the workforce.

Conclusions: Findings are discussed in the light of prevailing literature and new insights into the relationships between the variables are identified. Suggestions for future research include a longitudinal research design to track changes in the variables over time and replication of the study using measures of domain specific self-efficacy.

Exploring the lightness induction effects in Adelson's snake pattern

D.A. ROSS, Queen's University Belfast.

Background: Conventionally, the phenomenon of lightness induction is explained in terms of mechanisms such as; contrast at the diamonds edge, the type of junction available in the display, the luminance ratios within the pattern.

Aims: To examine the role these mechanisms play in complex and simple stimuli.

Method: Experiments were conducted to test these mechanisms in both complex (based on Adelson's snake pattern) and simple stimuli (separated strips from these snake patterns).

Results: Results indicate that the lightness induction effect can be reduced (from 3.25 to 0.75 Munsell units) while maintaining the presence of these traditional mechanisms, and the complexity of the pattern.

Conclusions: Conclusions are drawn that the traditional explanations of this phenomenon (lightness induction) are insufficient, that in fact the phenomenon can be more easily explained in terms of a rescaling effect which is evident in even the simplest displays and which may be enhanced in the presence of these other factors.

The effect of maternal smoking on response habituation in fetuses at 30 weeks gestation

L. SMITH & P. HEPPER, Queen's University Belfast.

Background: Response habituation is a form of learning. It may, therefore, be used to assess the functioning of the central nervous system. Previous research has shown that compromised fetuses habituate differently compared with fetuses without problems; generally habituating faster, slower, or not at all. Furthermore, past research on fetuses of women who smoke show that they take significantly longer to habituate than fetuses of non-smokers.

Aims: The current study aims to replicate such research but also include analyses of reactions in terms of amplitude, latency, quality and body parts moved.

Method: A between groups design was implemented. Twenty habitual smokers and 20 non-smokers were recruited for a 15-minute ultrasound scan. The reaction of the fetuses to 10 vibroacoustic stimuli were later analysed.

Results & Conclusions: Results will be discussed in terms of implications for the developing fetus of smoking mothers.

Childhood parental perceptions and adult clergy stress

D.W. TURTON & L.J. FRANCIS, University of Wales, Bangor.

Background: Winnicott (1957), Bowlby (1995) and Lake (1978) have all indicated that there is a connection between adult health and behaviour and early childhood trauma and stress. However, there has been little attempt to empirically examine the relationship between perceived levels of current stress and childhood perceptions of parents.

Aims: This paper explores some of the childhood perceptions of parents by male Anglican clergy and relates it to perceived levels of stress in adulthood.

Method: A questionnaire, including the Maslach Burnout Inventory and specific questions about childhood perceptions of parents, was sent to 2000 stipendiary Anglican clergy.

Results: A response rate of 65 per cent was achieved. The data demonstrate a significant relationship

between high levels of current stress and poor parental images of both fathers and mothers.

Conclusion: More research is necessary in order to enhance and validate or otherwise, popularly held views on Freud and post-Freudian theories that bring together stress and childhood perceptions of parents.

Offence-related post-traumatic stress disorder in life sentenced prisoners

A. WATT, University of Wales Institute Cardiff & E. PAYNE, Craegmoor Health Care Group.

Background: It has been suggested that perpetrators of serious crime can often be traumatised by their offences.

Aims: To explore the relationship between serious crime and offence-specific PTSD symptoms.

Method: Offence related post-traumatic stress disorder (PTSD) was explored in 26 life sentence prisoners detained in a British Category B prison.

Symptom measures included the Impact of Events Scale - Revised and the Post-traumatic Stress Diagnostic Scale. Index offence violence was categorised as either reactive or instrumental.

Results: Eight prisoners (31 per cent) met all DSM-IV criteria for current PTSD diagnosis. Partial PTSD was common in the remaining prisoners. PTSD symptoms were unrelated to both the act of killing and the nature of violence. The rate of trauma prior to index offences was positively related to intrusive, avoidant and hyperarousal symptoms attributed by the prisoners to their index offence.

Conclusions: These results suggest that prior trauma sensitised prisoners to react traumatically to their offences.

Emotional labour and turnover intentions in call centres

J. WILSON & N. CHMIEL, Queen's University Belfast.

Background: Emotional labour has been related to indices of employee well-being. However, research has yet to investigate its associations with turnover intentions.

Aims: Using Grandey's model of emotion regulation this study investigated whether emotional labour could explain additional variance in predicting turnover intentions.

Method: In total, 369 questionnaires were distributed to employees at the Northern Ireland base of an international call centre. Two-hundred-and-five employees replied giving a response rate of 56 per cent. Participants completed a range of self-report instruments assessing emotional labour, emotional exhaustion and traditional variables known to relate to turnover intentions.

Results: Two hierarchical regression analyses were estimated to investigate the extent to which emotional labour predicts turnover intentions.

Surface acting (displaying required emotions without actually feeling them) was shown to be significantly and positively related to turnover intentions, explaining a significant proportion of the variance. Emotional exhaustion was also found to mediate this relationship. Deep acting, however, was not significant.

Conclusions: These findings are discussed in relation to the theoretical and practical implications.

POSTER

Physical attractiveness contrast effects and the moderating influence of differential personality factors

A. GREEN & N. RAINEY, Queen's University Belfast.

Background: Research indicates a contrast effect influences perceptions of self-esteem and attractiveness. Images of highly attractive individuals negatively influence self-evaluations.

The reverse occurs with images of low attractiveness. Little research considers which aspects of state self-esteem may be influenced, or whether personality factors moderate this effect.

Aims: This research examined the impact of an attractiveness contrast effect on appearance evaluation and state self-esteem. Moderators of this effect were also examined.

Method: Female undergraduates were shown

photographs of females of high or low attractiveness (control group received no photographs). A questionnaire measuring state self-esteem and appearance evaluations examined contrast effects. Appearance Stereotypes, Sex Role Orientation, Appearance Orientation and Neuroticism were measured as potential moderators.

Results: Multivariate analyses supported the existence of a bi-directional contrast effect on Appearance State Self-Esteem and Appearance Evaluation. Regression analyses indicated the independent measures did not moderate this effect.

Conclusions: Findings were considered in relation to the mass media's promotion of unobtainable beauty standards.

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