Abstracts
(In alphabetical order by first author/convenor surname)

1528 Experimental & Applied Oral Presentation

The relationship between state anxiety, quiet-eye duration and penalty kick accuracy: An eye-tracking study
Aidan Adamson, Sena Agbo-Quaye, Buckinghamshire New University

Objectives
The present study aimed to clarify the relationship between state anxiety, penalty kick accuracy and quiet-eye duration. The findings of the limited research in this area has been inconsistent (Wilson, 2008; Wood, 2010).

Design
A within-group factorial design was utilised to study the influence of state anxiety on participants’ penalty kick accuracy and quiet-eye duration. The effect of quiet-eye duration on participants’ penalty kick accuracy was also examined.

Methods
An opportunity sample of 10 male university level footballers took a single penalty against a goalkeeper across three experimental conditions (low, control and high state anxiety). All participants wore Tobii Pro (eye-tracking) Glasses enabling quiet-eye duration to be measured. State anxiety was measured using the Visual Analogue Scale of Anxiety (Hornblow & Kidson, 1976). Results were analysed using a repeated-measures MANOVA.

Results
Penalties were significantly more accurate in the low state anxiety condition compared to the high state anxiety condition. Results showed that as state anxiety levels increased, periods of quiet-eye duration significantly decreased, which supported Eysenck and Calvo’s (1992) Attentional Control Theory. Finally, the results inferred that lower levels of state anxiety extended participants’ quiet-eye duration, which helped improve penalty kick accuracy. Conversely, higher levels of state anxiety significantly reduced periods of quiet-eye, which worsened penalty kick accuracy.

Conclusions
Footballers should perform relaxation techniques prior to taking a penalty in order to lower their state anxiety level, lengthen their quiet-eye duration, and enhance their penalty kick accuracy.

1648 Symposium

Doing sport psychology in International Disability Football: Contemporary research and practice perspectives
Jamie Barker, Loughborough University

The Paralympics are now the second largest multisport event in the world (Legg & Steadward, 2011), where the representation of athletes with a disability at major competition has proliferated from 400 at the 1960 Paralympic Games to 4250 at London 2012 (Arnold, Wagstaff, Steadman, & Pratt, 2017). Despite the growing participation of athletes with a disability at elite level there exists a paucity of literature exploring the application of psychological interventions along with little professional practice guidance for sport psychologists. In this symposia we present professional practice insights and applied research from our work in disability football across a range of disabilities and age groups. Specifically, the symposia delineates the challenges, practical considerations, and recommendations for practice and future researchers. Ultimately, shining a light onto the application and idiosyncrasies of sport psychology provision with elite athletes with a disability. The symposium begins with an overview of a resilience-based intervention in an elite cerebral palsy football setting. The second presentation provides professional practice reflections into the application of sport psychology provision with visually impaired athletes. In the third presentation an overview of a 2 year leadership intervention programme in Paralympic football is provided. Finally, the fourth presentation highlights the key aspects of the psychological considerations of coaching in disability football along with bringing together the main themes of the symposium.
Paper 1: Wings to thrive: Working in Elite Cerebral Palsy Football to develop individual and collective resilience
Jamie Barker, Loughborough University

Objectives / Purpose / Background
Scant research exists exploring the application of psychological interventions and professional practice guidance for sport psychologists working in elite disability sport. In this symposia we present professional practice insights and applied research from our work in disability football across a range of disabilities and age groups. First, we introduce the main themes of the symposia whilst exploring the delivery of a resilience-based intervention in international Cerebral Palsy football. Second, we provide professional practice reflections into the application of sport psychology provision with visually impaired athletes. Third, we outline the development and delivery of a two-year leadership development programme based on the social identity approach in an international disability football team. Finally, we discuss the practicalities of coaching within the disability football pathway from a psychological perspective.

Design / Background / Key Points
Using a reflective case-study approach, consideration is given to the context of working as a sport psychologist within international disability football longitudinally.

Methods / Conclusions
Detail will be provided regarding the development and implementation of a resilience-based intervention programme aimed at facilitating individual and collective resilience. Insights will be offered on the provision of one-to-one athlete and coach support, psycho-education, and development of a performance culture.

Results / Conclusions
A series of reflections on the challenges, adaptations, limitations and implications of using a resilience-based intervention in elite disability football are offered along with the effects on individual and collective resilience.

Conclusions
This presentation will conclude with a series of position statements for future researchers and practitioners whilst also providing stimulus for discussion at the end of the symposia.

Paper 2: Put the textbook down: Provision of psychological support for elite footballers with visual impairments
Andrew Wood, Staffordshire University

Objectives / Purpose / Background
The aim of this presentation is to share professional practice insights into sport psychology provision with elite footballers with visual impairment.

Design / Background / Key Points
This presentation is drawn from a layered and personal reflective accounts of applied consultancy. This layered account allowed the author to document the applied challenges, experiences, and learning that is typically not afforded for elaboration in usual channels of scientific dissemination (Richardson, 1994).

Methods / Conclusions
Themes were selected on experiences and/or critical moments that were proposed to glean meaningful professional practice insights. Each salient theme was constructed on the process of recall and a reflective diary entries. Further, each theme was layered with a theoretical narrative that made sense of the given theme in reference to the extant literature.
Results / Conclusions
Emerging themes included: practitioner attitude, cognitive load, understanding game demands, basic psychological needs, retaining normality, and activist identities. Further, these themes were structured and aligned with competencies within Key Role 2 of the BPS Stage Two Process. Specifically including: 1) planning for consultancy 2) establish develop, and maintain working relationships, 3) conduct consultancy, and 4) monitor and evaluate the impact of consultancy.

Conclusions
It appears athletes with visual impairments experience physical and psychological challenges differently to able-bodied athletes and are specific to their condition (i.e., severity of impairment) and acquisition of the disability. Therefore, applied researchers and practitioners are encouraged further explore, understand, and share professional practice guidelines to further develop a nuanced appreciation of psychological provision with elite athletes with visual impairments.

1501 Part of Symposia
Paper 3: It’s all about ‘us’: Developing and delivering a two-year leadership development programme in Paralympic football
Matthew Slater, Staffordshire University

Objectives
Few examples of evidence-based leadership development programmes exist in disability sport. Based on the social identity approach, in this study we examined the efficacy and effectiveness of a two-year leadership development programme with an elite Paralympic football team.

Design
A two-year pre- to post-test longitudinal design involved an elite male disability soccer team that prepared for a World Championship (Year 1) and then reformed for Paralympic competition (Year 2).

Methods
Informed by the 3R’s of identity leadership (Reflect, Represent, Realise), following a baseline period, the programme created a Senior Leadership Team including staff (n = 3) and athletes (n = 4) to empower these individuals to embed identity leadership behaviours within the team. Fourteen SLT sessions were completed across two years. Remaining athletes on the team completed measures of identity leadership, social identity, mobilisation of effort, and the number of hours practiced away from camps 18 times across the study.

Results
Athlete data indicated marginal to significant increases from baseline to intervention phases in identity leadership, social identity, and hours practice completed away from training camps, but no significant change in mobilisation of effort (in Year 1 and 2). Moderate to large effect size increases were found across variables. Social validation data on intervention delivery highlighted strengths and future recommendations.

Conclusions
This applied study contributes to understanding by applying social identity leadership theory to practice in an elite disability environment. Conclusions will also focus on applied implications based on practitioner reflections.

1539 Part of Symposia
Paper 4: English football’s best kept secret: The practicalities of coaching within the disability football pathway
Jon Whittingham, UCFB

Objectives
The aim of this presentation is to share a reflective account of applied practice of working with international and grassroots disabled footballers as a coach from a sport psychology perspective.
**Design**
Using a reflective case-study approach, consideration is given to the context of working as a coach within international, talent and grassroots disability football over-time.

**Methods**
Detail will be provided regarding the practical implementation of coaching within international, talent and grassroots disability football. More specifically, insights will be offered on the provision of individual and collective athlete support, integration of psychological considerations and development of coaching practice.

**Results**
A series of comparative reflections along with exploration of the challenges, adaptations, limitations and implications of coaching in elite and grassroots disability football are offered along with an appreciation of how psychological interventions can aid delivery.

**Conclusions**
The presentation will conclude with a series of position statements for future consideration whilst also providing stimulus for discussion at the end of the symposia.

**Keynote Presentation**

**Embodiment, wellbeing, and performance**  
*Jürgen Beckmann, Technical University of Munich, Germany and University of Queensland, Australia*

Stress is an omnipresent factor in many areas of life and especially in elite sports. Competitive stress can result in anxiety leading to worrying and rumination. This constitutes a possible threat to athletes’ mental health and wellbeing as well as their performance. Our research shows that the depressive syndrome in athletes is closely related to stress but also to a lack of recovery. Not all athletes are vulnerable to the negative effects of stress. We found that individuals with a disposition to ruminate (state orientation) show impaired self-regulation (e.g. coping with stress) and reduced recovery. Ruminations caused by negative attributions are particularly prevalent in individual sports. This is one factor why athletes in individual sports are more susceptible to depression than athletes in team sports. Ruminations about failure also constitute a major factor in choking under pressure. Embodiment techniques can change the perception of internal states. They can be employed as short-term interventions to reduce anxiety and rumination. It was found that, for example, a dynamic clenching of the left fist (dynamic handgrip) results in relaxation that spreads across the cortex, thereby eliminating rumination, anxiety, and stabilising performance under pressure. Long-term interventions focus on the personality of the athlete. They involve developing skills to cope with stress and regulate affect. Both skills have been found to promote better access to one’s implicit self. It is also important to develop several sources of meaning in life which can function as a buffer for the maintenance of wellbeing.

**2044 Review/Theoretical & Practice Poster Presentation**

**On The Head: Tackling mental health in football**  
*Andrew Bethell, University of Liverpool / On The Head, Ross White & James Reilly, University of Liverpool*

**Objectives / Purpose / Background**
There is growing awareness that the demands of participating in sport can negatively impact on athletes’ mental health. In March 2018, the UK Government launched the Mental Health and Elite Sport Action Plan, which places emphasis on exploring ways to better support the mental health needs of athletes. Football, as the national sport of the UK, needs to be at the heart of this initiative. To date, our understanding about the factors that predict positive mental health in footballers remains limited. Our study seeks to address this gap in the research evidence.

NB: Our study launched in February 2018. So far, 63 players have taken part. Recruitment will continue until Spring 2019.
Design / Background / Key Points
Design: Cross-sectional design.
Inclusion criteria: Current academy, semi-professional and professional players; recently retired players (<2 years); male and female players; aged 16+.
Aims: This study will explore subjective wellbeing and mental health in current and former academy, semi-professional and professional football players. We will examine the relationship between subjective wellbeing and psychological processes linked to Acceptance and Commitment Therapy.

Methods / Conclusions
Participants are recruited via social media and directly through football clubs and organisations. Participants fill in a series of questionnaires which take approximately 15-20 minutes to complete, and are asked questions about their football career, wellbeing and mental health.

Conclusions
We are still recruiting to this study. We will have preliminary results in preparation for the conference. Our results will help build understanding about how forms of support can be tailored to footballers’ needs.

2039 Review/Theoretical & Practice Poster Presentation
Exploring the effectiveness of an integrated mixed martial arts (MMA) and psychotherapy intervention for young men's mental health
Niamh Bird, Maynooth University, Geoffrey McCarthy, Beacon of Light Counselling Centre & Katriona O'Sullivan, Maynooth University

Objectives / Purpose / Background
The current research sought to establish the impact of a 10-week programme combining MMA and one-to-one psychotherapy on young males’ mental-health, and determine factors that impact help-seeking.

Design / Background / Key Points
Engaging young men in mental-health services is crucial. Ireland had 392 deaths by suicide in 2017, with 3.9 times more male deaths than female. Despite over-representation in suicide figures, young men are least likely to access services, leading to calls for gender-specific treatment options.

Methods / Conclusions
A mixed-method approach tracked participant outcomes over 10-weeks. 7 males (20-35; M = 24.57) participated (5 completed programme). Recruitment was by referral from primary, community, and specialised mental-health services. Semi-structured interviews, conducted before and after the programme, explored participant’s experiences. A quantitative survey established demographics, aggression (Buss-Perry Aggression Questionnaire), mental-health (GHQ-12), and self-report ratings of mental-health and anxiety. The programme’s psychotherapists were also interviewed.

Results / Conclusions
Help-seeking facilitators included combining physical and mental-health, improving routines, self-discovery, and hope. Barriers included gender-norms, and absence of positive role-models. Mean aggression (M=20.4), GHQ-12 (M=21.8), and self-report anxiety (M=2.8) scores decreased. Self-report ratings of mental-health (M=4.8) increased. Participants revealed sport provided structure and fitness, counselling as pivotal for personal-growth, and positive male role-models as meaningful. Improved relationships, work-life and self-esteem were reported. Psychotherapist’s interviews revealed the stigma faced by young males, and value of the Breakthrough programme as an introduction to psychotherapy.

Conclusions
Findings support previous research indicating combining sports and psychotherapy positively impacts young male’s mental-health. Sport provides an acceptable doorway into psychotherapy, providing space to explore personal issues.
How changing of group boundaries affects the salient identity, intergroup dynamics, social support, performance and self-efficacy?

Zoe Black, University of Stirling

Objectives / Purpose / Background
Elite athletes, particularly swimmers often train and race against their friends and teammates. With this occurs a changes in group boundaries and often the salient identity. The salient social identity is a known driver of behaviour. This study aimed to investigate the circumstances whereby group boundary changes created a change in the salient identity and how this, in turn, affected intergroup relationships, social support and self-efficacy.

Design / Background / Key Points
Qualitative, inductive thematic analysis.

Methods / Conclusions
Eight elite university swimmers took part in semi structured interviews which lasted on average 43 minutes. Data were analysed inductively and thematically.

Results / Conclusions
Findings suggest a change in group boundaries, creates a change in the salient social identity. Such that before and during important competitions the individual identity was salient, and during hard training the team identity was salient. When the salient identity was the team, perceived social support, self-efficacy and performance was enhanced.

Conclusions
This study suggests individual athletes who train as part of a team, can have conflicting social identities. Swimmers reported higher self-efficacy and improved performance when they believed social support was available. A strong team identity was evident in training and team competition and increased the likelihood of supporting teammates. A strong individual identity revealed a more self-focused individual. Intergroup conflict was most common when the group boundaries were changing and the individual identity was salient.

Relationship between motivational climate and moral aspects in young soccer players

Marta Borruelo, Ariadna Angulo-Brunet, Carme Viladrich, Susana Pallarès & Jaume Cruz, Universitat Autònoma de Barcelona

Objectives
The objective of this research was to examine the relationship between perceived motivational climate and moral aspects in young soccer players.

Design
The study was conducted using a survey-research cross-sectional design, as the information about the sample was drawn at one time using questionnaires.

Methods
The sample was incidental and non-probabilistic. Participants were 197 soccer players aged between 13 and 19 from a club in Barcelona. Empowering and Disempowering Motivational Climate Questionnaire (EDMCQ-C), Disposition to Cheating in Sport Questionnaire (CDED) and Multidimensional Sportspersonship Orientations Scale (MSOS) were administered.

Results
Results showed there is also a moderate positive correlation between all MSOS subscales and an empowering climate. There is also a moderate positive correlation between Disempowering and Predisposition to acceptance of cheating ($r = .36$) and Predisposition to acceptance of gamesmanship ($r = .33$). Finally, there is a negative link between Respect for rules and officials and Predisposition to acceptance of cheating ($r = -.54$; higher scores in Predisposition to acceptance of cheating are linked to lower scores in Respect for rules and officials).
Conclusions
The investigation showed that the perception of an empowering climate is linked to prosocial behaviors (i.e., sportspersonship). Contrary, a perception of a disempowering climate is linked to the acceptance of antisocial behaviors (i.e., cheating and gamesmanship). Moreover, gamesmanship behaviors are more accepted than cheating. This enlightens the importance of the coach-created motivational climate as an aspect that can influence in the players’ moral development.

Panel Discussion
Psychosocial and policy-related approaches to mental health awareness in sport: Developing a consensus statement
Panel Organiser: Dr Gavin Breslin, Ulster University, Chair: Dr John Kremer
Professor Andy Smith, Edge Hill University, Dr Tim Rogers, Cognacity, Dr Ruth Lowry, University of Chichester, Professor Bradley Donohue, University of Nevada, Las Vegas, Professor Stewart Cotterill (DSEP Chair), AECC University College, Antoinette McKeown, CEO SportNI & Geraldine McConaghy, NSPCC/ChildLine
The recent surge in the number of mental health awareness programmes in sport has revealed important variations in programme conception and design, measurement, delivery methods, use of theory and evaluation approaches. As a result there is a need to have some standardisation on reporting. The best way to achieve the standardisation is through the development of a consensus statement. The aim of the panel discussion is to feed into the development of a consensus statement. We welcome panel members from psychology, psychiatry, sociology, researchers in mental health awareness, journal editors, professional training pathways, safeguarding youth and senior policy makers for a lively discussion on mental health in sport. Further information on the consensus statement development can be found here https://www.surveymonkey.co.uk/r/5MQYZH3 where you can play an active role in shaping its direction.

NIBPS Symposium
Current issues in sport, exercise and performance psychology: A Northern Irish perspective
Noel Brick, Ulster University
This symposium, presented by the Northern Irish branch of the British Psychological Society, will provide an overview of current topics in sport, exercise, and performance psychology from a Northern Irish perspective. The symposium will begin with two presentations on the topics of sport-related head injury and concussion. The first presentation will provide a review of sports-related head injury referrals to a brain injury rehabilitation service in Northern Ireland over a one-year period. Learning points on the management of sports-related head injuries will be presented. The second presentation will provide a focused case study on the management of concussion in both professional and amateur rugby players in Ulster. The emphasis will be on novel approaches to education, recognition, and concussion risk-reduction in rugby players. The third presentation will focus on the influence of exercise on psychological wellbeing. Data from one cross-sectional and two longitudinal studies will be presented to highlight the role of self-compassion in both exercise adherence and to mediate the relationship between exercise and psychological wellbeing. The final presentation will adopt a case study approach to discuss the role of performance psychology to reduce barriers to improved performance. Recommendations for applied practice will be provided, with an emphasis on both sporting and organisational performance contexts.

Part of Symposium
Paper 1: The concussion epidemic: Ulster Rugby’s approach
Michael Webb, Ulster University
Concussion occurring whilst playing sport is a common injury, the CDC estimates there are 300,000 sports related concussions in the United States annually. Best practice management of concussion has evolved greatly over the past 10 years in response to an upsurge in worldwide interest and research in the condition. The dangers of
mismanaging concussion are being increasingly recognised. Athletes who return to sport before full resolution of the primary injury risk long term adverse effects. Ulster Rugby is a provincial constituent of the IRFU, and as such consists of a professional team which plays in the Pro14 league and the European Champions Cup, and an amateur game with 20,000 regular players. This talk will address how Ulster Rugby has approached the ‘concussion epidemic’ over the past 5-10 years in both the professional and amateur games. We will discuss novel approaches in the areas of education, injury recognition and research that have been employed in an attempt to reduce the risks from concussive injury.

Part of Symposium

Paper 2: Brain injury in sport: Referrals and management of sports related head injury in H&SC Trust in Northern Ireland

Robert Rauch & Yvonne Dunlop
Brain Injury Service, Northern Health & Social Care Trust

Background

Health and Social Care in NI is experiencing increased referrals of people who have sustained a head injury whilst playing sport. Guidance on the management of mild head injury is readily available, for example, Scottish Sports Concussion Guidance: grassroots sport and general public 2018 version.

Methods

This study reviews a convenience sample of referrals to a H&SC Trust community brain injury rehabilitation service over a 1-year period.

Conclusions

Trends in referral patterns and the needs of people presenting with sport related head injury are described and discussed. A separate, accelerated pathway for mild head injury is indicated. Service links with education and employers are appropriate for a subgroup of people. Learning points are summarised and discussed.

Part of Symposium

Paper 3: Exercise and wellbeing: The role of self-compassion

Tony Cassidy, Ulster University

Objectives

Three studies are reported which explored the role of self-compassion in in relation to exercise and wellbeing. Design: One cross-sectional survey and two longitudinal experiments.

Methods

A survey of 540 female participants aged 18-25 assessed exercise frequency, self-compassion, body image, social support and wellbeing. Experiment 1 assessed 73 participants (37 males and 36 females) aged 18-65 at 3 points over 6 weeks. For experiment 2, 74 female university students were allocated, 42 to an exercise condition and 32 to a control group, and were assessed at 3 time-points over 7 weeks.

Results

Analysis of the survey showed that self-compassion predicted wellbeing and also mediated the relationship between exercise and wellbeing. In both experiments self-compassion was the best predictor of exercise adherence and was a direct predictor of wellbeing.

Conclusion

The findings indicate that self-compassion, particularly the dimensions of self-kindness and mindfulness, is an underlying mechanism in the maintenance of exercise and mediates the relationship between exercise and wellbeing. As such it would appear that in the success of exercise as an intervention in health and wellbeing could be improved by self-compassion training.
2028 Experimental & Applied Oral Presentation

Anticipated task difficulty influences pace-regulation during running time-trials
Noel Brick, Ben Fitzpatrick, Robin Turkington & John Mallett, Ulster University

Objectives / Purpose / Background
Models of self-paced endurance performance suggest that accurate knowledge of the exercise end-point influences pace-related decision-making. No studies have examined the effects of anticipated task difficulty during equidistant endurance activities, however. This study aimed to investigate the effects of anticipated task difficulty on pacing, psychological, and physiological responses during running time-trials.

Design / Background / Key Points
The study employed a counterbalanced, repeated measures design.

Methods / Conclusions
Twenty-eight trained runners completed three self-paced 3000 m time-trials. The first was a baseline (BL) time-trial completed on a 0% treadmill gradient. Before a known incline (KI) time-trial, anticipated to be more difficult, subjects were accurately informed that the gradient would increase to 7% for the final 800 m. Before an equivalent, unknown incline (UI) time-trial subjects were deceptively informed that the gradient would remain at a 0% gradient throughout.

Results / Conclusions
Expressed relative to BL, running speed was 2.44% slower (d = -0.47) over the first 2200 m during KI than UI. Effort perception, affective valence, and physiological responses did not differ between time-trials. Initial running speed during KI was related to pre-trial motivation, pre-trial vigor, perceived effort, and affective valence. No such relationships existed during UI. More subjects also reported a conscious focus on pacing during KI.

Conclusions
An anticipated increase in task difficulty negatively impacted performance during 3000 m running time-trials. The reduced pace may have resulted from greater task uncertainty and consciously aware, effort- and affect-based decisions to conserve energy and maintain hedonic state during KI. The findings add to understandings of factors that influence pacing during endurance activity.

2034 Experimental & Applied Oral Presentation

Does expertise influence challenge and threat states under pressure?
Jack Brimmell¹, John Parker², Meghan Brown², Lee Moore³
¹University of York St John, ²University of Gloucestershire, ³University of Bath

Objectives
Challenge and threat states have been shown to influence pressurised sports performance. However, the antecedents of these states, particularly those proposed by the BPSM (familiarity, effort, skill etc.), have received sparse attention. Therefore, this study tested the antecedent of skill level or expertise, by examining the differences in challenge and threat states between elite and novice soccer players.

Design
Cross-sectional design.

Methods
Fourteen female soccer players completed a pressurised penalty task, with seven players from a professional team competing in the FA Women’s Super League (elite group), and seven players from the university of Gloucestershire (novice group). Before the task, challenge and threat states were measured via self-report (demand resource evaluation score), and cardiovascular reactivity (challenge/threat index). After the task, performance, or distance from the centre of the goal (in cm), was determined.

Results
The elite group (2.86±1.68) evaluated the task as more of a challenge (coping resources exceeded task demands) than the novice group (-1.00±2.00; t(12) = -3.91, p = .002, d = -2.26). However, the elite group (-0.11±2.71), did not differ from the novice group (-1.86±0.83) in terms of cardiovascular reactivity (t(12) = -1.63, p = .129, d = -0.94).
Finally, the elite group (124.17±24.78) performed better than the novice group (46.43±52.34; t(11) = -3.32, p = .007, d = -2.00).

Conclusions
Skill level or expertise is an important antecedent that influences challenge and threat evaluations, with greater expertise helping athletes view pressurised competition as a challenge rather than a threat.

1650 Review/Theoretical & Practice Poster Presentation
‘Do me a favour and ask if you need some help’: Understanding antecedents leading to Adverse Mental Health in professional sport
Thomas Buck & Robert Morris, Liverpool John Moores University

Purpose
The study builds on previous literature and provides a unique insight into the experiences of retired professional athletes from a variety of sporting professions. The study aims to enlighten the understanding of mental health within professional sport and provide recommendations regarding what causes are most likely to affect an athlete's mental health and wellbeing.

Background
The present study used qualitative methods in order to investigate the experiences and knowledge of retired professional athletes in order to enlighten understanding surrounding adverse mental health in professional sports. This included the investigation of potentially developing adverse mental health issues as a professional athlete. Previous literature has suggested strong arguments of injuries in professional sport contributing to a decline in mental health, while the current study aimed to build on this and explore what other factors may be affecting the mental health of professional sportspeople.

Methods
The study is qualitative in its methodological design and employed the use of in-depth, semi-structured interviews with participants. The participant sample in particular is unique as four ex-professional athletes from football (English Premier League), English Rugby League, and English Cricket were recruited. All participants were purposively recruited by the lead researcher, and were contacted via a gatekeeper in order to avoid coercing potential participants to participate. All participants had competed to the highest elite level in their respective sports, as well as competing internationally. All participants also revealed experiences of dealing with depression, or some other adverse mental health issue. Interview data was transcribed verbatim, and then a thematic content analysis was conducted to reveal emergent themes.

Conclusions
Four antecedents of mental health issues were revealed as a result of the analysis. These were; Transitions (within-career and retirement), Athletic Identity, Long-Term Injuries, and Coping Mechanisms. Recommendations to enhance and develop professional support services within sport are made as a result of these findings.

1854 Experimental & Applied Poster Presentation
Males v. females: Understanding gender differences in coach communicator style and success
Megan Buning¹, Donald Rockey²
¹Augusta University, ²Coastal Carolina University

Purpose
This study examined relationships between athletes’ motivation, coaches’ communicator styles, and coaches’ success, and differences between male and female coaches’ success and communicator style. Research questions were: What is the relationship between motivation, communicator style, and success? H0 = There is a positive relationship between self-determined motivation and favorable coach factors. What is the difference between male and female coaches’ perceived communicator style and success? H0 = There is no difference.

Design
A cross-sectional survey design was used to examine relationships and differences between genders.
Methods
A variety of adolescent athletes were recruited through coaches in the Southeastern United States. Male (n = 71) and female (n = 168) athletes (coached by male (n = 175) and female (n = 65) coaches) electronically completed the Coach Success Questionnaire, Communicator Style Measure, and Behavior Regulation in Sport Questionnaire.

Results
Results: Pearson’s r revealed weak correlations between athletes’ motivation, coach communicator style (r = .22), and coach success (r = .26). One-way ANOVA showed athletes thought male coaches communicated more precisely (p = .04), and more successfully prepared athletes to win (p = .03) than female coaches. Male athletes perceived coaches overall had more relaxed communicator styles (p = .00) while female athletes perceived coaches overall displayed more positive attitudes about winning (p = .00).

Conclusions
Motivation was not as strongly correlated to positive perceptions about coaches as hypothesised. Despite popular dialogue, perceived differences between genders was not dramatic. Still, with unbalanced groups, results indicate the need for gender-specific coach training.

1540 Experimental & Applied Oral Presentation
Coping with organisational change in sport: A case study of high-performance coaches
Shelby Carr, James Rumbold, Joanne Butt & Peter Olusoga, Sheffield Hallam University

Objectives / Purpose / Background
The purpose of this study was to explore high-performance coaches' experiences of coping with organisational change

Design / Background / Key Points
A qualitative research design was implemented to gain insight and understanding into individuals coping mechanisms.

Methods / Conclusions
Using maximum variation sampling, interviews (Md = 81.32 minutes, SD = 22.57 minutes) were conducted with 11 individuals (Mage = 50.10 years, SD = 7.62) who have coached sport performers at international, Olympic and/or professional level. Each coach provided detailed accounts of how they coped with varying organisational change initiatives that they had experienced (e.g., funding cuts, changes in leadership and management, competition structure, staff turnover) whilst operating within elite and professional sport organisations. Inductive thematic analysis procedures were utilised to generate 5 central themes which provided insight into the strategies used by coaches to cope with organisational change.

Results / Conclusions
The central themes included: communication and consultation (e.g., participation in the change process), dissociation (e.g., deflecting attention away from decisions), empathic understanding and acceptance (e.g., accepting the need for change), optimism (e.g., adopting a positive outlook), and proactive behaviours (e.g., seeking support).

Conclusions
Although the findings provide some support for existing literature on coping, these themes carry holistic meaning beyond traditional abstractions of coping experiences for elite and professional sport coaches. From an applied perspective, the findings highlight the need for coaches to carefully monitor their ability to cope with varying organisational change initiatives, and recognise the symptoms that may lead to reduced mental health and wellbeing.
1823 Experimental & Applied Oral Presentation

The effect of study location on Athletic Identity and in-group Identification in native Irish Gaelic footballers
Sarah Carters, Caroline Wakefield & Simon Kawycz, Liverpool Hope University

Objectives
Athletic identity (AI) has been found to be greater among athletes participating in a popular culture sport at the highest competitive level (Rasquinha & Cardinal, 2017). As Gaelic Football (GF) is native to Ireland, it stands to reason that athletes playing in Ireland will demonstrate higher levels of AI and those playing outside Ireland will indicate higher levels of in-group identification (IGI). This study investigated these constructs in GF and student athletes.

Design
A between-participant design explored AI and IGI across location of study (Northern Ireland, Republic of Ireland, Great Britain) year of study and sex.

Methods
170 Irish student athletes undertook the study based on their Irish ethnicity. They completed the Athletic Identity Measurement Scale (Brewer & Cornelius, 2001), In-Group Identification Multicomponent Model (Leach et al., 2008) and self-made free response questions.

Results
Multivariate tests revealed significant differences (p<.001) in AI dependent on location of study (NI and ROI > GB). Significant differences (p=.001) were also found regarding the IGI component solidarity (NI > ROI and GB) and post-hoc tests revealed differences in social identity dependent on year of study, decreasing with time.

Conclusions
This study highlights the importance of AI to define one’s self-concept, especially among students in Ireland, specifically NI. Consistent levels of IGI emphasises the versatility of GF athletes to adapt to their environment. Lower AI within GB suggests exploratory behaviour of student athletes. This also highlights the need for greater provision of GF to allow maintenance of native culture in sport away from home.

1566 Experimental & Applied Oral Presentation

Temporally examining how irrational beliefs interact with cognitive appraisals to predict emotions and golf performance
Nanaki Chadha, Martin Turner, Matthew Slater & Jamie Barker, Staffordshire University

Objectives / Purpose / Background
The study examines the influence of irrational beliefs on temporal changes in cognitive appraisals and emotions of elite golfers in the lead up to a golf tournament.

Design / Background / Key Points
A cross-sectional repeated measures design that examines temporal changes in cognitive appraisals and emotions among golfers in the lead up to an actual golf tournament at four time points: A week before competition, The night before competition, An hour before competition, After competition.

Methods / Conclusions
The sample size comprises of 116 elite Indian golfers (Male=84, Female=32; ageM=24.62) with a handicap below 10 (M=1.33; SD=1.85). Data was collected using psychometrics assessing the dependent variables.

Results / Conclusions
Pearson’s correlation analysis was conducted on data. Specifically, time-point 2 (i.e., the night before), analyses found significant positive relationships between irrational beliefs and motivational incongruence (r = .34, p < .05), threat state (r = .40, p < .05), negative emotion (r = .46, p < .01) and somatic anxiety (r = .43, p < .01). In addition, the analyses revealed significant negative associations between irrational beliefs and PFC (r = -.38, p < .05), EFC (r = -.40, p < .05) and challenge (r = -.39, p < .05). Further, data analysis will include SEM of effects of irrational beliefs and temporal changes in cognitive appraisals and emotions on the performance of the golfers.
Conclusions
Results demonstrate the importance of irrational beliefs in the temporal patterning of performance anxiety. Findings inform the delivery and monitoring of REBT intervention with athletes on approach to competition.

2032 Experimental & Applied Poster Presentation
Developing mental health awareness in Parasport Athletes: The State of Mind Ireland (SOMI) pilot programme
Terry Conroy, Gavin Breslin & Stephen Shannon, Ulster University

Objectives / Purpose / Background
To assess whether a brief mental health awareness programme could increase wellbeing, resilience and mental health awareness in parasport athletes using the Theory of Planned Behaviour.

Design / Background / Key Points
A quasi 2 (group) x 3 (pre, post and 4-week follow-up) mixed measures design was used, involving an intervention and control group.

Methods / Conclusions
Participants (N=37; Male= 23, Female= 14; Mean Age= 36.84, SD= 11.02) were recruited via local parasport clubs. All participants completed the Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS), Brief Resilience Scale (BRS), Reported and Intended Behaviour Scale (RIBS) and Mental Health Knowledge Schedule (MAKS).

Results / Conclusions
Significant increases were found for resilience and mental health knowledge within the intervention group from pre- to post- intervention and at the 4-week follow-up point. A medium effect size for BRS and a large effect size for MAKS scores was found between Group and Time, with the intervention group showing a larger increase compared to the control group. A significant but weak positive correlation was found between knowledge of mental health and intentions to help someone with a mental health problem.

Conclusions
State of Mind Ireland, can improve mental health awareness within parasport athletes. Given that resilience and awareness measures showed positive results, future research should look at how wellbeing can be improved within this population with a longitudinal design.

1476 Experimental & Applied Oral Presentation
Optimising mental toughness
Brad Cooper, US Corporate Wellness, Inc. and University of Exeter

Objectives
Mental toughness has garnered a great deal of interest in academic literature over the past 2 decades, frequently examining state versus trait characteristics. Daniel Gucciardi identified state-like variability which this study generally supports. However, research in this area has primarily focused on group comparisons versus the longitudinal within-person study we’ve performed.

Design
This pair of concurrent studies investigated the presence of mental toughness variability in elite Masters runners across self-selected high-RPE training sessions, followed by the identification of primary influencers of that variability.

Methods
13 participants (mean +/- SD age 47.5 +/- 5.5 years, Masters age-graded ranking = 80.7 +/- 6.3%) completed a series of self-assessment surveys incorporating the Mental Toughness Index (MTI) and related factors across a 30 day period and 5 self-selected high RPE training sessions. For each participant, their maximum/minimum reported MTI score was calculated across 5 high-RPE sessions. Data was combined with the baseline report into a one- way ANOVA, using three levels. Follow-up interviews were then conducted to explore the sources of this variability.
Results
Results demonstrated a significant main effect for ‘variability’ (i.e. differences between the scores over the three reports): $F(2,26) = 31.38, p < .001$. Interviews revealed that mental toughness was influenced by optimisers and depleters including but not limited to sleep, stress and self-talk. These results have implications for application across a variety of settings, both in sport and general wellbeing.

Conclusions
These results have implications for application across a variety of settings, both in sport and general wellbeing.

1658 Review/Theoretical & Practice Poster Presentation
Exploring the conceptualisation and persistence of disordered eating in retired swimmers
Hannah Cooper¹, Stacy Winter²
¹St Mary's Twickenham/UCL, ²St Mary's Twickenham

Objectives
The purpose of this research was to explore disordered eating in relation to swimming participation, how retirement affects eating patterns, and ways to mitigate disordered eating for current and retired swimmers.

Design
Both qualitative and quantitative approaches were adopted in order to select appropriate participants and allow for full exploration into a new topic area in the field.

Methods
Over 50 retired swimmers who met certain performance standards were given the Eating Disorder Examination Questionnaire 6.0. Six retired swimmers whose scores from the questionnaire indicated disordered eating pathology were chosen for semi-structured interviews. Interviews were analysed using interpretative phenomenological analysis.

Results
From the analysis three superordinate themes emerged: (1) Pressures Unique to Swimming, (2) Transition to Eating Pattern Awareness, (3) Maintaining Ideal Eating Patterns in Retirement. The first superordinate theme and corresponding subthemes revealed how swimmers’ insatiable appetites, social pressures of swimming, and wearing revealing uniforms influenced disordered eating. Results indicated key mental transitions in retirement including becoming aware of nutrition and life without swimming. Many retired swimmers used disordered eating to cope with feeling unhealthy and post-swimming weight gain.

Conclusions
Results were a combination of novel findings on, support for, and expansion of, previous data on disordered eating. Findings specifically expanded how pressures unique to swimming can be linked to disordered eating. It was unique in its exploration of disordered eating in the context of sport retirement, however it was limited by using only retired NCAA swimmers whose experience will be different to those in other countries.

1542 Workshop
Developing a mental-health focus for practitioner sport and exercise psychologists
Stewart Cotterill, AECC University College

Objectives / Purpose / Background
Seeking to combat mental ill-health has been a core aspect of the psychology profession for a long time. However, sport and exercise psychology has frequently neglected this important aspect of the role of a practitioner psychologist. Recent developments including the publication of the UK Government’s mental health action plan for elite sport have increased the focus on mental health and wellbeing at all levels in both sport and exercise domains. These developments in turn offer appropriately skilled sport and exercise psychologists a significant opportunity to
embed themselves in various sport and exercise environments and to make a real difference in developing mentally healthy individuals.

Design / Background / Key Points
The aim of this workshop is to explore the mental health-related knowledge and expertise that sport and exercise psychologists should have, and to explore opportunities for sport and exercise psychologists to embed themselves as agents of change in developing mentally healthy environment.

Methods / Conclusions
This workshop will consider broad categories of mental health conditions that practitioner sport and exercise psychologists might encounter in sport and exercise-related environments, treatment options, and referral practices. Participants will also have the opportunity to reflect upon their own knowledge and expertise in working with mental ill-health and different approaches that can be adopted in seeking to develop mentally healthy environments. On conclusion of the workshop it is expected that participants will have a more in-depth understanding of their mental health-related expertise, their own personal development needs, and how they can work to foster mentally healthy environments.

Keynote Presentation

Virtual Reality Technology: What use can it have in sport?
Cathy Craig, Queen’s University Belfast & CEO/Founder of INCISIV

Through the preservation of the perception/action loop, immersive, interactive virtual reality technology can offer an exciting new way of studying decision making in sport. The versatility of this technology in terms of generating digital content means that it can be easily applied to a wide variety of sports (e.g. rugby, soccer, cricket) [1]. In this talk I will present examples that show how the dynamics of the unfolding events (e.g. side-step in rugby, curved free kicks in soccer) presented in a virtual environment impact on the decisions players make. I will show how an in-depth analysis of the player’s action (what they do and when and how they do it) can offer a new way of studying decision-making in sport [2, 3]. I will finish by exploring how this technology can be used to profile, train and improve decision making in sport and how it can offer new insight into player performance. I will suggest that this ability to act in the right place, at the right time and in the right way can be considered as a new form of intelligence, namely action intelligence.

1451 Five-Minute Challenge

Exploring the effects of Rational-Emotive Behaviour Therapy on self-determined motivation in triathletes
Helen Davis, Think Believe Perform

Objectives
The purpose of this study is to explore the effects of Rational-Emotive Behaviour-Therapy (REBT) on self-determined motivation, irrational beliefs, burnout and vitality of triathletes. Specifically, the aim is to repeatedly examine shifts in different types of intrinsic and extrinsic motivation and irrational beliefs for the first time in research, building on both REBT and self-determination theory (SDT) literatures.

Design
This study uses idiographic methods based on single-case research design to give accurate inferences specific to uniqueness of individuals

Method
A sample of five participants, all members of a large triathlon club, were recruited reporting low self-determined motivation and high irrational beliefs from questionnaires. Participants attended weekly individual sessions, receiving tailored REBT sessions, for an average of 5 sessions each. Data was repeatedly collected for each variable and social validation collected by semi-structured interview.

Results
At time of submission data collection is still in process. Data is to be visually inspected and, in accordance with idiographic methods, analysed for variation around individual means and within-person patterns.
Conclusions
The headline findings will be the first to explore effects of REBT on specific motivation types in research. Conclusions based around the following hypotheses will be formulated: 1. REBT will reduce the irrational beliefs of triathletes. 2. REBT will decrease extrinsic motivation and increase intrinsic motivation. 3. Subjective vitality will increase, and burnout will decrease across the time period.

1837 Five-Minute Challenge

Becoming a sport psychologist: Transferrable skills (Teaching)

Helen Davis, Think Believe Perform

Background
The QSEP Stage 2 pathway to full HCPC accreditation is one of self-discovery, and professional growth and development. It’s a challenging and rewarding process. The transition, however, from graduate and/or post-graduate study to applied settings, where business skills are required to be independent practitioners, can feel daunting. Hence, at the start of my Stage 2 journey, I often approached the process with a ‘what can I learn from this?’ mindset. I soon realised, however, that I was a trainee with diverse skills, careers and life experiences, and my approach shifted to ‘what can I offer this experience?’

Key Points
Here I will talk about specific transferrable skills from my 25 yearlong teaching career and how it has helped my applied consultancy. I believe my experience allows me to apply creativity, and presentation/delivery skills to develop effective and engaging workshops and valuable experience having worked with a variety of age groups; children and adults alike.

Conclusions
Gain insight into how skills from a teaching career has helped a Stage 2 sport and exercise psychologist trainee in their professional development.

1453 Experimental & Applied Oral Presentation

‘Power! Unlimited power!’ How power relations impact a national talent development system

Niels Feddersen, Robert Morris, Martin Littlewood & David Richardson, Liverpool John Moores University

Objectives
The aim was to explore the impact of power relations on the implementation of a national talent development system.

Design
An action research design, combined with grounded theory principles formed a longitudinal case-study with a national sports organisation (NSO). The reconnaissance phase ran from September 2017 – November 2017. Change strategies were implemented from December 2017 – December 2018.

Methods
Nine focus groups were conducted with key stakeholders during the reconnaissance phase, two with athletes (n=15), four with coaches (n=10), two with parents of athletes (n=13), and one with NSO personnel (n=4). Participant observations were conducted over 15 months. All data were analysed using grounded theory principles.

Results
All key stakeholders suggested that the remnants of a performance programme had alienated and fragmented the sporting community. This programme forced athletes to break with their club resulting in diminishing belief in the NSO and club coaches actively combating any initiatives. Change in culture was the macro-level change strategy and operationalised through three micro-level strategies: (1) decentralised development centres, (2) selection policies, (3) youth national team camps. Deep-rooted beliefs (i.e. favouritism, centralisation, lack of belief) affected power relations and coaches employed social dominance and collusion to stop athletes participating. Coaches also set-up ungoverned talent initiatives to undermine the NSO, of which the psychological impact was disruption and increased fragmentation.
Conclusions
NSOs need to consider how key stakeholders employ active-disruptive behaviours from deep-rooted beliefs, and how these might combat new initiatives. Not recognising these beliefs can undermine strategic efforts ultimately disrupting performance goals.

1897 Experimental & Applied Poster Presentation
Mental coping strategies employed by ‘clean’ elite athletes against the assumption other athletes have engaged in doping practices
*André Filipe Do Brito Valente*¹, *Elizabeth Pummell*¹, *Sam N Thrower*², *Andrea Petróčzi*¹
¹Kingston University, ²University of Roehampton

Objectives / Purpose / Background
World Anti-Doping Agency (WADA) Laboratory test statistics for 2016 revealed that athletics had the second highest doping prevalence among all sports. Whilst research has previously examined athletes’ motivation for doping, this study shifted focus and aimed to explore the mental coping strategies clean elite athletes employ against the assumption their competitors are, or might have, doped.

Design / Background / Key Points
Acknowledging the sensitive nature of the topic, a semi-structured individual interview guide was constructed, with the aim to collect rich data.

Methods / Conclusions
Five athletes (four Olympians and one former participant in World Championships) from disciplines within athletics (mean age 33.6 ± 9.9 years) were recruited via mutual contacts on social media. Athletes were guaranteed confidentiality and anonymity. Interviews held in person or via video call were recorded, transcribed, and analysed using content analysis.

Results / Conclusions
Four higher order themes emerged: views on doping; mental coping strategies; motivation and behaviour; and views on anti-doping policies. The participants acknowledged doping as a commonplace behaviour but chose not to consider the possibility of competitors being doped. Focusing on the self, working towards individual goals, and having a clear conscience were coping strategies reported.

Conclusions
The athletes in this study were aware of the presence of doping, requiring the utilisation of appropriate coping strategies. By adopting such strategies, they reported being able to overcome perceptions of competitor doping. Further research is warranted to explore coping with samples of elite and sub-/non-elite clean athletes, to understand the dynamics of the processes used by clean athletes to cope with doping in sport.

Invited Symposium
Physical activity, disability and health
*Ben Fitzpatrick, Ulster University*
This symposium offers an insight into the physical activity behaviour, considerations and limitations of people with intellectual and physical disabilities. Papers presented will discuss new research into interventions for vulnerable groups and the social impact of physical activity.

Part of Symposium
Paper 1: The development, piloting and evaluation of a community gym-based exercise program for adults with intellectual disabilities: The Gym Buds program
*Teresa Greene, Laurence Taggart and Gavin Breslin*
Ulster University

Background
Just 9% of adults with intellectual disabilities (ID) achieve minimum recommended levels of physical activity per week (Dario et al. 2016) and disease of the circulatory are the leading cause of death in this population (Glover et al.
The Gym Buds program was developed to investigate the effects of a peer-supported gym program on the physical and psychosocial health of adults with ID in Northern Ireland.

**Methods**
A cluster randomised pilot study was conducted to ascertain the feasibility of the Gym Buds program. Adults with ID (N=24) were randomised into intervention (N=13) and waiting list control groups (N=11). Undergraduate student buddies (N=19) were recruited from the university to provide social support and guidance during the study. Fitness instructors (N=4) delivered physical activity consultations (PAC’s) to adults with ID and developed personalised gym plans for the participants.

**Results**
Retention of ID participants (83%) and fitness instructors (100%) was good, but there was a poor retention rate in the gym buddies group (31.5%). ID participants attended just 45% of prescribed gym sessions (10/22). Reductions in sedentary time, increases in light PA per week and improved physical fitness were observed in the intervention group. None of the participants met minimum recommended levels of moderate-vigorous physical activity per week at post-intervention. Participant feedback was unanimously positive.

**Conclusions**
The Gym Buds program was not feasible in its current format as most of the ID participants did not want to do two weekly gym sessions. A re-design of the program involving one weekly gym session would be more feasible. More incentives for undergraduate student buddies may have improved retention in this cohort.

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**Part of Symposium**

**Paper 2: A 12-week feasibility study of school based walking intervention in Northern Ireland**

*Anne Johnston, Laurence Taggart*

*Ulster University*

**Background**
There are low levels of physical activity (PA) in children and adolescents with intellectual disabilities (ID). Walking can help to reach the recommended daily guidelines of 60 minutes moderate to vigorous PA per day. Walking is a convenient, accessible and free form of exercise that can be incorporated into daily life and sustained into old age; therefore it may be suitable for the ID population.

**Method**
A 12 week feasibility study of a school based walking intervention across 3 schools in Northern Ireland with a total of 38 participants. The age range of participants was 9-13 years. Children with ID (9-13 years) were paired with peer role models with ID (15-19 years) in a peer buddy system. Behaviour change techniques were mapped to COM-B and the socio-ecological model to identify intervention components. PA was objectively measured by accelerometer and pedometers were used as a motivational tool. PA, BMI, height, weight, physical fitness and behavioural and emotional wellbeing were assessed at three time points.

**Results**
It is feasible to develop and test a school-based multi-component walking intervention for children and adolescents with ID. In relation to attrition, 30 participants consented to the intervention group, 2 participants subsequently withdrew. 28/30 participants (93.3%) completed the intervention. Adherence to the walking intervention was 78.5% across the 2 intervention schools. There were statistically significant increase in vigorous PA (p=0.008) and moderate PA (p=0.027) in children with ID and peer role models with ID respectively from baseline to end of intervention. There was a statistically significant increase in physical fitness in peer role models with ID (p=0.010). There was a statistically significant decrease in total behavioural and emotional difficulties (p=0.036) in peer role models with ID.

**Conclusion**
This is the first study to develop and test a school-based multi-component walking intervention for children with ID. There was poor compliance to accelerometer wear time however all other outcome measures were appropriate and acceptable. There was a trend for improvement in PA, physical fitness and emotional and behavioural wellbeing.
Part of Symposium

Paper 3: Associations between activist and athletic identities among Para Sport athletes: A health and wellbeing perspective
Damien Haslett, University of Birmingham

Background
Sport psychology research has recently expanded to focus on how sport can be used to promote social justice issues; such as supporting athletes who engage in social activism. Recently, a small number of scholars have extended research to investigate how Para athletes advocate for social change within or outside their sports. Despite this, research on the experience of Para sport athlete activism has only involved qualitative designs to explore how some Paralympians engage specifically in disability activism (e.g. challenging disablism). No research has attempted to assess, for example, the compatibility of general social activist and athletic identities among Para athletes. Identity development is an important factor for health and wellbeing of athletes with disabilities. This study employed a cross-sectional survey design to examine the relationship between activist and athletic identities in Para sport athletes.

Method
The enquiry was underpinned by a critical disability studies paradigm (e.g. drawing on theory from psychology, sociology and disability studies). The activist and athletic identities of 130 Irish Para sport athletes (elite and recreational level) were measured using the Activism Orientation Scale (AOS) and the Athletic Identity Measurement Scale (AIMS), respectively. Data were analysed using statistical techniques (e.g. T-tests and Pearson’s correlation).

Results
Results will be presented in relation to: identity development and health and wellbeing literature; high-risk and low-risk activist orientations; and Para athlete and disability stereotypes.

Conclusions
This study provides an evidence-base to support and facilitate advocacy in Para sport contexts.

1541 Experimental & Applied Oral Presentation
The effect of social support received from others on cardiovascular reactivity towards an acute stress task
Jamie Gillman¹, Martin Turner¹, Matthew Slater¹, Jamie Barker²
¹Staffordshire University, ²Loughborough University

Objectives / Purpose / Background
Social support can be particularly beneficial when individuals are subject to stressful situations. Having a shared identity can also play an important role in the effectiveness of this support. The purpose of this study was to examine the effect of relational identification (RI) and social support on cardiovascular (CV) reactivity on approach to an acute stress task.

Design / Background / Key Points
A between-participant design included two social support groups: 1) support from a friend (i.e., high RI), or 2) support from someone they did not know (i.e., low RI).

Methods / Conclusions
Eighty-four participants were assigned to one of the two conditions (high/low RI) and attended the lab in dyads. Baseline measures of challenge and threat were recorded through self-report and CV indices. Participants were told that they would complete part of the Trier Social Stress Test, which involved participants talking to camera about their dream job for 5 minutes. Each condition had 5-minute preparation time, where the dyad interactions were video recorded for social support analysis before then completing the task. CV indices were monitored on approach to the task. Measures of relational identification, social support, and anxiety were also taken.

Results / Conclusions
Data collection has concluded with analysis currently being undertaken. Initial observations indicate that those in the low RI condition gave less support than those in the high RI condition. The effect of this on participants’ CV indices will be examined to explore differences between the two conditions.
Conclusions
Conclusions will be drawn in the context of theoretical and applied implications.

1548 Experimental & Applied Oral Presentation
Examining the influence of errors on subsequent performance: A test of the attentional control theory for sport
David Harris¹, Samuel Vine³, Michael Eysenck², Mark Wilson¹
¹University of Exeter, ²Royal Holloway University of London

Objectives
This paper explored the predictions made by the recently proposed Attentional Control Theory: Sport (ACTS; Eysenck & Wilson, 2016). While it is believed that errors in perceptual-cognitive tasks become more likely under elevated pressure, the relationship between perceived pressure and performance errors may not be straightforward. Negative interpretations of an error may further increase pressure, leading to a bidirectional pressure-performance relationship, as has recently been outlined in ACTS.

Design
We aimed to test these predictions using real-world data from two sports: American Football (the NFL) and Grand Slam Tennis. Data was obtained from NFL seasons 2009 to 2016, and every match from Grand Slam tournaments in 2016 and 2017.

Methods
These were analysed in a play-by-play manner by 1) assigning a pressure score to each play/point based on the current match scenario and 2) identifying when plays/points resulted in an error. Logistic regression was performed using a Bayesian estimation approach to identify credible intervals for the regression parameters.

Results
In American Football there was a clear increase in errors on high pressure plays and plays immediately following error, as well as an interactive effect. Similarly, in Tennis, there was an increased incidence of an error immediately after an error, as predicted by ACTS. However, fewer mistakes were made on high pressure points in Grand Slam Tennis.

Conclusions
These results support the predictions of ACTS that errors elevate the chance of further mistakes, but also highlight that strategies to mitigate the negative effects of pressure are possible.

1599 Review/ Theoretical & Practice Oral Presentation
Para sport athlete activism: social activist orientations among elite athletes with impairment
Damian Haslett & Brett Smith, University of Birmingham

Objectives / Purpose / Background
Recently, there have been calls for sport psychology researchers to focus upon social justice issues. There has also been a resurgence of scholarly interest into athlete activism: athletes who use their inherent social power to advocate for social change in sport or society (e.g. challenge discrimination). However, studies have predominantly focused on non-disabled athletes who use their profiles to highlight issues such as race or gender discrimination. In contrast, little focus has been given to the experience of Para sport athlete activism. Yet observational evidence suggests that some Para sport athletes use their sporting platforms to advocate for disability issues. Therefore, the aim of this study is to understand Irish Paralympians’ ordinations towards disability activism.

Design / Background / Key Points
Theoretically, this study was underpinned in a critical disability studies paradigm (e.g. research that can help challenge the socio-political and psycho-emotional exclusion of people with impairments).
Methods / Conclusions
We employed a qualitative methodology and collected data using open-ended interviews. 20 Irish Paralympians were recruited using a maximum variation purposive sampling strategy. The data set was rigorously analysed using a deductive/inductive thematic analysis.

Results / Conclusions
The results produced four themes: perceptions of disablism; challenging disablism and ableism; types of activist orientations; and athlete activism (im) possibilities. Within these themes links were made to the experience of; othering, dis/ability, becoming activist, voice for others and, metal health and wellbeing.

Conclusions
The central theoretical contribution of this research is athlete activism conceptualised as a contextually informed continuum of behaviours. Practically, the study provides an evidence base for advocacy workshops in Para sport contexts.

1578 Review/ Theoretical & Practice Oral Presentation
A critical review: How level one and two recreational gymnastics coaches affects the building of a coach-athlete relationship?
Tandy Jane Haughey & Jessica Hassan, Ulster

Objectives / Purpose / Background
A positive and healthy coach-athlete relationship is essential. Within this research, the coach-athlete relationship was analysed within an individual sport (gymnastics). Aim of the study was to research how level one and two recreational gymnastics coaches build their coach-athlete relationships.

Design / Background / Key Points
Coaching is complex in nature, meaning a coach must not only have a high skill level and knowledge, but have high motivational levels and competent in their role. These attributes allow a coach to be empathetic towards an athlete, gain respect through well-organised and planned sessions. To create a positive environment, coaches must respect athletes and allow for their ownership in sessions, creating an autonomy-supportive environment, this motivates them to continue in their sport gives choices, increasing the intrinsic motivation.

Methods / Conclusions
6 coaches (3 level 1 and 3 level 2), data collected via (a) observation of coaches and their behaviours during sessions; ASUOI and CBAS, (b) qualitative data through self-reports on their own perspective of behaviours towards athletes; LLS, BRSQ, CART-Q and IBQ-Self and (c) collection of quantitative data through interviews.

Results / Conclusions
To positively increase motivation levels the athlete’s Basic Psychological Needs components must be catered to, autonomy (giving ownership over), competence (a sense of mastery) and relatedness (feeling of mutual care). When each are catered to the athlete will feel a sense of connection to the coach, transferring into closeness, co-orientation and complementarity components of the coach-athlete relationship.

Workshop
Reflections on 25 years of consulting in sport psychology
Brian Hemmings, Private Practice
Brian has consulted in applied sport psychology for 25 years (1993-2018) principally working within professional and elite amateur golf, professional cricket, Olympic boxing and a range of elite level motorsport categories. His reflections will detail ten key factors in effective consultancy, as well as involving the audience in their own reflections.
**1640 Symposium**

**Physical activity and exercise for anxiety: Meta-analytic, epidemiological, and experimental evidence**

*Matt Herring, Cillian McDowell & Brett Gordon, University of Limerick*

**Objectives**
Anxiety is prevalent, burdensome, and poorly treated. Evidence supports salutary benefits of physical activity (PA) and exercise for mental health. Compared to depression, however, the influence of PA and exercise on anxiety remains understudied. This symposium will summarise the evidence regarding the influence of PA and exercise on anxiety.

**Design**
Recent meta-analytic, epidemiological, and experimental evidence will be presented.

**Methods**
Random effects meta-analyses of longitudinal studies of PA and anxiety and randomised controlled trials (RCT) of exercise training effects, including resistance exercise training, on anxiety were completed; meta-regression explored potential sources of variability. Cross-sectional and prospective associations between PA and anxiety symptoms and status and Generalized Anxiety Disorder (GAD) were examined using data from ~4,000 participants in The Irish Longitudinal Study on Ageing (TILDA). Acute exercise effects on worry and state anxiety were examined and replicated among two samples of young women with subclinical GAD, and expanded via comparison to young men with subclinical GAD. One previous and one ongoing RCT investigated exercise training for clinical and subclinical GAD.

**Results**
PA, particularly meeting PA guidelines, was associated with lower odds of developing elevated anxiety symptoms or an anxiety disorder. Acute exercise improved worry and state anxiety among adults with and without subclinical GAD. Aerobic and resistance exercise training result in small-to-moderate improvements in anxiety among otherwise healthy adults, chronically-ill adults, and adults with subclinical and clinical GAD.

**Conclusions**
Meta-analytic, epidemiological, and experimental evidence supports positive benefits of PA and acute and chronic aerobic and resistance exercise for anxiety.

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**1641 Part of Symposia**

**Paper 1: Physical activity for anxiety: Epidemiological evidence**

*Cillian McDowell, Brett Gordon, Matthew Herring*

*University of Limerick*

**Objectives**
To synthesise the epidemiological evidence of associations between physical activity (PA) and anxiety symptoms and disorders.

**Design**
Meta-analytic, cross-sectional, and longitudinal epidemiological evidence will be presented.

**Methods**
Random effects meta-analysis synthesised evidence from epidemiological studies of longitudinal associations of PA and anxiety symptoms and disorders. Combined cross-sectional data from the Mitchelstown Cohort Study and The Irish Longitudinal Study on Ageing (TILDA), and prospective data from TILDA were analyzed. In each of these studies PA was measured using the short-form International Physical Activity Questionnaire, and participants were classified based on meeting recommended PA guidelines. Outcomes included anxiety symptoms (Hospital Anxiety Depression Scale (HADS)), worry symptoms (Penn State Worry Questionnaire), and Generalized Anxiety Disorder status (GAD; Composite International Diagnostic Interview Short-Form (CIDI-SF)).

**Results**
Following adjustment, seventeen studies of 86,523 participants followed for a mean 8.01±0.95 years showed that PA was associated with 22% (OR=0.78, 95%CI: 0.70-0.88) lower odds of developing anxiety and 41% (OR=0.59, 95%CI: 0.51-0.69) lower odds of developing a diagnosed anxiety disorder, although only two studies were included. Meeting recommended PA guidelines was associated with 18% (OR=0.82, 95%CI: 0.73-0.93) lower odds of prevalent anxiety...
(HADS; n=6,513), 6% (OR=0.94: 95%CI: 0.63-1.40) lower odds of incident anxiety (HADS; n=3,165), and 63%
(OR=0.37: 95%CI: 0.17-0.85) lower odds of incident GAD (CIDI-SF; n=3,236).

Conclusions
The available evidence supports that PA is associated with lower odds of prevalent and incident anxiety symptom elevations and disorders. However, additional methodologically rigorous research using objectively-measured PA and clinical diagnosis of anxiety disorders is needed.

1643 Part of Symposia
Paper 2: Experimental evidence of the effects of acute exercise and exercise training on anxiety
Matthew Herring, Cillian McDowell & Brett Gordon, University of Limerick

Objectives
To summarise recent evidence of acute and chronic exercise effects on anxiety and related symptoms among otherwise healthy adults, chronically-ill adults, and adults with a subclinical or clinical anxiety disorder.

Design
Evidence from meta-analysis and experimental studies of acute exercise and exercise training will be presented.

Methods
Random effects meta-analysis synthesised evidence from randomised controlled trials (RCTs) of acute exercise on anxiety, RCTs of exercise training effects on anxiety among chronically-ill adults, and RCTs of exercise training effects among anxiety disordered samples. Meta-regression explored sources of variability. Three within-subjects counterbalanced experiments compared the effects of 30-min of vigorous treadmill running to 30-min of cognitively-passive seated rest among healthy young adults, young women with subclinical Generalized Anxiety Disorder (GAD), and a replication sample of young women and men with subclinical GAD. Potential sex-related differences were explored. Standardised mean differences and Hedges’ d quantified magnitude of change.

Results
Evidence from available RCTs supports significant, small anxiolytic effects of acute exercise among healthy and ill adults (g=0.16; 95%CI: 0.05-0.27), exercise training among chronically-ill adults (Δ=0.34; 95%CI: 0.27-0.40), and exercise training among anxiety disordered samples (Δ=0.38; 95%CI: 0.22-0.54). Compared to seated rest, acute exercise resulted in small-to-moderate magnitude improvements in state anxiety and worry among healthy young adults, young women with subclinical GAD, and young women and men with subclinical GAD (d range: 0.13 to 0.44). The magnitude of these improvements were larger among women.

Conclusions
Available evidence supports the anxiolytic effects of acute and chronic exercise among diverse samples of adults.

1644 Part of Symposia
Paper 3: Experimental evidence of resistance exercise training effects on anxiety
Brett Gordon, Cillian McDowell & Matthew Herring, University of Limerick

Objectives
To synthesise the existing evidence of resistance exercise training (RET) effects on anxiety symptoms and subclinical and clinical disorders.

Design
Meta-analytic and experimental evidence from randomised controlled trials (RCT) will be presented.

Methods
Random effects meta-analysis and meta-regression analysis synthesised the available RCTs of RET effects on anxiety compared to non-active controls, and explored potential sources of variability. A previous RCT examined six weeks of twice weekly RET or aerobic training compared to wait-list control among young women with clinical Generalized Anxiety Disorder (GAD). An ongoing RCT investigated eight weeks of ecologically-valid upper- and lower-body RET on signs and symptoms of GAD among young adult men and women with subclinical GAD.
Results
Meta-analysis of 16 RCTs supports a significant small effect of RET on anxiety symptoms (Δ=0.31). Larger effects resulted from RCTs of healthy adults compared to adults with an illness. Effects were not moderated by sex or features of RET. Six weeks of exercise training significantly improved anxiety symptoms (d≥0.52), worry (d≥0.45), and feelings of tension (d≥1.05) among young women with clinical GAD. Positive responses to RET occurred as soon as two weeks into training. Preliminary findings from an ongoing RCT of the acute and chronic effects of RET on signs and symptoms of GAD among 24 young adult men and women with subclinical GAD will be presented.

Conclusions
RET significantly reduces anxiety among adults. However, higher quality RCTs of adults with subclinical or clinical anxiety are needed to more rigorously assess the true effect of RET.

1631 Experimental & Applied Oral Presentation
The role of celebrity in the post-olympic blues
Karen Howells & Mathijs Lucassen, The Open University

Objectives
To explore the role of celebrity in the development of the ‘post-Olympic blues’.

Design
Interpretative Phenomenological Analysis with its roots in phenomenology and hermeneutics was deemed to appropriate to explore the meaning(s) athletes construct about their personal experiences.

Methods
A criterion-based, purposive sampling strategy was used to identify a demographically homogenous sample of four female British athletes who competed in the 2016 Olympic Games. They were interviewed and asked to draw timelines about their Olympic experiences on one or two occasions.

Results
The athletes’ experiences in the build-up to, during, and in the immediate aftermath of the Rio Olympic Games created a celebrity identity that was internalised as being part of what an Olympian was. Environmental factors including the kitting process, the Olympic village, and homecoming contributed to the development and growth of this identity. However, when interest in the Olympic Games disappeared from the public imagination and the athletes returned to their everyday existence, a focus on the mundane could not be assimilated into the athletes’ perceptions of identity and they consequently experienced depressive symptoms that were conceptualised as the blues.

Conclusions
This study articulated what the post-Olympic blues meant to athletes following the Rio Olympic Games and identified the negative impact that the athletes’ celebritisation had on their mental wellbeing. It is hoped that this research will inform National Governing Bodies’ to ensure that athletes are provided with the support and skills they require to negotiate the celebritisation of their personas before, during and after the Games.

1557 Five-Minute Challenge
Getting comfortable being uncomfortable: My first month as a trainee
Pete Jackson, Sport Psychology Trainee

Purpose
To reflect, and assist others to reflect on the particular discomfort that accompanies the first few months of QSEP Stage II.

Background
‘How will they respect me if I haven’t got any experience?’
‘What will I say if they ask me for advice?’
‘Have I read enough?’
‘Am I ready?’
‘Here goes’
That first consultation.
I’ve never felt more out of my depth in all my life. In other jobs I’ve been told to ‘put your hand up’, ‘ask the stupid questions’ and ‘don’t be too proud to say you don’t know how the photocopier works’. But this is different. The expectation is that I know my stuff straight off the bat, and that I am the expert. The only choice is to embrace this horrible, gnawing uncomfortableness and just blast through it. Hold your chin up and deliver your speech. Believe in yourself and trust your supervisor’s sage advice

**Methods**

1st person, autoethnographic approach – brought to life through a 5 minute story informed by relevant literature on applied practice and reflection.

**Conclusions**

This 5-minute challenge will explore my first few months as a Stage 2 trainee, my first few consultations and that completely unavoidable feeling of uncomfortableness in a series of completely new and novel situations. The story will be told through the lens of relevant research on applied practice and reflection, such as Knowles et al. (207), McCormick, Coyle & Gibbs-Nicholls (2018), McCormick & Meijen (2015) and McDoughall, Nesti & Richardson (2015).

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1801 Experimental & Applied Poster Presentation

**Re-engaging inactive former elite athletes in healthy sport and physical activity**

Anna Jordana¹, Miquel Torregrossa¹, Susana Regüela², Javier Vega², Yago Ramis¹

¹Universitat Autònoma de Barcelona, ²Centre d’Alt Rendiment de Sant Cugat del Vallès

**Purpose**

This program had the goal to implement an individualised intervention based on Rational Emotive Behaviour Therapy (REBT) to explore the beliefs, motivations and perceived barriers to re-engage in healthy PA years after retirement from elite sport.

**Background**

After retiring from elite sports, maintaining healthy levels of physical activity (PA) might be challenging for former elite athletes. Some of these athletes, time after dropping out from sport, develop an inactive lifestyle.

**Methods**

Eight former elite athletes received three one-to-one 45 minutes REBT sessions, focused on identifying, disputing and replacing irrational beliefs in favour to rational beliefs. In addition, to help the self-reflection and reaffirmation of the REBT principles, we provided homework tasks between sessions. Measures were collected before and one month after the intervention sessions, combining on-line questionnaires (e.g., Shortened General Attitudes and Belief Scale; SGABS) and semi-structured interviews.

**Conclusions**

Seven of the eight participants re-engaged in PA after reinterpreting the ‘healthy PA’ concept as more rational levels of activity both in terms of frequency and intensity, and reducing some irrational beliefs such as catastrophism and demandiness. We discuss that retirement from elite sports implies a deep change in athletes’ lifestyle, involving behavioural, cognitive and emotional consequences. Former elite athletes might need support for their re-adaptation and transition to less intense but healthier PA. Our research sheds light on the difficulties that elite athletes face once they retire from competition, and contributes to the growing literature supporting the efficacy of REBT as an intervention program in sport contexts.

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1603 Symposium

**Preventing doping in sport: From theory to application**

Maria Kavussanu¹, Phil Hurst²

¹University of Birmingham, ²Canterbury Christ University

The use of banned performance-enhancing substances, also known as doping, is a major threat to the health of athletes and the integrity and image of sport. Although our understanding of the factors that facilitate doping has increased in the last decade, less progress has been made in developing evidence-based psychological interventions aimed to prevent doping in sport. In this symposium, we discuss the development and evaluation of two such interventions, in young British and Greek athletes: the VIRTUES and HEROES projects, funded by IOC and WADA. The first paper is a large cross-sectional study that examines the psychological factors associated with doping in young
competitive athletes, recruited from three countries. The second paper describes an experiment that examines the effects of moral disengagement on doping likelihood and anticipated guilt. The third paper presents the development, implementation and evaluation of the VIRTUES intervention, which aims to reduce doping intentions by focusing on moral disengagement, anticipated guilt, and self-regulatory efficacy. The fourth paper presents the development and evaluation of the HEROES intervention, which focuses on moral identity, moral disengagement and moral atmosphere. The fifth paper explores the experiences of athletes, who took part in the VIRTUES and HEROES projects, and provides qualitative evidence for the effectiveness of these interventions in reducing doping intentions. The symposium concludes with a reflection on the pearls and pitfalls of designing and delivering anti-doping interventions to help further our understanding of the difficulties researchers and policymakers face in their anti-doping efforts.

1604 Part of Symposia

Paper 1: Social cognitive predictors of doping intentions: A multi-national study

Maria Kavussanu1, Lida Skoufa2, Vassilis Barkoukis2, Phil Hurst3, Andrea Chirico4, Fabio Lucidi4, Chris Ring1

1University of Birmingham, 2Aristotle University of Thessaloniki, 3Canterbury Christ Church University, 4Sapienza University of Rome

Objectives
Doping is among the most important threats to the image of sport. In order to better understand the psychological mechanisms associated with doping, several theoretical approaches have been tested. One of the most prominent is Bandura’s Social Cognitive Theory, which posits that moral disengagement and self-regulatory efficacy are among the most influential predictors of decision making towards anti-social and unethical behaviors. The present study aimed to investigate whether moral identity predicts doping intentions directly and indirectly via moral disengagement and self-regulatory efficacy, in Greek, British and Italian athletes.

Design / Background / Key Points
Cross-sectional

Methods / Conclusions
A total of 1536 athletes were recruited (n = 489 in Greece, n = 481 in UK, n = 566 in Italy). The mean age of the participants was 19.83 (Mage = 17.80 in Greece, Mage = 20.37 in UK, Mage = 20.90 in Italy). Participants completed a survey comprising measures of moral identity, moral disengagement, self-regulatory efficacy and doping intentions.

Results / Conclusions
Structural equation modelling was used to test the proposed model and examine whether the model is invariant across the three countries. The results of the analyses indicated that moral disengagement and self-regulatory efficacy mediated the effect of moral identity on doping likelihood. The model was partially invariant across the three countries.

Conclusions
The findings of the study provide valuable information on the role of social cognitive constructs in the prediction of doping likelihood. Practical implications for coaches and stakeholders are presented.

1605 Part of Symposia

Paper 2: The effects of moral disengagement on doping likelihood and guilt

Maria Kavussanu1, Chris Ring1, Phil Hurst2

1University of Birmingham, 2Canterbury Christ Church University

Objectives
To examine the effects of moral disengagement on doping likelihood and guilt, and to determine whether the effects of moral disengagement on doping likelihood are mediated by guilt and moderated by moral standards.

Design
An experimental design was used to examine the effects of moral disengagement mechanisms on doping likelihood and guilt in hypothetical situations.
Methods
Athletes rated their doping likelihood and guilt in situations describing one of six moral disengagement mechanisms (moral justification, advantageous comparison, euphemistic labelling, distortion of consequences, displacement of responsibility, diffusion of responsibility) and in control (i.e., neutral) situations. Participants completed trait measures of moral agency, moral identity, moral perfectionism, and moral values.

Results
Doping likelihood was higher and guilt was lower in each of the six moral disengagement situations compared to control situations. Moreover, doping likelihood and guilt differed among the moral disengagement situations. The increased likelihood of doping associated with most moral disengagement situations (except euphemistic labelling) was mediated by decreased guilt and moderated by moral agency and moral perfectionism.

Conclusions
The moral disengagement mechanisms changed the extent of the regulation over moral action to reveal a hierarchy of mechanisms for encouraging doping. That the effects of situational temptations on doping intentions were moderated by moral standards highlights the role played by moral agency and moral perfectionism to restrain dishonest conduct.

1606 Part of Symposia
Paper 3: Preventing doping in sport: The VIRTUES project
Maria Kavussanu¹, Phil Hurst², Vassilis Barkoukis³, Lida Skoufa³, Ailish King¹, Chris Ring¹
¹University of Birmingham, ²Canterbury Christ University, ³Aristotle University of Thessaloniki,

Objectives
The main objective of this study was to develop and evaluate an anti-doping intervention aiming to reduce athletes’ intentions to dope by targeting their moral disengagement, anticipated guilt, and self-regulatory efficacy.

Design
2 Group (Psychological, Educational) x 2 Time (Pre, Post) Experimental design, with a two-month follow up.

Methods
Athletes (N= 206) from individual and team sports, recruited from Greece and UK, were randomly assigned to either a psychological (n= 95) or an educational intervention (n= 112). The psychological intervention focused on challenging moral disengagement mechanisms, accentuating anticipated guilt and strengthening self-regulatory efficacy to resist doping. The educational intervention included information about anti-doping rules and regulations, health consequences of banned substances, sport supplements, and healthy nutrition. Both interventions consisted of six, one-hour sessions. Athletes completed questionnaires about doping intention, moral disengagement, self-regulatory efficacy, and guilt pre and post intervention, and two months after the end of the intervention.

Results
Analysis showed a decrease in doping intention and moral disengagement from pre to post test for both the psychological and the educational intervention. Self-regulatory efficacy increased for those participants taking part in the educational but not those taking part in the psychological intervention.

Conclusions
Our findings suggest that our anti-doping interventions can be effective in reducing doping intentions. The findings have significant implications for anti-doping and can inform both policy and practice.

1607 Part of Symposia
Paper 4: Preventing doping in sport: The HEROES project
Maria Kavussanu¹, Phil Hurst², Ailish King¹, Antonis Hatzigeorgiadis³, Anne Marie Elbe⁴, Chris Ring¹
¹University of Birmingham, ²Canterbury Christ University, ³University of Thessaly, ⁴University of Leipzig,

Objectives
To examine the effectiveness of an evidence-based moral intervention compared to a standard educational (knowledge-based) intervention in reducing doping intentions in young athletes.
Design
2 Group (Moral, Educational) x 2 Time (Pre, Post) Experimental design, with a three-month follow up.

Methods
Male and female athletes (N= 159), aged 16-22 years old, taking part in individual and team sports, were recruited from sports colleges and clubs, in Greece and UK. They were assigned to either the moral or the educational intervention and participated in six one-hour sessions delivered by a facilitator, at their sports college or club. The sessions were delivered in groups of 4-14 athletes, once a week, over a period of six weeks. Measures of doping intentions, moral identity, moral disengagement and moral atmosphere were taken before and after the interventions, as well as three months after the interventions have ended.

Results
A 2 Intervention Group (Moral, Educational) × 2 Time (pre, post) × 2 Country (UK, Greece) Repeated Measures MANOVA on doping intentions, moral identity, moral disengagement, and moral atmosphere was conducted. The results show that both interventions were similarly effective in decreasing doping intention and moral disengagement (from pre to post-test) in both Greece and UK.

Conclusions
The findings suggest that doping intentions in young athletes can be reduced. They have significant implications for doping prevention and suggest that there is value in delivering both moral and educational interventions. Our findings could inform anti-doping policy and practice of national anti-doping organisations.

1608 Part of Symposia

Paper 5: Evaluating the effectiveness of the VIRTUES and HEROES projects: Qualitative evidence

Maria Kavussanu1, Ailish King2, Phil Hurst2, Lida Skoufa3, Vassilis Barkoukis4
1University of Birmingham, 2Canterbury Christ Church University, 3Aristotle University, 4Aristotle University of Thessaloniki

Objectives
The purpose of this study was to evaluate the effectiveness of the HEROES and VIRTUES projects using qualitative methods.

Design
Qualitative study involving semi-structured interviews with focus groups of 4-7 participants.

Methods
Athletes from individual and team sports aged between 16-24 years, who attended the two interventions took part in focus groups. The interview guide includes questions pertaining to the content and delivery mode of the interventions. Participants are asked about the effectiveness of the intervention on their views about doping use. They are also asked to identify elements of the intervention that they felt were most effective in changing their views about doping, comment on mode of delivery, and offer suggestions for improvement.

Results
Preliminary results indicate that participants have experienced a change in their views about doping. They have enjoyed the sessions and liked their interactive nature. They have become more aware about doping and better understand the consequences of using banned substances. Participants have also identified sessions on sport supplements from the educational intervention and consequences of doping for others from the moral/psychological interventions as important elements of the sessions that have changed the way they think about doping.

Conclusions
The qualitative evidence obtained in this study reinforces the quantitative results of the VIRTUES and HEROES projects. The findings suggest that the participants valued the experience of the intervention and they felt that certain elements of the intervention were particularly useful in changing their views about doping.
**2031 Experimental & Applied Poster Presentation**

**A preliminary investigation into coach leadership behaviours at an English football academy using an observational methodology**

*Adam Kelly¹, Jennifer Turnidge², Daniel Goldman², Jordan Chen², Jean Côté³, Samantha Berge³, Craig Williams⁴, Mark Wilson⁴*

¹Birmingham City University, ²Queen’s University, ³Oslo Metropolitan University, ⁴University of Exeter

**Purpose**

This study explored the contribution of a behavioural observation methodology by investigating coach leadership behaviours in an English football academy.

**Background**

Coaches’ leadership behaviours are important for facilitating quality sport experiences. However, there is recognition that the questionnaires most commonly used to assess coaches’ leadership behaviours may not accurately capture the dynamic nature of these behaviours. Accordingly, researchers have advocated for the use of observational methods to examine how leadership behaviours occur in real-world settings. This study explored coach-athlete interactions through quantitative analysis using the Coach Leadership Assessment System (CLAS), which is grounded in the full-range leadership model.

**Methods**

The coach (male; aged 29 years) at an under-11 football academy was observed over twelve practices. The CLAS enabled researchers to examine the duration of the coach’s leadership behaviours across five higher-order dimensions; transformational, transactional, neutral, laissez-faire, and toxic leadership. The coach’s leadership behaviours were also examined in relation to their content, recipient, and context.

**Results**

Results indicated that the coach’s behaviours involved high amounts of neutral (54.42%) and transformational (37.21%) leadership, and low amounts of transactional (3.24%), toxic (0.22%), and laissez-faire (0.14%) leadership. Moreover, the coach’s transformational behaviours were primarily delivered with instruction and feedback, and targeted individual athletes.

**Conclusions**

This study illustrates how behavioural observations using the CLAS offer a detailed account of coach leadership behaviours in academy football. Findings can be used to improve the quality of coaching behaviours within this environment. Further research is required to investigate the role of coach leadership from an age-specific context.

**MSc Award Winner**

**An exploration of the demands experiences by physiotherapists’ in elite sport**

*Sunita Kerai, St Mary’s University*

This study extends stress research by exploring physiotherapists’ experiences of stressors in elite sport. Ten physiotherapists (5 male, 5 female) were interviewed who had prepared athletes and worked with them at club, national, and international events (e.g., Olympic and Paralympic Games, Commonwealth Games, World Cups, World Championships). Transcripts were analysed using thematic analysis. Five themes were identified: I am not a Machine, This is Sport, Relationships are Messy, Under the Microscope, and Beyond one’s Remit. These themes illustrate that physiotherapists experience a wide variety of stressors, with diverse consequences (e.g., work-life conflict, relationship breakdown). Implications are discussed across multiple-levels (i.e., policy, cultural, organisational, interpersonal, and intrapersonal).

**1558 Five-Minute Challenge**

‘We’d only like you to observe’: Now be a complete psychologist

*Tom King, Sport Psychology Trainee*

**Purpose**

To help guide future/current QSEP trainees in understanding and dealing with uncomfortable environments in practice.
Background
Context for the 5-minute FAST presentation was triggered during practice at Leicester City Football Club, where I had originally been asked to just ‘observe’ a situation, and at the time that’s all I felt was expected of me. Of course, that didn’t turn out to be the case at all, as I was basically called upon as a chartered psychologist.

Methods / Conclusions
Justification: The reasoning for selection of the current case is to provide context for learning and development for other QSEP 2 trainees. Not only from peer support, but from practical examples of techniques used to counter uncomfortable thoughts/feelings around an incident of potential distress. This justification will also be discussed with an evidence-based background within personal qualities of a sport and exercise psychologist, explanations from experienced practitioners and the coping demands within an elite sport environment.

Conclusions
This 5-minute FAST challenge will explore reflections on my experience leading up to this situation, my preparation for the session itself, the small cluster of mental ‘what if’ plans I had in place if something went wrong, and how I’ve used an evidence based practice to facilitate growth in future practice.

Keynote Presentation
Engaging with public(s): Words, pictures, kids and trees
Zoe Knowles, Liverpool John Moores University
According to the National Coordinating Centre for Public Engagement, whilst everyone is a member of the public, there are differences between individuals which profoundly shape their own sense of themselves and their agency. One commonly used tactic is to replace the term ‘public’ with ‘publics’, to try to convey this complexity. Engaging with the public for research and consultancy requires time served with the public(s) together with the use of innovative and participatory approaches. For over 20 years I have conducted research with children, clinical populations, and the community and will share the origins, successes, and challenges from this period. Methodologies include Write Draw Show and Tell, 3D printing, and creative methodologies used within settings as diverse as the Natural Health Service, consultancy within elite youth sports, Forest Schools, Childrens Centres and childrens hospitals. Offering insight into my own career including that of a public engagement professional, I hope to challenge, provoke and disturb conventional thinking on the boundaries of our discipline and offer implications for training and practitioner development. I have been privileged to have access to the lives of many children, young people and families and for 15 years have led on modules whereby students encounter their first experiences of applied practice. I will share not only my own words and pictures but that of participants, clients, students and my own family. Finally, I will suggest ways for the sport and exercise psychologist to become a more engaged professional to increase the impact and reach of their research.

2040 Experimental & Applied Poster Presentation
‘...we are happy for each other...’: Considering cohesion in youth individual sport using interpretative phenomenological analysis
Michaela Kousalova & Cheryl A. Pitt, Buckinghamshire New University
Background
Cohesion has been found to affect various important psychological outcomes on individual and team levels, e.g. performance, and motivation. Majority of research investigating the topic of cohesion has focused on team sports, where athletes aim to complete a competitive task together. However, even though athletes representing individual sports train and compete in groups, they have been somewhat omitted from the cohesion research. It also appears that little empirical attention has been given to the perceptions of cohesion in youth sports. The present study aimed to explore the perception of group cohesion by providing an insight into the perspectives of youth athletes competing in an individual sport.

Methods
With institutional ethical approval, four female gymnasts aged 14-16 years were recruited via purposive sampling. Using Interpretative Phenomenological Analysis and in-depth semi-structured interviews the personal lived experience of group dynamics and cohesion within artistic gymnastics was explored.
Results
The findings revealed three superordinate themes and seven sub-themes: A) Team belonging - 1) Friendships, 2) Team togetherness, and 3) Disagreements; B) Support within the team - 1) Receiving support and 2) Giving support; C) Dynamics of the sport - 1) Size and age of the group and 2) Individual and team sports.

Conclusions
The results illustrate complexity, different forms, and importance of cohesion to the performance and wellbeing of athletes, implying the need to nurture the team aspect of individual youth sports. The number of participants as well as the recruitment from the same club might have been the possible limitation of this research.

QSEP Breakfast Meeting
Breakfast Meeting for Stage 2 QSEP
Professor Moira Lafferty, QSEP Chief Supervisor & Dr Martin Eubank, QSEP Chief Assessor
Prof Moira Lafferty (QSEP Chief Supervisor) and Dr Martin Eubank (QSEP Chief Assessor) are hosting an Inaugural QSEP Breakfast meeting at the conference from 8-9am on Tuesday 4th December to which QSEP trainees, supervisors and assessors are invited. This will be an open forum in which to engage practitioner training and development discussion relevant to the qualification. You can table your questions in advance to Moira or Martin via the QSEP stand or just bring them on the day! Hopefully this will be a lively hour of discussion to get everyone ready for day 2 after the conference dinner the night before! We look forward to seeing you there bright (hopefully?) and early...

2030 Experimental & Applied Poster Presentation
Welcome activity or sporting initiation? Benefit and risk for new players
Moira Lafferty¹, David Ryan¹, Caroline Wakefield²
¹University of Chester, ²Liverpool Hope University

Objectives
The British University Sport Model suggests that welcome events/rites for new players can be categorised on a continuum from beneficial activities to those with significant physical and psychological risk. An inverted-U relationship has been hypothesised between benefit and risk. Critical to the activities beyond the apex of this inverted-U are intensity, consent and power imbalance between new and senior players. To-date, there has been limited exploration of whether athletes consider initiations to be beneficial, their perception of risk in relation to benefit and activity categorisation.

Design
On-line survey with open ended questions exploring athletes own experiences of initiations, perceptions of activity acceptability and changes in practice over time.

Methods
After ethical approval, the survey link was shared on social media platforms. 96 university and ex-university sport players participated. Data were analysed using thematic analysis to produce both qualitative and quantitative results.

Results
71% of respondents considered welcome events to be acceptable. Qualitative results demonstrated that acceptability was reliant on, consent, the welcome event being situated at the positive end of the continuum and not involving harm. Themes including bullying behaviours, coercion/pressure, harm, humiliation and negative long-term effects emerged from the responses of those who deemed initiations to be unacceptable.

Conclusions
Results support the continuum model and notion of risk/benefit and have important implications for the acceptability of welcome activities and the need for increased awareness with respect to activity boundaries. To reduce negative outcomes interventions should focus on educating athletes about risk behaviour and discuss methods of conducting positive welcome activities.
1477 Case Study

An online goal-directed self-talk intervention: A single-case study
Alexander T. Latinjak¹, Cristina Hernando-Gimeno², Luz Lorido-Méndez³, James Hardy⁴
¹(1) University of Suffolk; ²EUSES - School for Health and Sport Sciences, ³University of Suffolk, ⁴Universitat Autònoma de Barcelona, ⁴Bangor University

Purpose
This study scrutinised an innovative online self-talk intervention targeting athletes’ goal-directed self-talk.

Background
Goal-directed self-talk interventions aim at improving athletes’ rational self-regulatory skills, by creating metacognitive knowledge. Changes in metacognition stem from repeated reflections upon past self-talk and future usage of self-instructions. Furthermore, a unique and contemporary aspect of the intervention presented in this study, was the use of an online text-messenger service for the intervention.

Methods
The single-case design was justified because this intervention would be the first online-intervention based on the goal-directed self-talk. Data were multi-sourced stemming, from the psychologist, the athlete, Julia, a 20-years old elite field-hockey player, and her coach. To analyse the data, an interpretative phenomenological analysis was performed.

Conclusions
After the 4-weeks intervention (8 sessions), Julia noticed important changes, mainly related to her confidence: ‘it’s where I’ve see most changes (…) I approach things differently, and that was like a door that opened to me’. Moreover, the use of the text-messenger service for the intervention was key: ‘… for I had to respond in writing, I had a moment to think before I answered.’ Lastly, three months post-intervention, Julia still rated the intervention positively, even beyond the sport context: ‘The whole program, the ‘what do you say to yourself’ and ‘what could you have said differently to yourself’, can help you in all your life.’ Hence, this is a self-talk intervention developed and applied in sport, with potential beneficial effects for the athlete in other areas of life.

1478 Experimental & Applied Oral Presentation

Goal-directed self-talk mechanisms in sports: A qualitative study
Alexander T. Latinjak¹, Cristina Hernando-Gimeno², Antonis Hatzigeorgiadis³
¹(1) University of Suffolk; ²EUSES - School for Health and Sport Sciences, ³University of Suffolk, ⁴University of Thessaly

Objectives
This study focused on a basic question in self-talk literature: How does self-talk increase sport performance?

Design
To further our understanding on self-talk mechanisms, we used a descriptive qualitative research design. The use of self-reports was justified because such procedures provide access to metacognitive knowledge that cannot be obtained through other methods.

Methods
Convenience sampling was used to select the participants (n = 73; 28 females; Mage = 24.82, SD = 4.58). Experienced adult athletes were contacted in groups of 8 to 12, until the point of data saturation was reached. The main research question on self-talk mechanisms, formulated and responded in writing, was presented in face-to-face interviews, designed to guide participants’ understanding of goal-directed self-talk. Regarding data analysis, a hierarchical content analysis was performed by two analysts with the help of one critical friend.

Results
The participants in this study identified (a) general cognitive self-talk mechanisms and (b) specific self-talk mechanisms. With regard to the former, self-talk can increase performance by provoking general cognitive changes such as focusing attention, concentrating and thinking rationally. Regarding the latter, self-talk can aid performance by recalling instructions, coping with perceptions of pain and fatigue, regulating motivation, controlling emotions and adjusting confidence.
Conclusions
Since many of the described categories echo past findings, the innovative contribution of this study lies within the distinction in terms of general and specific self-talk mechanisms. Regarding applied practice, the simple scheme of self-talk mechanisms could serve in goal-directed self-talk interventions as an explanatory representation for athletes and coaches.

1602 Experimental & Applied Oral Presentation
Developing Mental Toughness: The feasibility of the Mindfulness-Acceptance-Commitment (MAC) approach in academy rugby players
Stephen Leckey¹, Victoria Penpraze¹, Ross White², Niall Macfarlane¹
¹The University of Glasgow ²The University of Liverpool

Objectives / Purpose / Background
Mental Toughness (MT) is a multi-dimensional construct that allows individuals to cope with stress. Sport settings are complex, high pressure environments that include a number of sport and non-sport stressors. There is a need for an effective MT intervention that gives players the ability to perform within these performance environments. The Mindfulness Acceptance and Commitment (MAC) approach serves to enhance psychological flexibility, which shares considerable conceptual overlap with MT. The aim of this study was to evaluate the feasibility of the 7 session MAC approach for enhancing MT in elite, academy rugby union players.

Design / Background / Key Points
An uncontrolled trial was conducted using the PICO framework to explore the feasibility of using the MAC approach to enhance MT. This was accompanied by qualitative data relating to the participants' perceptions of the acceptability of the MAC approach.

Methods / Conclusions
After purposeful sampling, 33 participants (Mean age = 20, SD = 1.2 years, mean playing experience = 10, SD = 3.8 years) from 2 regional academies were assigned to 3 separate MAC groups. Pre- and post-intervention measures included MT, Mindfulness and Psychological Flexibility.

Results / Conclusions
21% of participants completed all of the MAC sessions, 73% completed more than half of the MAC sessions. Significant, positive improvements were evident in measures of MT (Challenge = 10%, Confidence in Abilities = 5.4%).

Conclusions
The study findings indicated that the MAC approach offers promise for enhancing MT in elite, academy rugby players. Further investigation employing a randomised controlled trial design is warranted.

1636 Experimental & Applied Oral Presentation
Becoming Mum: How elite athletes balance motherhood and high-performance sport
Candice Lingam-Willgoss¹, Caroline Heaney¹, Karen Howells¹, Martin Polley²
¹The Open University, ²De Montfort University

Objectives / Purpose / Background
The current study addressed the lack of understanding about the experiences of elite athletic mothers. Specifically, it was concerned with how these athletes managed the demands of motherhood and their careers, and explored the lived experience of their transition into motherhood. Further, it explored whether the type of sport has any impact.

Design / Background / Key Points
To explore each athlete’s experience holistically, the study was informed by the qualitative tradition of narratology allowing a focus on their lived experiences. This facilitated an in-depth analysis of both the content and the structure of the athletes’ stories.
Methods / Conclusions
Six elite athletic mothers from a range of sports were purposively sampled and interviewed. The semi-structured interviews were transcribed verbatim and analysed using thematic narrative analysis, whereby patterns, themes, and categories were tracked giving meaning to the life story.

Results / Conclusions
Similarities were found in the athletes’ narratives in relation to how they coped with their different roles: time management, planning, social support and flexibility. It was also recognised how the same factors that made the experience manageable were also those that created challenges when they were absent or inappropriate.

Conclusions
The findings of this study suggest that social support is at the forefront of every athlete’s story. This type of support was integral to the successful negotiation of the conflicting demands that elite sporting mothers experience in respect of maintaining their relationship with sport and their sporting identity. Ultimately, unrealistic expectations and poor planning tended to lead to more unmanageable and negative experiences.

1736 Workshop
Mapping Personal Social Networks: Guidance for practice and research in sport and exercise psychology
Ruth Lowry, Matthew Sitch, University of Chichester

Background
As social media has evolved, the term social network is more commonplace in everyday and research vocabulary. People often use the term to describe ways other people as a collective, interact and influence their behaviour, thoughts or emotions. The concept of the network can be seen in terms of psychological concepts including, stress, injury response, career transitions and health behaviour change. That said, like many other constructs, social networks may be understood but more difficult to define for the purposes of empirical investigation or for practitioners to pinpoint the particular nuances of group influence. Networks can take the form of a bounded social construct for example a team, organisation, workplace or community. Alternatively, the network can be a personal construct of how important others are viewed by an individual.

Key Points
In this workshop we will examine what networks are in terms of composition and structure before exploring how they function to facilitate or inhibit the actions of the individual or group. Examples from sport, physical activity, health and fiction will be used to illustrate some of these concepts. The workshop will give participants the opportunity to map their own personal network to see how information is generated and can be incorporated into a research interview or a consultation with a client.

Conclusions
The workshop has been designed to provide a brief and practical introduction to personal social networks to participants and is aimed at individuals involved in research and practice in the field of sport and exercise psychology.

1549 Review/ Theoretical & Practice Oral Presentation
Men in the company of men: A scoping review of the perceived physical, psychosocial and employability benefits of Shedding
Ruth Lowry, Sarah Edmunds, Esther Burkitt, Nicolas Farina
1University of Chichester, 2Brighton and Sussex Medical School

Objectives / Purpose / Background
The mortality, health and wellbeing of men and their willingness to seek support is recognised as falling below that of women. The gendered, Men Shed movement originated in Australia is recognised as an effective space offering shedders the opportunity to learn skills and socialise but with potential to have wider health benefits. The documented benefits of the shed’s movement still remain unclear despite recent growth in the number of publications appearing in the literature. The aim of this scoping review was to identify the direct physical health, psychosocial and employability benefits to shedders resulting from their involvement in Men Sheds.
Design / Background / Key Points
A search of the literature published between 2013 and 2018 returned 232 studies with 69 screened and evaluated for inclusion in this review. The review was designed to assess the literature for consistencies or differences of the findings, adopting a similar strategy to that employed by Milligan et al. (2016) and the recommendations of Askey and O’Malley (2005).

Results / Conclusions
The majority of the included studies used cross-sectional, qualitative methods to evaluate the effectiveness of involvement in Sheds with current shedders. Few studies appeared to cite any theoretical underpinning to the Shed structure or to the evaluation framework adopted. Whilst participants perceive a myriad of positive benefits from their involvement in shedding, there still is a distinct lack of causality to the evidence gathered. Future research needs to carefully consider the evaluation of Shedding experiences to provide a more comprehensive understanding of shedding culture and the efficacy of this grassroots movement.

1543 Symposium
Symposium on international perspectives in wellbeing and mental health in sport: New pathways to Impact
Tadhg E. MacIntyre¹, Jessie Barr¹, Giles Warrington¹, Juergen Beckmann², Gavin Breslin¹, Paul Donnelly⁴, Stephen Shannon³, Tandy Haughey³, Hannah McCormack¹, Deirdre O'Shea¹, Mark Campbell¹
¹University of Limerick, ²Technical University of Munich, ³Ulster University, ⁴Sport Northern Ireland
The problem of mental health challenges in high performance sport has recently been illuminated by successive international studies. Evidence suggests that the trend is that athletes in elite and professional sport are at a higher risk than participants at other levels of competition. In particular, elite dual-career performers are particularly at risk and a combination of sport and non-sporting factors have been identified. Three major issues that limit our capacity to provide appropriate support for those involved in elite sport have emerged. Firstly, as addressed by Jessie Barr et al. mental health stigma, based on a large scale national online survey, appears to be pervasive in sport, creating a barrier to helping behaviour and leading to an underestimation of the mental health challenge. Next, the role of stakeholders, other than athletes and coaches, in supporting athletes’ wellbeing, mental health and help-seeking has been somewhat overlooked. The sporting landscape is unique and the studies on practitioner psychologists’ ability to engage in self-care by Hannah McCormack is integral to ensuring wellbeing within sport systems. An international survey conducted with sport sciences and sports medicine support staff and accredited practitioner psychologists bridges the gap in the literature with regard to their value in prioritising wellbeing and mental health in performance sport. And finally, the optimal solutions to support mental health and wellbeing are to date unclear. A case study approach and a National Action Plan for Mental Health and Wellbeing in Northern Ireland Sport offers an exemplar for other sport systems to emulate.

1567 Part of Symposia
Paper 1: Mental health stigma within an Irish Sports context:
A large-scale online national survey of athletes and sporting stakeholders
Jessie Barr, Tadhg E. MacIntyre & Giles Warrington, University of Limerick
Objectives / Purpose / Background
Despite consensus that sport is beneficial to mental wellbeing, recent research indicates that participation in high performance sport may compromise athlete mental health. It has been suggested that up to 50% of athletes will experience a mental health issue throughout their career, compared to a lifetime prevalence of 25% among the general population. Intense physical demands and uniquely challenging psychological stressors associated with elite sport may leave athletes vulnerable to developing mental disorders. Additionally, a significant proportion of this population fall within the highest risk age bracket for the onset of mental health issues (16-25 years). The greatest barrier to improving athlete mental wellbeing is the existence of negative attitudes and beliefs about mental health issues - or ‘stigma’ – within society

Design / Background / Key Points
This research project has been designed to investigate the barriers that deter athletes from engaging in mental health help-seeking behaviours, with a specific focus on the barriers presented by the perceived existence of mental health stigma.
Methods / Conclusions
An online national survey of over 2,500 participants was conducted. The sample comprised of athletes, sports professionals and members of the general public measured attitudes towards psychology and mental health service provision and towards those who engage with these services.

Results / Conclusions
Preliminary findings suggest that the perception of public stigma remains the most significant barrier to help-seeking behaviours, as well poor mental health literacy.

Conclusions
We propose that the findings from this research will inform the development of a sport-specific educational intervention in a bid to demystify mental health disorders, reducing stigma within a sports context.

1569 Part of Symposia
Paper 2: An international online survey of sport science support staffs' attitudes and knowledge of mental health and wellbeing
Tadhg E. MacIntyre¹, Jessie Barr¹, Giles Warrington¹, Juergen Beckmann², Denise Beckmann³, Insa Nixdorf², Raphael Frank², Alan Ringland⁴, Norma Bargary⁵, Marc O'Donovan-Wyatt¹, Aisling Holton¹
¹University of Limerick, ²Technical University of Munich, ³Consultant, ⁴Institute of Technology Tralee

Objectives / Purpose / Background
Within the emerging literature practitioners have noted that recognition of mental health status of stakeholders (athletes, coaches, support staff) is part of a shared mandate for those working in high performance sport. Few studies have examined the mental health status, service aversion and mental health literacy of a sample of sport science support staff using surveys combined with ecologically valid vignettes (case studies).

Design / Background / Key Points
In order to address emerging concerns regarding the mental health and its complicated relationship with sport, this study seeks to survey sport science support staff about their mental health status, their attitudes to mental health service provision and their general psychological literacy.

Study design: This exploratory will employ a single cohort study using an anonymous online survey methodology.

Methods / Conclusions
Participants: A total of two hundred and fifty participants, comprising accredited sport science support personnel working in high performance sport from US, UK, Germany, Ireland and Australia.

Materials: Standardised inventories measuring stigma, knowledge of psychology, help-seeking etc. were employed in addition to a number of demographic questions. Uniquely, vignettes, hypothetical situations to which participants respond thereby revealing their perceptions, values, or impressions of events, were presented with specific questions on the mental health status in each scenario.

Results / Conclusions
Mental health stigma was pervasive across the sample and the vignettes additionally offered an ecologically valid approach to explore judgements and knowledge of wellbeing and mental health among this unique sample.

Conclusions
The findings will inform policy and the development of interventions in the International context.

1574 Part of Symposia
Paper 3: You cannot pour from an empty cup:
Self-care challenges facing applied sport psychology practitioners
Hannah McCormack, Tadhg MacIntyre, Deirdre O'Shea, Mark Campbell
University of Limerick

Objectives / Purpose / Background
Applied sport psychologists are tasked with looking after the mental health and wellbeing of athletes, coaches and other support staff alike. Self-care practice is essential for those within this caring profession, yet many struggle to find the time to put their own needs first, especially during high-pressure competition (e.g. the Olympic and Paralympic Games) or through juggling multiple roles (e.g. applied work and academic commitments).
**Design / Background / Key Points**

Using an organisational psychology lens and specifically employing the Jobs Demands Resources Model (JDR) we approached both experienced and neophyte practitioners on their self-care practices.

**Methods / Conclusions**

Through qualitative semi-structured interviews, we were able to assess the self-care practices of applied sport psychologists (n = 30) in their general work practice. We were also able to assess the impact of a large multi-sport event on the self-care practices of applied sport psychologists (n = 6) who attended the 2016 Summer Olympic and Paralympic Games in Rio.

**Results / Conclusions**

Analysis revealed that during times of high stress, applied sport psychologists struggle to apply the same self-care practices that they employ during the rest of the year. Environment pressures and organisational stressors play a role in both the facilitation and debilitation of these practices. Participants who attended the Games required at least one-month to experience feelings of recovery.

**Conclusions**

We present recommendations to all psychologists both experienced and neophyte on the importance of maintaining self-care practices throughout their career.

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**1568 Part of Symposia**

**Paper 4: Positioning mental health and wellbeing in a national action plan for sport in Northern Ireland**

*Gavin Breslin, Ulster University, Paul Donnelly, Sport Northern Ireland, Stephen Shannon & Tandy Haughey, Ulster University*

**Objectives / Purpose / Background**

To show how a modestly funded psycho-educational coach and athlete mental health intervention programme, systematic review, and community engagement consultation succeeded in influencing policy in Northern Ireland with regard to developing a National Action Plan for Mental Health and Wellbeing in Sport.

**Design / Background / Key Points**

More than ever, there is increasing demand that publicly funded research must be cost effective and show a positive impact on either policy or practice. The case study reported here is part of a larger programme of work on athlete mental health and wellbeing that is focused on impacting community wellbeing in sport.

**Methods / Conclusions**

In this case study, the methods that carved out the pathway to impact consisted, not just of the evidence base through peer reviewed journal articles, but also included creating enduring partnerships with local sports clubs, governing bodies of sport, charities, local health authorities, and a persistence over the longer term. The persistence was required in the face of a lack of functioning government, and what appeared to be competition for the development of more than one overarching mental health strategy for mental health in Northern Ireland.

**Conclusions**

The translation of research-based evidence into policy and community impact in sport is not a linear process and as psychologists a skill set we should endeavour to build upon. With the increasing interest in mental health and wellbeing in sport what has been achieved in a smaller policy community, such as Northern Ireland, can be shared for others to emulate.

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**1833 Experimental & Applied Poster Presentation**

**The dynamic nature of temporal cognitive appraisals: Challenge and threat states in a soccer penalty shootout**

*Chris Maskell¹, Martin Turner²*

¹University of Buckingham, ²University of Staffordshire
Objectives / Purpose / Background
The study aimed to investigate how soccer players experienced challenge and threat states as outlined in the Theory of Challenge and Threat States in Athletes (TCTSA; Jones, Meijen, McCarthy & Sheffield, 2009) during a soccer penalty shootout.

The major hypothesis was that challenge and threat states would change during the four stages of a penalty shootout as outlined by Jordet and Elferink-Gemser (2012) and during an additional stage called The Walk Back (to the penalty spot). In addition, shorter completion times would feature more avoidance behaviours in players whereas longer completion times would feature more approach behaviours. Heart rate would increase for all players over time.

Design / Background / Key Points
A soccer match was set up to conclude with an ecologically valid, pressured penalty shootout at the end. In game criteria were used to score the match in an effort to engineer a draw (the players were blind to this). A trophy and monetary incentive were used to increase pressure.

N=28, male, 17-35 years old (M=24.3, SD=4.8). N=9 took part in the shootout.

Methods / Conclusions
Self-report questionnaires, heart rate, video and audio including the Think Aloud protocol (Nicholls & Polman, 2008) were used to build idiographic profiles for each penalty taker.

Results / Conclusions
Players experience an aroused state. Task importance was high. Emotions, verbalisations and behaviours were unique to each stage of the shootout.

Conclusions
The findings of Jordet and Elferink-Gemser (2012) were validated in an ecological setting. The dynamic shift in behaviors and appraisals occurred rapidly and highlighted the need for interventions to take this into consideration.

1891 Experimental & Applied Poster Presentation
Sports coaches’ mental health literacy, stigma and role perceptions for supporting young people’s mental health
James Matthews, Cliona O’Leary, University College Dublin

Objectives
The present study examined whether sports coaches’ depression literacy, personal stigma and their role perceptions would relate to their engagement in mental health promotion, prevention, and early intervention behaviours with young people.

Design
A cross-sectional design was employed.

Methods
A sample of 869 sports coaches (Mean age = 43.37; SD = 11.63; 28.2% female) completed an online questionnaire. Participants completed self-report measures of: depression literacy, personal stigma, role perceptions (i.e., role breadth and role efficacy) and engagement in prevention, promotion and early intervention behaviours. Path analysis was employed to explore the relationships between these variables.

Results
Path analyses revealed that a slightly modified revision of the model provided an excellent fit to the data. Specifically, depression literacy, role breadth and role efficacy were significantly positively associated with each behaviour (i.e., promotion, prevention and early intervention). Personal stigma was not directly associated with these behaviours. However, depression literacy was significantly negatively associated with personal stigma.

Conclusions
This study revealed that depression literacy and role perceptions are influential in predicting sports coaches’ involvement in supporting young people’s mental health through promotion, prevention, and early intervention behaviours. Assisting coaches to engage in these helping behaviours, by developing their knowledge and competence and clearly aligning these behaviours to the coaching role, may provide young people with additional...
support from a trusted source. Further research is required to explore the relationship between stigma and these helping behaviours.

1482 Review/ Theoretical & Practice Oral Presentation
Understanding the theme of Regulation between the ages of U9 to U16 within an Elite Football Academy
James Maurice, Sunderland Association Football Club

Background
Regulation is the ability to monitor and positively adapt one’s thinking and behaviour, and is acknowledged in the literature as a key characteristic that elite sports men and women possess.

Key Points
Regulation is a critical factor within football, and at Sunderland Academy, is one of five key themes that are explored and developed amongst academy players from the time they enter the building at under 9 years of age, all the way up to the U23s where they hope to make their transition into professional football.

Method
This presentation will aim to provide a valuable insight into the theory and work carried out within an elite Category One academy, focused around the theme of emotional regulation. It will explore how different developmental ages are catered for, and how education of this key area and the skills taught can generalise to benefit players outside of the footballing environment. It will also explore the challenges faced by a trainee Sport Psychologist in working with different age groups and stakeholders, and how through reflection these have become more productively managed.

Conclusions
The overall aim of this presentation is to provide delegates with a hands-on example of how a key theme can be brought to life with various age groups.

2035 Experimental & Applied Poster Presentation
Participant motivation during diversionary sport: The perceived role of coaches, parents and peers
Bryan McCann, Matthew Mackie, Gregor Nee, Niklas Gerka, David Watt
Robert Gordon University

Objectives
Research has consistently identified that coaches, parents and peers influence athlete motivation in traditional sport settings. This exploratory study aimed to examine the perceived influence of these social agents on athlete motivation in non-traditional sport settings for which the social context has received less research.

Design
Qualitative.

Methods
Researchers volunteered at six sessions of a local diversionary sport project to familiarise themselves with the context and participants with the researchers. 18 participants aged 12-16 years (M=14.22, years; 15 male, 3 female) from the diversionary sport project took part in six group interviews exploring their perceptions of the influence of their coaches, parents and peers on their motivation to participant in the project. Interview transcripts were analysed inductively using thematic analysis.

Results
Participants perceived all three social agents as influencing their motivation through feedback and evaluative behaviours, supporting health and wellbeing, and through positive behaviours within the sporting context. Coaches and peers were both perceived to influence participant motivation through the environments they created during activities. Parents and peers were both perceived to provide motivational inspiration to participants.

Conclusions
Coaches, parents and peers are perceived to be important sources of motivation for participants in non-traditional and diversionary sport contexts. Diversionary sport projects may, therefore, wish to consider the broader social
context during the development and enhancement of activities in order to enhance the experience for participants. Further research should examine the actual relationship between perceived social agent influence and athlete motivation in diversionary sport context.

2036 Experimental & Applied Poster Presentation

The development of life skills during youth diversionary sport projects: The role of coaches

Bryan McCann, Megan Patey, Drew Copeland
Robert Gordon University

Objectives
Organised sport programmes provide opportunities for at-risk young people to develop life skills that they may not receive in other contexts. Coaches have a role in developing sport-specific and life skills in traditional sport contexts, but their role is not as well understood in non-traditional contexts such as diversionary sport programmes. This study aimed to explore coaches’ influence on the development of life skills in diversionary sport programmes.

Design
Qualitative.

Methods
Researchers familiarised themselves with the programme context by attending six sessions prior to data collection. 16 participants aged 12-18 years (M=14.5; 10 male, 6 female) of a local diversionary sport programme took part in four group interviews exploring their perceptions of the role of their coaches in developing life skills. Transcripts were analysed using hierarchical content analysis to identify patterns in participants’ responses and order these into sub-themes, higher order themes and general dimensions.

Results
Participants felt they gained valuable life skills through participation in the diversionary sport programme such as leadership, teamwork and problem solving. Coaches were perceived to have facilitated development of life skills by establishing positive relationships, commitment to the participants, complimentary coaching styles and autonomy-support behaviours.

Conclusions
Diversionary sport programmes may provide participants with opportunities to gain valuable life skills. Coaches are proposed to play an important role in the development of these life skills. Future research may wish to test interventions aimed at improving coaching quality to enhance life skill development and explore transfer of participant life skills to other social contexts.

1847 Experimental & Applied Poster Presentation

Education, anxiety and lack of social life: Challenges of transitioning into a full-time professional female football team

Michael McGreary¹, Robert Morris², Martin Eubank²
¹The University Centre North Lindsey College, ²Liverpool John Moores University

Objectives
The paper aimed to explore the junior to senior transition in professional female football. Given the rapid and positively changing environment of women’s football, the present study investigated whether increased professionalism of women’s football has influenced the experiences of athletes transitioning into senior women’s soccer.

Design
Semi-structured interviews were used to elicit information relevant to understanding challenges and coping strategies adopted by athletes when transitioning into professional football.

Methods
Six full-time professional female footballers took part in the study, group one (N = 3), consisted of senior players who had already successfully made the transition and group two (N = 3), consisted of players who were currently in the
process of transitioning into the first team. All players represented the same club which competed in the WSL1. All athletes were either currently, or had been in full time education during the transition. The developmental model of transitions and the career transition model served as underlying frameworks.

**Results**
The main themes generated from the results were (a) Being a dual career athlete; and (b) anxiety towards the transition as the most pertinent themes across both groups for challenges experienced towards the transition. (c) personal development attributes; and (d) social support were the most pertinent themes across both groups for coping strategies used.

**Conclusions**
The present study further adds to within-career and dual-career athlete research. The paper provides research into the challenges faced by transitioning professional female football players and offers suggestions into how they can be supported during this transition.

**1468 Workshop**

**RESIST: Research-evaluated endurance strategies intending to support training**

Carla Meijen1, Andy Lane2, Alister McCormick3, Noel Brick4, Dominic Micklewright5, David Marchant6, Samuele Marcora7

1St Mary’s University, Twickenham, 2University of Wolverhampton, 3Plymouth Marjon University, 4Ulster University, 5University of Essex, 6Edge Hill University, 7University of Kent

**Background**
Endurance activities are amongst the most accessible mass-participation sports. A challenge for athletes is countering the desire to slow down significantly, temporarily stop, walk, or quit at an unplanned time. Our online survey (n =192, runners, triathletes, adventure racers) exploring reasons underpinning this urge showed that a high proportion experienced (n= 184; 95.8%) and acted on (n = 169, 88%) this urge. Respondents also reported feeling disappointment or frustration. Considering how common and undesirable the urge is, we are developing and evaluating brief psychological interventions for recreational endurance athletes. Our interventions focus on optimising pacing-related decision-making, managing expectations, and dealing with thoughts around the urge to slow down, stop, or quit. In this workshop we highlight athletes’ experience of this urge, introduce brief educational interventions developed by the RESIST group, and share resources that can empower athletes to overcome performance-limiting urges and improve endurance performance outcomes.

**Key Points**
There is a need to translate research-based evidence into real-world interventions that impact endurance athletes’ experiences, and to emphasise the positive impact of sport psychology support for recreational athletes, an otherwise underrepresented discipline. We will involve participants in the evaluation of the brief educational interventions and discuss innovative methods (videos, infographics, website) to share interventions with the public.

**Conclusions**
Interventions can help recreational endurance participants improve pace-related decision-making, manage expectations, deal with thoughts around stopping and avoid associated frustration. Through our research-evaluated endurance strategies, we aim to provide readily-accessible support for recreational athletes to facilitate desirable psychological experiences of endurance activities.

**1590 Symposium**

**Consciousness and endurance sport performance: Emotional, cognitive and psychophysiological perspectives**

Dominic Micklewright1, Andrew Lane2, Alan St Clair Gibson1, Samuele Marcora3, Lex Mauger3

1University of Essex, 2University of Wolverhampton, 3University of Kent

The purpose of this symposium is to explore, contrast and compare different perspectives on the role of consciousness in effort regulation and performance of endurance sport. The issue of consciousness and effort regulation during sport has on the one hand provoked integrated approaches from the psychological and physiological sciences, yet has also intensely polarised expert opinion on how endurance sport is regulated? This symposium will bring together some of the most renowned authors from the emotional, cognitive and
psychophysiological perspectives to debate consciousness and endurance performance. The symposium will also consider different methodological approaches to measuring emotions, attention, information-processing, perceptions and pain during endurance exercise and how this has influenced the various theoretical perspectives. The symposium will conclude with an open panel question and discussion session.

1592 Part of Symposia
Paper 1: Emotional perspective of regulation and performance of endurance sport
Andrew Lane, University of Wolverhampton

Purpose
To discuss emotional experiences and the influence on the performance of endurance sport.

Background
Athletes wish to experience emotions that are desirable that they feel will help lead to better performance via one or more of mechanisms such as increasing energy, helping focus or making better decisions.

Conclusion
Although intense exercise can associate with unpleasant emotions, emotion regulation strategies to re-appraise these emotions as a necessary part of performance and thus indicative of peak performance.

1593 Part of Symposia
Paper 2: Cognitive perspective of regulation and performance of endurance sport
Dominic Micklewright, University of Essex

Purpose
To discuss the role of cognition in regulating effort during endurance tasks.

Background
Athletes attend to and process internal and external cues as a decision-making mechanism during endurance sport. In considering how such cues are processed, evidence from developmental studies in young athletes and process-tracing studies such as eye-tracking and think-aloud protocols will be considered in the context of consciousness and endurance performance.

Conclusions
Information processing and decision-making during endurance performance is adaptive, situation specific and influenced by experience.

1660 Part of Symposia
Paper 3: Psychophysiological perspective: Perceptions of exertion and effort
Dominic Micklewright¹, Sabrina Skorski²
¹University of Essex, ²Saarland University, Germany

Purpose
To discuss psychophysiological influences of the pace and performance of endurance activity.

Background
Ratings of perceived exertion (RPE) and effort are considered extremely important in the regulation of intensity during self-paced physical activity. While effort and exertion are slightly different constructs, these terms are often used interchangeably within the literature. The development of perceptions of both effort and exertion is a complicated process involving numerous neural processes occurring in various regions within the brain. It is widely accepted that perceptions of effort are highly dependent on efferent copies of central drive which are sent from motor to sensory regions of the brain. Additionally, it has been suggested that the integration of perceptions of effort and exertion is based on a balance between corollary discharge and actual afferent feedback; the involvement of peripheral afferent sensory feedback in the development of such perceptions has been debated.
Conclusions
The difference between effort and exertion has implications in understanding the role of perceptions in the regulation of pace during endurance exercise.

1594 Part of Symposia
Paper 4: Psychophysiological perspective: Integrative governor
Alan St Clair Gibson, University of Essex
Purpose
To propose integrated governance of endurance exercise that avoids implausible central-peripheral bifurcation featured in many previous regulation models.

Background
It is often forgotten that conscious awareness of any physical activity is generated from subconscious regulatory control processes that ‘describe’ to the individual what the subconsciousness wants that individual to hear and be aware of, as described in the day of Freud, Jung, Rank and Adler, all of whose work has been forgotten or ignored in the last half century. Evidence indicates that conscious perception of activity is at best loosely related to underlying physical body or brain activity, or mental state.

Conclusions
Subconscious regulatory control processes are an active determinant of endurance exercise performance.

1595 Part of Symposia
Paper 5: Psychophysiological perspective: Psychobiological model of endurance performance
Samuele Marcora, University of Kent
Objectives / Purpose / Background
This psychobiological perspective is based on the assumption that consciousness is an emergent property of the brain and plays a causal role in the self-regulation of pace and performance during endurance competitions. Experimental studies testing this model at both the psychological and the biological level will be presented.

1596 Part of Symposia
Paper 6: Psychophysiological perspective: Pain and endurance performance
Lex Mauger, University of Kent
Purpose
To propose the hypothesis that the experience of the pain arising from exercise limits endurance performance.

Background
Intense exercise causes naturally occurring muscle pain that is usually proportional to exercise intensity and/or duration. This exercise-induced pain may contribute to the fatigue experienced during exercise, but the nature of this is complex because pain is a multidimensional construct, usually with both sensory-discriminative (i.e. nociception – can occur in absence of consciousness) and affective-motivational (unpleasantness/emotional – requires consciousness) components. Experimental studies suggest that trained athletes have a higher pain tolerance that their sedentary counterparts, which has been attributed to improved coping mechanisms. It has also been shown that improvements in endurance performance arising from training can specifically be linked with increases in pain tolerance independently of physiological adaptation. However, nociceptive stimuli have been shown to induce supraspinal fatigue and reduce maximal voluntary contraction. Therefore, this talk will discuss the data from recent studies which suggest that the limiting effect of pain can be explained through both psychological and physiological perspectives, and will broadly discuss the fatiguing effect of pain during exercise and whether the mechanism is conscious, unconscious, or both.
Conclusions

It is likely that naturally occurring pain during exercise has a negative impact on performance, and that this can be explained through both psychological and physiological mechanisms. However, the degree of its impact, and mechanism of effect is likely to be specific to the individual, activity and environment.

1514 Experimental & Applied Poster Presentation

The relationship between social identity leadership, team identification and resource appraisals in team sport athletes

Anthony Miller, Matthew Slater, Martin Turner
Staffordshire University

Objectives

*Note: Data collection is currently ongoing. Data collection and analysis will be complete by the conference*

Little is known about the role of social factors such as leadership in stress appraisals. In the present research we investigate whether social identity leadership influences an athletes’ approach to stressful situations. Based on the social identity approach to leadership and challenge and threat theory, the current research examines the direct and indirect relationships between social identity leadership, team identification and resource appraisals on approach to a competitive match.

Design

A cross sectional design.

Methods

Achieving appropriate power, 200 team sport athletes will complete measures of social identity leadership and identification with their team, as well as perceptions of social support, self-efficacy, goal focus and control over performance (resource appraisals). Athletes will complete these measures on approach to a competitive match. Correlations and regression analyses will identify:

To what extent social identity leadership positively relates to resource appraisals.
The extent to which team identification mediates the social identity leadership - resource appraisal relationship.

Results

Expected Results:

A positive linear relationship between social identity leadership and resource appraisals on approach to competition. Team identification will partially mediate the social identity leadership – resource appraisal relationship.

Conclusions

Potential conclusions: There is scope to suggest that social identity leadership may be part of the reason why athletes appraise competition positively. If this trend is found irrespective of team identification, strategies to improve leadership quality may contribute to an athlete’s overall ability to cope with the demands of competition.

2041 Experimental & Applied Poster Presentation

Challenge and threat evaluations mediate the relationship between stress and burnout among high-performing student-athletes

Lee Moore, Jack Williams
University of Bath

Objectives

Advocates of the biopsychosocial model of challenge and threat have suggested that repeatedly responding to stress with a threat state, triggered by an evaluation that situational demands exceed personal coping resources, might harm long-term health. However, little research has tested this notion. Thus, this study investigated the relationship between stress, challenge/threat evaluations, and burnout among student-athletes.

Design

Cross-sectional.
Methods
223 student-athletes (Mage = 21 ± 2 years) completed self-report items assessing stress (perceived stress scale; α = .88), challenge/threat evaluations (demand resource evaluation score), and burnout (athlete burnout questionnaire; α = .90). All participants were enrolled on a university degree, and competed nationally or internationally in their sport.

Results
Stress (R² = .33, β = .58, p < .001, 95% CI = 0.67 to 0.98), and challenge/threat evaluations (R² = .15, β = -.39, p < .001, 95% CI = -3.16 to -1.65), accounted for a significant proportion of variance in burnout, suggesting that higher stress, and a tendency to evaluate stressful events as a threat, were associated with greater burnout. Furthermore, mediation analyses revealed a significant indirect effect (Effect = 0.10, SE = 0.04, 95% CI = 0.03 to 0.19), with challenge/threat evaluations mediating the stress-burnout relationship.

Conclusions
Student-athletes who experience a high degree of stress, and often appraise stressful events as a threat, might be particularly susceptible to developing burnout, which has been linked with ill health (depression, cardiovascular disease etc.). Interventions that therefore reduce stress, and/or help student-athletes view stress as a challenge, should be promoted.

1488 Experimental & Applied Oral Presentation
To be kind, or not to be kind, that is the question: Self-compassion and fear of failure in competitive footballers
James Newman, The Mind Hawk

Objectives / Purpose / Background
Self-compassion (SC) is linked to superior coping and wellbeing during difficult situations. However, sporting stakeholders have expressed concern that SC promotes weakness and mediocrity. The present study examined whether differences in SC and fear of failure (FoF) existed between competitive footballers and non-athletes.

Design / Background / Key Points
A 3x2 independent, between-factors design examined differences in SC and FoF by: Level of Football Performance (Higher, Lower, Non-Athlete) and Gender (Female, Male).

Methods / Conclusions
Participants (N = 154) aged 17-22 (M = 19.69, SD = 1.34) were recruited from colleges and universities in the North of England using opportunity sampling. All participants completed the Self-Compassion Scale and the Performance Failure Appraisal Inventory – Short Form. Data were analysed using 3x2 ANOVAs (one for SC, one for FoF) and a Pearson’s correlation coefficient.

Results / Conclusions
Findings demonstrated significant, large effects of Level of Football Performance on both SC (ηp² = .139) and FoF (ηp² = .070). Post-hoc analyses demonstrated higher SC and lower FoF for footballers compared with non-athletes. No differences in SC nor FoF were found between higher and lower level footballers. Males held significantly higher SC than females, but not significantly different FoF. Finally, SC and FoF demonstrated a significant, negative relationship (r = -.54, p <.001).

Conclusions
Findings suggest that competitive footballers have greater SC that non-athletes. According to previous literature and the present study, this greater SC likely facilitates their capacity to cope with challenging sporting situations (e.g. non-selection, defeat) and aids lower FoF. In contrast to being a ‘drawback’ to performance sport, SC may offer significant benefits.
**What happens in the changing room, stays in the changing room: Unearthing bullying, banter, teasing and victimisation in football**

*James Newman¹, Victoria Warburton², Kate Russell²*

¹Sheffield Hallam University, ²University of East Anglia

**Objectives / Purpose / Background**
The purpose of this presentation is to explore the perceptions of how professional footballers define bullying. More specifically, this presentation seeks to explain what professional footballers perceive bullying to be and to what extent bullying in football differs from teasing, victimisation and banter?

**Design / Background / Key Points**
The study’s approach was influenced by the transcendental, existential and empirical branches of phenomenology, and focused on the essences of participants’ perceptions and experiences. Utilising a similar inductive, themed approach via interviews, has been shown to be effective in exploring the causes of bullying and for ensuring participants are happy to divulge information about bullying in sport.

**Methods / Conclusions**
Guided by Interpretative Phenomenological Analysis (IPA) individual semi-structured interviews (MDuration = 44.10, SD =10.81 ) were conducted with 18 professional footballers (Mage=19.83, SD=2.96) from three Premier League and Championship football clubs. Due to the need for a homogenous sample within IPA research, a purposive approach was adopted in order to reflect convergence and divergence in the participants' accounts.

**Results / Conclusions**
The findings from this study revealed several key superordinate themes in relation to bullying such as the 'bullying act' and the 'bully and victim', as well as related superordinate themes such as 'the dividing line', 'the football environment' and 'banter and teasing'.

**Conclusions**
A phenomenological approach has enabled a more contextual understanding of bullying that has not been possible from previous research methods in sport, whilst providing recommendations for coaches highlighting challenges with identifying this behaviour.

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**Barriers and facilitators of a physical activity intervention: A qualitative analysis using the TDF**

*Nicola Peddie, Tony Westbury, Austyn Snowden*

*Edinburgh Napier University*

**Objectives**
Structured physical activity (PA) programmes are recommended as interventions for people with mild to moderate depression. However, the evidence for these PA programmes remains poor, with evidence suggesting that only 50% of those referred adhere. A cognitive behavioural behaviour change intervention was delivered alongside existing exercise referral schemes implemented in three areas across Scotland. The aim of this intervention was to increase adherence to PA for improved physical and mental wellbeing.

**Design**
Focus group discussions were held with individuals who had completed the intervention in each of the three areas in order to evaluate the acceptability of the intervention.

**Methods**
The data were transcribed and analysed using thematic analysis to identify commonalities in the data. The themes identified were then mapped on to the Theoretical Domains Framework (TDF). The TDF is an integrated framework of behaviour change theories and has been used widely in implementation research, it contains 14 domains in which to view cognitive, affective, social and environmental influences on behaviour. Mapping is undertaken to identify barriers and facilitators to the effectiveness of the interventions.
Results
The focus groups contained between 3 - 8 participants and had a running time between 1 hour and an hour and fifteen minutes. Preliminary analysis has identified seven emerging themes which have been mapped onto three domains as facilitators to the effectiveness of the intervention: social influence, reinforcement and beliefs about capabilities.

Conclusions
A full analysis of the results will be presented and the clinical implications will be explored in this presentation.

1597 Experimental & Applied Oral Presentation
Exploring the relationships between goal orientation, motivational climate, goal valuation and sport performance
Kasey Philyaw, Daniel Smith, Judith Covey
Durham University

Objectives
Achievement Goal Theory (AGT) research has shown that congruency between achievement orientation and motivational climate results in better performance. The primary objective of the current study was to examine whether this effect holds in a sport & exercise setting, specifically with elite athletes. The main hypothesis was that athletes would perform better in climates that were congruent to their task or ego orientation.

Design
This experiment used a repeated-measures design, in which each participant completed two timed 400m runs, one with an ego-oriented goal and the other with a task-oriented goal.

Methods
Athlete participants, N=139, were recruited from top NCAA/NAIA Division 1 programs in the US and Team Durham 1st teams from the UK. Goal orientation and goal valuation were measured by questionnaires, the Task and Ego Orientation in Sport Questionnaire (TEOSQ) and the Subjective Task Value in Sport Questionnaire (STVSQ). The performance element was recorded by the time of a 400-meter run. Mixed model analysis was used to interpret the data.

Results
Contrary to our hypothesis, the effect of task or ego instructions on the performance running speed was unrelated to the athletes’ ego or task orientation. Instead, athletes overall ran significantly faster (p=.011) in the ego motivational climate.

Conclusions
These results suggest that elite athletes, regardless of personal task or ego orientation, are motivated to perform better by competitive ego goals over task goals in immediate performance situations. Further research with recreational athletes will need to be conducted to find the generalisability of these findings.

2033 Experimental & Applied Poster Presentation
Exploring parents’ influence on the performance enhancing mindset
Tanya Power1, Elizabeth Pummell1, Sam N Thrower2, Andrea Petrócz2
1Kingston University, London, 2University of Roehampton

Objectives / Purpose / Background
Previous research suggests parents are important determinants of their children’s decisions and behaviours, and thus have potential to influence their child’s performance enhancing mindset. However, little is known about parental opinions of performance enhancing substances, and the influence on a child’s view of such substances. Exploring this was the aim of the current study.

Design / Background / Key Points
A qualitative design was used, with three semi-structured focus groups and one interview gathering in depth understanding of parents’ opinions of performance enhancing substances and their influence.
Methods / Conclusions
Eighteen parents (mean age: 48.4±6) of young athletes (aged 12-18) competing from club to national level sport were recruited from sport clubs through convenience sampling. Thematic analysis was used to analyse the data.

Results / Conclusions
The analysis resulted in the emergence of two main themes, and several sub-themes: i) Parents’ anti-doping influence during adolescence: Parents’ attitudes towards substances; Perceived parental roles within sport; Barriers preventing parental influence; and ii) Parents’ knowledge of performance enhancing substances: General doping knowledge of performance enhancing substances; Sources of doping and anti-doping information; Doping prevention strategies employed by parents.

Conclusions
Whilst there were mixed opinions of the acceptability of performance enhancing supplements, all parents held unaccepting views towards prohibited substance use and perceived themselves to be an important determinant in anti-doping promotion, particularly for very young athletes. For older athletes, coaches and peers were also perceived to be influential. Parents’ limited doping knowledge was noteworthy, suggesting future research should target educational campaigns at parents of young athletes to both educate them and to prevent doping among athletes.

1576 Experimental & Applied Oral Presentation
Contextualising experience in reflective practice: UK sport coaches’ narratives
Laura Quayle, Liverpool John Moores University, School of Sport Studies, Leisure and Nutrition

Objectives
To explore coaches’ journeys through learning to coach and understand contextual influencers that affect the development of reflective practice.

Design
This study adopted a qualitative approach and utilised retrospective individual semi-structured telephone interviews to understand how UK sport coaches perceived their learning experience and engagement in reflective practice.

Methods
12 UK sport coaches across level of coaching qualification (Level 2-4) were purposively sampled using a realist sampling strategy. Telephone interviews lasted between 58 and 115 minutes and were transcribed verbatim. Narrative analysis guided and supported the interpretation of coaches’ journeys with a view to identifying socially produced patterns across the participant group.

Results
This presentation will focus on two key preliminary patterns emerging from the narratives. 1) Coaches’ who felt that they were given, or could claim autonomy in learning environments had a positive learning experience. Additionally, when coaches perceived an increase of competency in engaging in reflective practice and relatedness to their peers, this contributed to sustained practice and development; and 2) Coaches’ motivation for engaging in development is largely underpinned by a need to form positive group social identity and peer-learning relationships.

Conclusions
The study has highlighted the mediating role of basic psychological needs and social identity influencing how sport coaches are motivated to engage in development. Further, this research provides a unique avenue for discussion and increases awareness of sport coaches’ journeys and identifying key patterns that contribute to positive development and engagement in reflective practice.

1911 Experimental & Applied Poster Presentation
Paralympic experiences
Alan Ringland, Institute of Technology, Tralee

Objectives / Purpose / Background
While there has been increasing research on the role of the performance environment and organisATIONAL stress in elite sport (Arnold et al. 2016; Thelwell et al. 2017), there has been a dearth in the Paralympic context (Ringland et al. 2018).
This research investigated the psychological factors of the performance environment and organisational stress in Paralympic sport from the performer’s perspective.

**Design / Background / Key Points**
A purposeful sample of 8 Paralympic athletes (m=5, f=3; x=39.6) from 3 different sports and different classifications who had competed in at least two Paralympic Games were interviewed with regards to their experience in preparation for international competition. Qualitative content analysis was used for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns from the literature (Mayring 2000). Themes and analysis were based on the principles of grounded theory (Charmaz, 2006).

**Methods / Conclusions**
The findings illustrate a wide range of factors in this context and provide qualitative evidence for a multi-faceted model in an elite sport context. Three main categories of stress were deduced: Personal (injury, expectations, wellbeing), Competitive (environment, preparation, resilience) and Organisational (leadership, team, people, support) and when aligned provide a basis for a better understanding of Paralympic preparation.

**Results / Conclusions**
For practitioners operating in all levels of elite sport, adopting a comprehensive view of the performance environment draws attention to the numerous organisational influences on sport performers and should encourage a more coordinated approach to developing high performance. The results illustrate that people and relationships are influential in facilitating performance.

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**1912 Experimental & Applied Poster Presentation**
What do we know about adolescent behaviour after non-selection in elite sport?

*Alan Ringland, Institute of Technology, Tralee*

**Objectives / Purpose / Background**
Playing for a Premiership club in soccer or rugby are the dreams of many young people but only 0.5% are likely to make it (Magowan 2015). The drop-out rate in soccer is comparatively high in comparison to other sports, where up to 76% of players between the ages of 13 and 16 withdraw after investing years in training, coaching and competing in various levels and age groups (Crone & Temple 2015). This non-selection may have implications for mental health at a later stage (Ringland 2016). The purpose of this research was to gain an understanding of elite youth’s positive and negative experiences from sport.

**Design / Background / Key Points**
Semi-structured interviews were conducted with a purposeful sample of (n=3). Content analysis was used for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns from the literature (Mayring 2000).

**Methods / Conclusions**
Purposive sampling was used, and semi-structured interviews were transcribed and subjected to initial coding (line to line, incident to incident). Themes and analysis of data generated was based on the principles of grounded theory (Charmaz, 2006).

**Results / Conclusions**
The main themes to emerge were Training (Excessive, Sport Specific, Competitive), Personal issues (Injury, Self, Finance), Risk effect (Identity, Failure, Enjoyment) and Support (Parents, Family, Peers, Coaches, Club).

**Conclusions**
Findings underlie the need for a 'duty of care' for youths who miss out on selection to Premiership clubs and how the impact of mental health is a challenge for every sector in the sporting context.

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**1535 Experimental & Applied Oral Presentation**
Combining motor imagery and action observation on aiming performance, upper-limb kinematics and muscle activation

*Stephanie Romano-Smith¹, Greg Wood², Ginny Coyles¹, James Roberts¹, Caroline Wakefield¹*

¹Liverpool Hope University, ²Manchester Metropolitan University
Objectives / Purpose / Background
Recent research has begun to employ interventions that combine AO and MI (AOMI). However, little is known about the most effective way to combine these techniques and the mechanisms behind their facilitative effect on performance.

Design / Background / Key Points
Participants (n=50) were randomly allocated to one of five training groups: action observation (AO), motor imagery (MI), simultaneous action observation and motor imagery (S-AOMI), alternate action observation and motor imagery (A-AOMI) and control.

Methods / Conclusions
The task involved dart-throwing toward a concentric circle dartboard at pre- and post-test. Interventions were conducted 3 times per week for 6 weeks. Data were collected from the performance outcomes, mean muscle activation of the upper and forearm muscles. Critical, angular velocity and peak angular velocity elements of the elbow were also collected from the throwing arm.

Results / Conclusions
Results showed A-AOMI, S-AOMI and MI groups improved to a significantly greater degree than the than AO and control groups (ps < .05). Mean muscle activation of the Triceps Brachii significantly reduced from pre to post test in the S-AOMI group and participants in the AO, A-AOMI, S-AOMI groups exhibited significantly reduced activation in the Bicep Brachii from pre to post test (ps < .05). Peak angular velocity exhibited significant differences from pre- to post-test in both A-AOMI, S-AOMI groups (ps < .05).

Conclusions
These findings have important implications for the explanation of the mechanics of MI and AO used both independently and in combination. This paves the way for the examination of the potential neural mechanisms that underpin the learning motor skills and performance enhancement.

Oral Presentation
Age-friendly Belfast: Danderball and more!
Anne Ross, Healthy Ageing, Belfast

Background
Belfast has introduced its own brand of walking football called 'danderball.' The word 'dander' is used as slang instead of 'walk' in Northern Ireland and the idea was this unique spin would encourage more people to get involved. Since 2014 Belfast has developed danderball, to increase older people’s participation in physical activity resulting in improving daily living and reducing social isolation.

Keypoints
Belfast was the first city in Northern Ireland to become an Age-friendly City, this is an inclusive, accessible urban environment that promotes active ageing. Age-friendly Belfast’s vision is: A City where older people live life to the full. In 2012, we began the process to become Age-friendly and produced a 3 year multiagency action plan and in October this year we Age-friendly Belfast Plan. Our baseline research showed that one of the main issues for older men was limited social participation and we were also aware of low levels of physical activity in older people so thought this may be an activity that would attract men to get involve and get active.

Conclusions
Age-friendly Belfast in partnership with Better Leisure Centres, Belfast Community Sports Development Network Irish Football Association, and Bravehearts, The H.E.A.R.T. Project - Maureen Sheehan Centre, have developed danderball and to date weekly danderball programmes are running in a number of centres in Belfast and there are relationships with other councils delivering danderball across Northern Ireland.
The relative influence of mothers, fathers, and coaches’ perceived responsiveness on youth rugby players psychosocial outcomes

Olivier Rouquette¹, Camilla J. Knight², Victoria E. Lovett², Jean-Philippe Heuzé³
¹Swansea University & Université Grenoble Alpes, ²Swansea University, ³Université Grenoble Alpes

Objectives
This study aimed to examine the relative influence of athletes’ perception of mothers, fathers, and coaches’ responsiveness on self-esteem, anxiety, and goal achievement. It was hypothesised that perceived responsiveness would positively influence athletes’ self-esteem and goal achievement, and negatively influence athletes’ sport anxiety.

Design
A cross-sectional design using online self-reported questionnaires was developed.

Methods
Participants (N = 125) were male, rugby players aged 15-16 years. All participants were members of rugby academies in England. Data were analysed using structural equation models (SEM).

Results
Players perceived mothers (MED = 6.05) as more responsive than fathers (MED = 5.72) and coaches (MED = 4.4), but mother responsiveness did not influence any players’ outcomes. Players’ perception of their father and coach responsiveness influenced their self-esteem (β = 0.53, β = 0.25, r² = 0.30). Players self-esteem, in turn influenced their sport anxiety (β = -0.42, r² = 0.20), normative goal achievement (β = 0.42, r² = 0.20), and performance goal achievement (β = 0.38, r² = .17). The model showed a good fit to the data (Chi² = 781.26, p = 0.28, RMSEA = 0.020 90% CI = [0: 0.036], CFI = 0.95, SRMR = 0.07).

Conclusions
This study provides unique evidence that youth rugby players could perceived mothers and fathers differently, resulting in different influences. The results also show the positive influence of perceived responsiveness (i.e., being validated, understood, and cared for), on young rugby players’ perceptions of self-esteem, sport anxiety, and goal achievement.

Disordered eating and exercise in athletes: Exploring convergence in teammate attitudes & behaviours using social network analysis

Charlotte Scott, Emma Haycraft, Carolyn Plateau
Loughborough University

Objectives
To assess how social networks within sport teams influence individual athletes’ eating and exercise attitudes and behaviours over the course of an athletic season.

Design
A longitudinal design was employed to establish whether athletes’ eating and exercise attitudes and behaviours converge with their teammates’ attitudes and behaviours over time.

Methods
Athletes from 29 sports teams (N = 319, mean age = 18.75 years, n = 173 female) completed a survey exploring eating (Eating Disorders Inventory) and exercise attitudes and behaviours (Compulsive Exercise Test) and teammate closeness at the start (T1) and middle (T2) of their athletic season.

Results
Athletes became closer to their teammates from T1 to T2. At T1, significant Spearman’s Rho correlations were observed between teammate closeness and disordered exercise attitudes and behaviours and body dissatisfaction. At T2, teammate closeness was significantly correlated with body dissatisfaction, disordered exercise and eating attitudes and behaviours. Social network analysis revealed that patterns of convergence and divergence towards team eating and exercise norms varied according to team characteristics (age, gender and sport-type).
Conclusions
Higher teammate closeness is related to greater similarity in disordered eating and exercise attitudes and behaviours. Teammates can be protective against, or engender an increased risk of, disordered eating in athletes. Additional research extending prospective analyses to the post-season and off-season is required. Furthermore, research investigating the impact of particular mechanisms of teammate influence will be useful to inform the development of team-based interventions to reduce disordered eating among athletes.

1498 Five Minute Challenge
Becoming a sport psychologist: Transferrable Skills (Journalism)
Evie Serventi, QSEP Stage 2 Trainee

Background
The QSEP Stage 2 pathway to full HCPC accreditation is one of self-discovery, and professional growth and development. It’s a challenging and rewarding process. The transition, however, from graduate and/or postgraduate study to applied settings, where business skills are required to be an independent practitioner, can feel daunting. Hence, at the start of my Stage 2 journey, I often approached the process with a ‘what can I learn from this?’ mindset. I soon realised, however, that I was a trainee with diverse skills, careers and life experiences, and my approach began to shift to ‘what can I offer this experience?’

Key points
Here I will talk about specific transferrable skills from my 20 year career in journalism and how it has helped my applied consultancy. I believe my experience allows me to apply effective written and networking skills; intuition around knowing what type of approach or voice is appropriate; as well as research skills when it comes to looking for applied work.

Conclusions
We all have skills gained from previous experiences and careers, which can be carried forward into a new career. This five-minute presentation will allow attendees to gain insight into how skills from a career in journalism has helped a Stage 2 sport and exercise psychologist trainee in their professional development.

1552 Symposium
Optimising mental health and wellbeing interventions within and through sport
Stephen Shannon, Tandy Haughey, Gavin Breslin, Ulster University

Organised sport provides an opportune environment to promote mental health and wellbeing. Physical activity accumulation, social interaction and psychosocial development and functioning are some of the mechanisms through which sport may offer mental health benefits. As such, across multiple settings (e.g. university, community and prisons) sport has been used as a vehicle to promote mental health awareness with some success. However, only recently have researchers established that athletes experience unique stressors which can be maladaptive to mental health, and despite an increased demand from sporting organisations and policy makers for sport-specific mental health programmes, there are few well-designed and theory-based interventions available. This symposium focuses on recent attempts to harness the potential of sport to promote mental health through evidence-based research and practice. In particular the research designs and challenging environments in which the interventions were delivered will be discussed. Presenters include international collaborators who are designing and conducting interventions in Ireland (Prentice), the United Kingdom (Woods), Australia (Liddle) and the United States of America (Donohue). The presentations focus on a range of subjects that are significant for mental health optimisation within and through sport, including: mental health literacy and awareness, stigma, help-seeking behaviours, substance use, social support, resilience, and factors affecting sports performance. Significant time will be allocated to discussing the wider implications of the work for directing future mental health research, policy and practice in sport.

1553 Part of Symposium
Paper 1: Mental health stigma in athletes: The application of a theory of reasoned action predictive framework
Garry Prentice¹, Stephen Shannon², Tandy Haughey², Gavin Breslin², Kyle Ferguson²
¹Dublin Business School, ²Ulster University,
Objectives / Purpose / Background
Despite an increase in mental health awareness interventions, a prevailing stigma attached to being mentally ill remains. Mental health stigma acts as a barrier, preventing help-seeking behaviours like using mental health services or self-help techniques. The objective of this study was to predict mental health stigma among athletes through the Theory of Reasoned Action framework.

Methods / Conclusions
A cross-sectional design was implemented. Prediction of athletes’ mental health stigma was ascertained by the Theory of Reasoned Action (TRA) framework, which included demographic and psychological factors. Demographic (e.g. gender), psychological (e.g. norms) and moderating variable (e.g. sport type) influence on stigma-related intentions to socialise with individuals with a mental health condition were examined using multiple linear regression analyses.

Results / Conclusions
TRA with and without moderation effects models explained a significant amount of variance for stigma-related intentions, where mental health knowledge and exposure to individuals living with a mental health condition significantly predicted stronger intentions to socialise with them. In addition, team sport athletes, particularly females, had stronger intentions to socialise with those living with a mental health condition.

Conclusions
This first application of the TRA in exploring mental health stigma in athletes offers the field opportunities for further development. For example, the current study informs the further development of athlete mental health awareness programmes by, amongst other things, highlighting the need for framing mental health in a positive way using terms like Mental Fitness/ Mental Wealth, while tailoring awareness messages to gender and team/ individual sport norms.

1559 Part of Symposia

Paper 2: The optimum performance program in sports
Bradley Donohue, University of Nevada

Objectives / Purpose / Background
To review and discuss the results of a randomised clinical trial specific to mental health and sport performance optimisation in collegiate athletes.

Design / Background / Key Points
Randomised clinical trial.

Methods / Conclusions
The Optimum Performance Program in Sports (TOPPS) was compared with campus counselling services as usual (SAU) in 74 collegiate athletes from the United States. All participants were recruited if they were collegiate athletes and interested in goal-oriented programming targeting performance. To participate in the study they were required to report at least one incident of substance use, and all participants were formally assessed for mental health diagnostic severity. Participants were randomly assigned to TOPPS or SAU after baseline. Dependent measures assessed mental health, mood, mental health factors affecting sport performance in training, competition and life outside of sports, self-reported days using substances (including biological screens), sexual risk behaviours, relationship satisfaction, relationships affecting sport performance, and contributions of relationship to sport performance.

Results / Conclusions
Intent to treat repeated measures analyses indicated that participants in TOPPS consistently demonstrated better outcomes than SAU up to 8-months post-randomisation and for mental health/substance use measures, particularly when diagnostic criteria were most severe. Outcome differences were not influenced by pre-intervention expectancy effects, and intervention integrity was outstanding.

Conclusions
This was the first RCT involving athletes who were formally assessed for mental health disorders. Results suggest TOPPS may be used to assist mental health and sport performance optimisation in collegiate athletes, and warrant the examination of TOPPS in other athlete populations, such as youth and professional athletes.
1562 Part of Symposia

Paper 3: Evaluating the effectiveness of the Ahead of the Game Programme

Stewart Vella, Christian Swann, Sarah Liddle, Anthony Okely, Frank Deane
University of Wollongong

Objectives / Purpose / Background
To evaluate the effectiveness of a multi-component, community-sport based programme for adolescent males. The aims of the Ahead of the Game (AOTG) programme are to: (1) increase mental health literacy among adolescents and their social support systems; (2) increase help-seeking intentions among adolescent male sport participants; and (3) increase resilience, wellbeing, and self-determined motivation.

Design / Background / Key Points
AOTG is a multi-level (adolescent, parent, coach, club), multi-component program designed using a community-based participatory research framework, and delivered through community sporting clubs. The AOTG programme was tested using a quasi-experimental, community-matched control design.

Methods / Conclusions
All sporting clubs within the programme and control regions were invited to participate. In total, 484 adolescent males aged 13-18 years (Mage =14.59 years, SD =1.35) participated in the programme (n =228), or as a matched control (n =256).

Results / Conclusions
The AOTG programme led to increased mental health literacy, intentions to seek help from professional sources, resilience, and wellbeing. Other benefits to sports-related outcomes included increased levels of perceived autonomy support, greater levels of engagement, and decreased burnout.

Conclusions
The results of the AOTG programme demonstrate that community sport-based programmes can be effective in the prevention and early intervention of mental health problems and the promotion of wellbeing among adolescent males. At a community level, sustainable and effective implementation strategies may be the most important variables in meaningful change.

1563 Part of Symposia

Paper 4: The perceived benefits of ‘State of Mind Sport’: A pilot program at HMP Risley

David Woods, Ulster University

Objectives / Purpose / Background
This study sought to determine the perceived benefits of the State of Mind Sport intervention within a male prison. The study consisted of three main aims, namely to determine: (1) if the intervention increased prisoners’ knowledge of mental health and their intentions to engage with those suffering mental illness, in comparison to a control group; (2) if the intervention increased prisoners’ psychological wellbeing and resilience; and (3) the feasibility of the intervention within the prison environment.

Design / Background / Key Points
A mixed methods design was adopted.

Methods / Conclusions
75 male volunteer prisoners (47 intervention group; 28 control group) completed questionnaires at baseline and post-program, and 29 (17 intervention; 12 control) completed questionnaires at an 8-week follow-up. Two focus groups with a total of 15 prisoners were also conducted immediately post-program.

Results / Conclusions
A significant difference in means scores for knowledge of mental health was observed, with the intervention group scoring higher in comparison to the control, immediately post-program. No significant long-term impacts were observed at 8-weeks. Focus group participants reported perceived increases in hope, coping efficacy and intentions to engage more openly with other prisoners regarding personal wellbeing. However, fear of stigmatisation and lack of trust were identified as persistent barriers to help-seeking behaviour.
Conclusions
The State of Mind Sport intervention resulted in positive short-term impacts on mental health knowledge. It was perceived as appropriate and engaging to a prisoner audience, increased intentions to seek help and an improved sense of hope. Suggestions for program enhancement are discussed.

1564 Review/ Theoretical & Practice Oral Presentation
‘I never wanted to ask, but congrats on the bump’:
Experiences of working in sport psychology whilst pregnant
Lee-Ann Sharp, Ulster University

Objectives
The purpose of the current investigation was to explore one sport psychology consultant’s experiences of working in applied sport psychology while pregnant.

Design
This study was conducted using an autoethnography approach.

Methods
The author is an applied sport psychology consultant working in an academic institution in the United Kingdom. A Chartered Psychologist with the British Psychological Society, and an accredited Sport Scientist with the British Association of Sport and Exercise Sciences, with 11 years’ experience working in applied sport psychology. At the time of the author’s pregnancy her applied role involved providing psychological support to elite amateur and professional golfers through the sport’s National Governing Body. Data was collected throughout the course of the authors 39 week pregnancy. Data consisted of reflective diary entries, emails, and experiential notes made during and after applied sport psychology sessions with clients. The gathered data was then interpreted using appropriate psychological theory.

Results
Throughout the authors applied sport psychology practice whilst pregnant she was faced with a number of personal and professional challenges, these included; (1) breaking the pregnancy news; (2) dealing with pregnancy and being fit to practice; (3) fear of missing out; (4) how to take time off, and (5) balancing my roles with a new baby.

Conclusions
Several practical considerations will be discussed for those practitioners considering working in applied sport psychology whilst pregnant, including: a) the need for female role models and mentors, b) finding balance between personal and professional lives, and c) the importance of self-care.

1817 Experimental & Applied Oral Presentation
Experiences leading elite motorcycle road racers to participate at the Isle of Man TT: A thematic narrative analysis
Richard Sille, LJMU

Objectives
This study explored how participants storied their journeys to becoming elite Isle of Man TT (TT) competitors and identified similarities and differences between motorcycle road racing and other high-risk sports.

Design
Qualitative thematic narrative analysis to explore in-depth athletes’ experiences.

Methods
Four male athletes, aged between 35 and 52, participated in semi-structured life-history interviews. Participants were recruited through purposeful and snowball sampling. Data were analysed using thematic narrative analysis.

Results
Participants storied their fathers’ proactive support as instrumental in their initial involvement in the sport. Contrary to dominant cultural narratives, pivotal life events were identified as directly influencing participants’ decisions to compete at the TT, primarily for the extrinsic benefits provided. Participants highlighted self-actualisation and flow as positive psychological aspects of the TT experience, although the addictive nature of flow was also noted.
Participants varied on how they characterised fear, anxiety and perceptions of risk. Factors such as situated freedom, experiences of fear and gender profile differentiated competitors in motorcycle road racing from participants in other high-risk sports.

Conclusions
This study advances knowledge by revealing the experiences that lead individuals to compete at the TT. As narratives flit between discovery and performance stories, the motivation to compete clearly goes far beyond traditional risk-taking explanations of behaviour. Findings also suggest that participants from differing high-risk sports should not be treated as a homogenous group. The knowledge generated from this study will allow stakeholders to better support the performance and wellbeing needs of TT competitors.

1410 Workshop
‘Leading from within’: A social identity approach to leadership development
Matthew Slater¹, Jamie Barker²
¹Staffordshire University, ²Loughborough University

Objectives / Purpose / Background
This interactive workshop will introduce and give you the opportunity to experience elements of the 3R (Reflect, Represent, Realise) leadership development programme. Our research and applied experiences in elite sport and business settings have demonstrated the positive effect of the 3R’s on perceived leadership, group dynamics, and follower behaviour. In this workshop you will learn the fundamental principles of the social identity approach to leadership, the 3R framework specifically, and engage in a series of tasks from the 3R programme. We also share our experiences and reflections upon the challenges, facilitators, and contextual factors pertinent when developing and delivering leadership development programmes in high performance contexts. Expected outcomes:
1. Increased understanding of the social identity approach to leadership.
2. Increased understanding of the 3R framework.
3. Engagement in 3R leadership development activities.

Design / Background / Key Points
The social identity approach to leadership is a contemporary and growing perspective on leadership in sport and exercise. Building on previous conceptualisations, the social identity perspective focusses on how leadership is inextricably connected to group processes, and that successful leadership develops, manages, and advances a shared group identity. Within research and practice in sport and exercise there exist few evidence-based leadership development programmes. The 3R framework is a social identity-based leadership development programme that is inclusive, group-focussed, and practical.

Methods / Conclusions
This interactive workshop will draw on our research and practice experiences to develop attendees’ knowledge of how leadership can be developed through the 3R programme. Attendees will also have a critical appreciation of the contextual challenges when delivering leadership development in practice.

2037 Experimental & Applied Poster Presentation
A case study of environmental factors influencing performance in student-athlete basketball players
Steve Smith, Stewart Cotterill, Hazel Brown
University of Winchester

Objectives
The psychological influencing performance factors from environments where competitive athletes practice is understudied despite non-sport domain research indicating practice performance can influence competitive performance. Using a case study approach, a student-athlete basketball practice environment was analysed for positive and negative influencing performance factors.
Design
A qualitative case study approach was adopted to provide a holistic evaluation of the practice environment. Due to psychological performance influences from practice environments being relatively unknown, an inductive thematic analysis was used.

Methods
Participants were fifteen members of a UK Elite Academy Basketball League team based in a sixth form college, which included: ten players, two coaches, one strength and conditioning coach, one academic teacher and the head of sport (mean age = 21.8 years). Participants were purposefully sampled to elicit the perceptions of members who had the best knowledge and experience to derive a holistic evaluation. Data was collected from interviews and focus groups and analysed using inductive thematic analysis.

Results
Data analysis of 760 individual data items led to the emergence of six overarching higher order themes, which were: effort, status, individuality, preparation, team drive and practice vision.

Conclusions
The data produced several themes unreported in previous literature suggesting practice environments should be viewed as a standalone field of investigative enquiry. Results and discussions provide practitioners, especially coaches who hold the expert knowledge of their own practice environment, an opportunity to reflect upon and practically implement the findings that are best suited to their environment.

2000 Experimental & Applied Poster Presentation
‘It’s just a word that has no meaning’: A phenomenological study of recreational endurance athletes’ experiences of wellbeing
Gillian Strathearn, Elaine Duncan, Elaine Turtle
Glasgow Caledonian University

Objectives
To investigate recreational endurance athletes’ experiences of wellbeing from a phenomenological perspective.

Design
Psychological inventories adopting pre-determined constructs dominate the study of wellbeing in sport. Such constructs suggest athletes’ wellbeing is dependent on sport participation and performance satisfaction. Conversely, qualitative research has indicated the idiosyncratic nature of wellbeing, suggesting athletes could express different understandings in relation to wellbeing. However, qualitative research into the lived experiences of wellbeing is still in its infancy. Moreover, existing research focuses on elite athletes whose experiences may not coincide with other athletic populations. One population who warrant attention are recreational endurance athletes due to the exponential rise in the popularity of recreational endurance events. Thus, there remains a gap in the literature concentrating on the subjective substance of athletes’ conceptualisations of wellbeing.

Methods
An Interpretative Phenomenological Analysis (IPA) approach was adopted exploring six recreational endurance athletes’ conceptualisations of wellbeing. Participants were recruited via convenience sampling. The semi-structured interviews were transcribed verbatim with an IPA analysis highlighting themes and connections across each transcript.

Results
Participant accounts described one overarching theme, three super-ordinate themes and eight sub-themes. The super-ordinate themes identified were; how recreational endurance athletes conceptualise wellbeing; recreational endurance athletes’ identities; and narratives around whether they were addicted to their sport.

Conclusions
This study provides novel insight into lived experiences of recreational endurance athletes. Findings emphasise that wellbeing is difficult to define in addition to highlighting that consideration could be given to expanding psychological inventories measuring wellbeing to include constructs such as identity and addiction.
**Identification of the psychological and physiological factors that enable endurance performance success in trained ultra-marathoners**

Jeremy Sutton¹, Gavin Breslin¹, Gareth Davison¹, Roddy Large²

¹Ulster University, ²Dundalk Institute of Technology

**Objectives / Purpose / Background**
To examine the psychological and physiological factors that enable endurance performance success in trained ultra-marathoners as evidenced by increased aerobic capacity.

**Design / Background / Key Points**
A cross-sectional design was adopted to quantify the psychological and physiological differences between ultra-marathoners and non ultra-marathoners.

**Methods / Conclusions**
Twenty-seven adult male volunteers (mean age = 39.41, SD = 6.95) were allocated to one of three groups based on answering questions regarding aerobic exercise and ultra-marathon race participation. Participants completed the Mental Toughness Questionnaire MTQ48, SDT GCOS Questionnaire, and the Big 5 personality dimensions, along with physiological assessment of VO2 max scores, pain tolerance and threshold, stress hormone, lactate threshold, running economy, and the SHTT, BDNF, D4DR genes.

**Results / Conclusions**
Overall the results did not identify significant differences in mental toughness, motivation, or personality, other than openness, between ultra-marathon runners, and non ultra-marathoners. Further analysis identified a strong relationship between increased levels of mental toughness and, running economy, pain threshold and tolerance.

**Conclusions**
Together these findings suggest that ultra-marathoners are identifiable by their openness to new experiences but not their mental toughness, or motivation and achieve higher levels of endurance as a result of physiological adaptions following increased training regimes. Furthermore, differences in psychological characteristics do not preclude participation in an endurance event, and although mental toughness does not predict participation in ultra-marathons, it may benefit factors that impact performance in ultra-marathon events.

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**Clinically relevant anxiety and depression symptoms in Icelandic elite athletes in different types of individual sports**

Richard Tahtinen¹, Hafrun Kristjansdottir²

¹Liverpool John Moores University, ²Reykjavik University

**Objectives**
To explore the prevalence of clinically relevant anxiety, depression, or co-morbid symptoms across different types of individual sports in Iceland.

**Design**
Cross-sectional online survey design

**Methods**
A convenience sampling method was utilised to recruit athletes via email and Facebook. Excluding non-elite and team sport athletes, the final sample consisted of 137 individual sport athletes (51.8 % female). Athletes were grouped into racket, aesthetic, speed and endurance, precision, power, and contact sports. Symptoms of depression were assessed with the 9-item Patient Health Questionnaire (PHQ-9) and anxiety with the 7-item anxiety scale (GAD-7). For both scales the gold-standard cut-off score of ≥ 10 was used to identify athletes with clinically relevant symptoms.

**Results**
In female athletes, having any subset of clinically relevant symptoms (e.g. anxiety, depression, or co-morbid symptoms) ranged from 25.0 % in power sports (e.g. Olympic lifting, n = 8) to 75.0 % in aesthetic sports (e.g. figure
skating, n = 8). In male athletes, prevalence ranged from 0.0 % in contact sports (e.g. Judo, n = 9) to 41.7 % in precision sports (e.g. golf, n = 12).

Conclusions
There may be high variability in depression and anxiety symptoms across different individual sports, which may be underpinned by sport specific determinants. Considering that in this sample most female athletes in aesthetic sports, and almost half of the male precision sports athletes reported clinically relevant anxiety or depression symptoms, further work is needed to understand the mechanism by which these sport-specific differences may emerge.

1620 Symposium
Sport and exercise psychologist training: The professional development and training network
David Tod, Martin Eubank
Liverpool John Moores University

Within the last 25 years research has begun to pay attention to the applied sport psychologist, with early studies focused on effective practitioners’ characteristics and personal qualities. Less is known about how best to train them, compared with the tools they use. This knowledge imbalance has potential to lead to an overemphasis in practitioner education on the interventions consultants deploy at the expense of a focus on their development as individuals, potentially compromising overall training effectiveness. The need for professional development research comes at a time when several countries are developing or reviewing training routes and accreditation schemes to ensure quality in the profession. As part of the sport psychology community’s efforts to thrive and enhance its credibility, there is a need to ensure that practitioners have been well trained and mentored. For the field to advance as a credible applied scientific profession, decisions about training and supervision need to have a base built on scientific evidence, which is currently lacking. This symposium documents an ongoing UK project aimed at furnishing the discipline with knowledge to help inform current training practice and inform quality supervision. The symposium comprises of four presentations from the project team, based around (a) the development of a proposed theoretical framework, (b) the contribution of the realist synthesis methodology, (c) the key findings from the systematic literature searches and pilot studies, and 4) the implications for applied sport psychology education, training, and supervision.

1621 Part of Symposia
Paper 1: A bio-ecological model underpinning sport psychologist training and development
David Tod1, Hayley McEwan2
1Liverpool John Moores University, 2University of West Scotland

Background
Development as a sport psychologist is not limited to the training years. Most studies, however, have focused on the early years. In this research, we present empirical evidence of the change process across the sport psychologist career span and synthesis the factors influencing development into a working model.

Design
Qualitative

Methods
This research involved 2 phases. In the first phase, we interviewed 9 Stage 2 trainees three times during their 2-year training programmes. In the second phase 5 HCPC practitioners were interviewed twice regarding their professional development. In both phases, we developed semi-structured interview guides from themes in the professional development literature. Interviews were transcribed verbatim and subject to a thematic analysis.

Results
We synthesised findings from the two phases into a working model of sport psychologist development based on a bio-ecological approach. This model allows us to understand how four components of process, person, context, and time mutually influence development. For example, participants discussed how the people (e.g., clients and supervisors), the environments (e.g., specific sports and organisations) and the time spent with each (e.g., short and
long-term relationships, intensive training camps) helped to shape development. In turn, participants changed their environments (e.g., selected supervisors and client groups) to allow them to be authentic.

Conclusions
The model proposed may serve as a reference point to follow the process of developing future sport psychologists, and progress the development of current practitioners. The model also informed the realist synthesis discussed in the next presentation.

1624 Part of Symposia

Paper 2: The evidence underpinning sport psychologist training and development: A realist synthesis
David Tod, Martin Eubank, Robbie Anderson, Nick Wadsworth, Seshnee Dam
Liverpool John Moores University

Purpose
The purpose of the current presentation is to outline the realist synthesis methodology used to drive several systematic reviews on the evidence underpinning sport psychologist training.

Background
Sport psychologist training does not represent a discrete or simple intervention assessable by individual studies, be they descriptive, experimental, qualitative, or quantitative. Scientific understanding of sport psychologist training and development arises from the amalgamation of many studies of various designs.

Methods
In the initial stage we undertook a scoping review to identify formal keywords and databases to be used in subsequent stages. The aim of the scoping review was to undertake an examination of the theoretical basis of sport psychologist training. In the second stage, we undertook the first formal search and evidence appraisal to ‘populate’ a proposed theoretical framework with empirical findings. We used the theoretical framework to guide the location, integration, and comparison of the sport psychology empirical evidence. In the third stage, we engaged in an iterative purposive process in which we examined literature in related fields, including clinical psychology, counselling, and education, to evaluate the gaps in the theoretical framework. The iterative searches were completed upon theoretical saturation. The process within and between each stage was iterative with a constant process of ‘going back and forth’ as new evidence emerged.

Results
The results are presented in the subsequent symposium presentation.

Conclusions
The current presentation highlights the value of realist syntheses for complex interventions like practitioner training and sets the scene for the subsequent symposia presentations.

1625 Part of Symposia

Paper 3: Key considerations underpinning sport psychologist training and development
David Tod¹, Robbie Anderson¹, Nick Wadsworth¹, Seshnee Dam¹, Charlotte Chandler², Michelle Smith³
¹Liverpool John Moores University, ²Derby University, ³University of West Scotland

Purpose
The current presentation discusses the key findings from the realist synthesis and how they informed the first presentations’ proposed theoretical framework.

Background
The previous symposia presentations surveyed the current landscape of practitioner development and described the realist synthesis approach to reviewing evidence for complex interventions, like practitioner training.

Methods
The current presentation presents the findings emerging from the realist synthesis.
Results
Specifically, the presentation outlines the process chains, and the context, mechanisms and outcomes they involve, that appear central to a more advanced theoretical framework of practitioner development. Based on the focus groups and literature reviews conducted, both within and outside of the domain of sport psychology, there are a number of key ‘process chain’ considerations for sport psychology training and development. For example, there is a key context relating to supervised work experience and the nature, scope and diversity of sport psychology practice settings. The outcome of this process chain is a need for improvement in the trainee’s ability to adapt services to clients, achieved through the mechanism of providing greater insight into service delivery during the training period. This process chain also implicates a need to understand sport environments and their culture / sub-culture.

Conclusions
The findings of the realist synthesis support a research underpinned theoretical framework for sport psychologist training and development, which accommodates practitioner growth across the career-span and provides detailed guidance about supervision methods and developmental tasks applicable to phased development, including the key training phase.

1626 Part of Symposia
Paper 4: Key implications underpinning sport psychologist training and supervision
David Tod¹, Moira Lafferty², Martin Eubank¹
¹Liverpool John Moores University, ²University of Chester

Purpose
This presentation discusses the key research implications for practitioner development, and the applied implications for educators, supervisors, and professional bodies engaged in the training and development of sport psychologists.

Background
As sport psychology training continues to develop and evolve, leading to increased professionalisation, there remains a need for research to contribute, shape and inform future applied practice training development. The key considerations emerging from the realist synthesis inform a revised bio-ecological theoretical framework for sport psychologist training and development.

Methods
The method underlying the realist synthesis was presented in the second symposium presentation.

Results
The results from the realist synthesis were presented in the third presentation.

Conclusions
From a research perspective, the presentation will discuss a number of key implications underpinning sport psychology training and supervision. For example, longitudinal studies that examine the process of development, including investigation of the interplay between the context, mechanisms and outcomes of training and development within a bio-ecological framework are advocated. In terms of applied implications, the presentation will discuss a number of key considerations that appear central to effective training and supervision, and how our findings can inform both the short and long-term development of active training activity for both supervisors and practitioners. For example, there is a clear mandate to better recognise the cultural and political macro factors that influence trainee development. As another example, there is a meaningful role for personal therapy in training.

HTA Undergraduate Award Winner
Sensorimotor development in autism spectrum disorders
Frederieke Turner, Liverpool John Moores University

To accommodate for autism severity, a novel preferential viewing protocol was developed to measure sensorimotor development. Compared to a media control group (n=19, 0 hours experience at trampolining), the trampolining group (n=22, over 100 hours experience at trampolining) was expected to show trampolining specific visual attention when viewing familiar actions. The preferential attention protocol displayed two point-light autistic models performing the same action on either side of a monitor in a congruent (upright) or incongruent (inverted)
orientation. Participants viewed two experimental trampolining actions (seat drops, twists), and two control actions (gait, straight jumps). Both groups watched each action 4 times (total n=16) in a randomised trial-order. Preferential attention was measured using First Fixation Duration that quantifies the length (ms) of the first fixation made on an area of interest. ANOVA revealed a significant Group x Congruency interaction (p < .05) for twists, which indicated that the trampolining group had a greater First Fixation Duration on the congruent action (202 ms), compared to the incongruent action (142 ms), whereas the media group had a greater First Fixation Duration on the incongruent action (177 ms), compared to the congruent action (175 ms). A significant main effect for Congruency indicated that the trampolining group and the media group spent a similar First Fixation Duration viewing the jumping action (p < .05). The First Fixation Duration data indicated that the trampolining group and media group showed similar visual attention when viewing a control action. Importantly, the trampolining group showed preferential attention when viewing an action based specifically on 100 hours of sensorimotor experience. This difference indicates for the first time that the sensorimotor system in moderate-to-severely autistic individuals develops in an experience dependent manner.

1504 Symposium
From lab to field: Symposium on the use of Rational Emotive Behavioural Therapy (REBT) in golf
Martin Turner, Andrew Wood, Nanaki Chadha, Lyle Kirkham
Staffordshire University

Research and professional practice literature provides a variety of useful applied psychological approaches to working with golfers. One approach that has emerged more recently in sport psychology (Turner, 2016) is Rational Emotive Behavioural Therapy (REBT; Ellis, 1957). REBT is particularly useful in golf where time between stroke, in training and competition, provides ample opportunity to implement REBT techniques. Rarely has research reported on the application of specific REBT techniques with athletes. It is vital that we understand how REBT can be integrated into the performance environments of specific sports, due to idiosyncrasies of particular sports. This symposium brings together experimental and field-based applied work, specifically focussed on the examination and use of REBT in golf. Particularly, the symposium coalesces around golf performance under pressure, and the effects of REBT on anxiety and skill execution. Two experimental studies are in communicated, in which REBT is operationalised through rational and irrational self-talk in the laboratory, and in the field. Then, two applied idiographic single-case design studies are presented in which REBT is applied with amateur and professional golfers in the real world both in the UK and India. As well as exploring the findings of each study, the symposium puts forth practical guidance on using REBT within golf for the benefit of practitioners working in golf, and or those working with REBT in other settings.

1505 Part of Symposia
Paper 1: Investigating the effects of irrational and rational self-statements on motor-skill performance
Andrew Wood, Staffordshire University

Objectives / Purpose / Background
In the present study, we examined the effects of irrational and rational self-statements on motor-skill performance (Experiment 1), performance effectiveness, and efficiency during a modified hazard perception task, and task persistence during a breath-holding task (Experiment 2). It was hypothesised, participants who used irrational self-statements would report higher-levels of pre-performance anxiety, higher performance concentration disruption, performance efficiency, and achieve lower performance scores in both performance tasks compared to when using rational self-statements.

Design / Background / Key Points
A repeated measures counterbalanced design was used to empirically examine the effects of irrational and rational self-statements on performance related outcomes.
Methods / Conclusions
Thirty-five undergraduate students were purposively recruited for Experiment 1 and 2, each participating in no self-statement, irrational, and rational self-statement conditions. Measures of irrational beliefs, state-anxiety, concentration disruption, as well as objective markers of performance efficiency (i.e., visual search behaviours) and effectiveness were used during a competitive task.

Results / Conclusions
Data indicated no differences in motor-skill and task performance, performance efficiency, task persistence, mental effort, and pre-performance anxiety between irrational and rational self-statement conditions.

Conclusions
The findings provide insight into a juxtaposition that irrational beliefs hinder psychological health, yet foster performance, highlighting important distinctions in factual and practical rationality that have previously been overlooked. The findings have important implications for practitioners looking to apply REBT with individuals who operate in high performance contexts. Further, the short and long-term effects of irrational and rational beliefs on performance and psychological health warrants greater investigation.

1506 Part of Symposia
Paper 2: Teeing up for success: The effects of rational and irrational self-talk on the putting performance of amateur golfers
Lyle Kirkham, Staffordshire University

Objectives / Purpose / Background
Past research has highlighted that irrational self-talk leads to disrupted motor skill performance, compared to rational self-talk. However, methodological limitations and the absence of sport-relevant tasks limit the application of past findings to athletic settings. In the present study, we examined the effects of irrational and rational self-statements on golf putting performance in the field. It was hypothesised that when using irrational self-statements participants would perform worse (hole less puts) compared to when using rational self-statements.

Design / Background / Key Points
A repeated measures counter-balanced design was used to empirically examine the effects of irrational and rational self-statements on putting performance.

Methods / Conclusions
Fifty-seven amateur golfers (Mage = 30.63, SD = 11.85; Mhandicap = 13.25, SD = 7.27, range: 0-28; Females = 17) took part. Each participant performed the golf putting task at baseline with no self-talk, and then in two conditions; (a) irrational self-talk and (b) rational self-talk.

Results / Conclusions
Golfers’ putting accuracy was significantly better with rational self-talk as opposed to irrational self-talk, and compared to baseline levels. Golfers also reported that rational self-talk was more usable than the irrational self-talk and perceived the rational self-talk to be more facilitative than the irrational self-talk for their putting performance.

Conclusions
The findings provide some support that irrational beliefs hinder skilled motor performance, whereas as rational beliefs help skilled motor performance, operationalised through self-talk. The findings have important implications for practitioners looking to apply REBT with golfers. The results are discussed with reference to potential explanatory mechanisms, study limitations, and future research needs.

1507 Part of Symposia
Paper 3: An idiographic single-case study of the effects of REBT on cognitive appraisals and emotions in Indian pro golfers
Nanaki Chadha, Staffordshire University

Objectives / Purpose / Background
The aim of this study is to investigate the effects of Rational Emotive Behavioural Therapy (REBT) on the cognitive appraisals, emotions, and performance, of five Indian professional golfers.
Design / Background / Key Points
The application of REBT in elite sport is growing, but scant research has applied REBT within golf, and little is understood about the cross-cultural applicability of REBT (Deen et al., 2017). Therefore, in the present study REBT is applied idiomatically with five Indian professional golfers, and the effects on irrational beliefs, cognitive appraisals, emotions, and performance, is examined.

Methods / Conclusions
Five Indian professional golfers (3 males, 2 females; mean age: 32.8 years; mean handicap: 0.6) took part. This study adopted an idiographic single-case design. Data were collected at three phases; baseline, intervention, and post-intervention phases. REBT was delivered using one-to-one sessions in India. Golfers were encouraged to apply REBT on the golf course during practice. Also, exposure techniques were used to place the athletes in situations that they typically avoided during play. At post-intervention, follow up measures and performance scores were collected as well as social validation data.

Results / Conclusions
Pending. To determine the effectiveness of the REBT intervention Visual analytical technique (Ottenbacher, 1986) along with statistical analysis is being performed (Turner & Barker, 2013), alongside content analysis of social validation data.

Conclusions
The effectiveness of REBT has not yet been investigated on performance among elite golfers and needs to be fully tested cross-culturally. The current study findings will inform future research and provide guidelines for the application of REBT with golfers.

1508 Part of Symposia
Paper 4: An idiographic single-case study examining the effects of REBT on the social anxiety of golfers
Martin Turner, Staffordshire University

Objectives / Purpose / Background
The aim of the present study is to investigate the effects of Rational Emotive Behavioural Therapy (REBT) on the social anxiety of three male amateur golfers.

Design / Background / Key Points
Performance anxiety has been studied in relation to golf performance extensively, but one phenomenon that has received scant attention is social anxiety. In addition, little research has focussed on the anxiety experienced within specific aspects of golf performance, such as particular shots in competitive situations. A potential intervention that could reduce social and performance anxiety in golfers is REBT (Turner & Barker, 2013).

Methods / Conclusions
Three amateur but experienced golfers (Mplaying years = 39; SD = 5.29) with handicaps ranging between 11 and 13 (Mhandicap = 12; SD = 1) were selected to take part in the study. An explanatory idiographic case-study design with the use of multiple probes (Kazdin, 2011) was adopted in this study. REBT was applied across six sessions with each golfer, integrating psychoeducational and on-course practical REBT techniques, including exposure.

Results / Conclusions
Data were collected prior to, during, and after the REBT intervention. Visual analysis following single-case guidelines revealed substantial reductions in irrational beliefs and social anxiety in all three golfers. Social validation data indicated the positive receipt of REBT by the golfers.

Conclusions
REBT was employed both on and off the golf course to ensure integration of REBT into performance, offering a methodological advancement of past research. This current study extends the research by applying REBT in a ‘real-world’ performance setting providing clear implications for future research and practice.
An examination of the dual career pathway and transitions UK student-athletes’ experience throughout university education

Emma Vickers, Liverpool John Moores University

This thesis extended knowledge on dual careers through the examination of athletes’ and stakeholders’ perceptions of the whole university experience. A qualitative research design was employed throughout the thesis and data were collected through focus groups (n=6), longitudinal semi-structured interviews (n=22), and one-off semi structured interviews (n=14) with participants from 11 UK universities. Data were analysed thematically and narratively.

Additionally, autoethnographic narratives (n=4) from the author (a former elite student-athlete) supplemented participant data (data collected via memories, informal interviews, and online articles). Part A explored athletes’ and stakeholders’ perceptions of the transition into university for student-athletes. Key results include the complexity of the decision-making process about entering university, that is influenced by cultural and psychological factors, and confusion over which role should take priority (student or athlete) upon arrival at university. Additionally, student-athletes form expectations before they move into university (e.g., perceived living challenges), but often experienced different demands following the transition (e.g., increased sporting commitments following entry to university sport). These results suggest that pre-transition support may not be targeting the correct areas. Part B examined the experiences during university for student-athletes using a longitudinal method. Results found that student-athletes have diverse and challenging experiences at university, leading to the creation of four different narratives (e.g., living at a national training centre where sport is the priority). Overall results highlight the importance of integrating university and external stakeholder support, and the development of more effective practitioner-athlete relationships. Finally, part C explored athletes’ and stakeholders’ perspectives of the transition out of university for student-athletes. Results found that student-athletes took five different pathways when they left university (postgraduate education, full-time sport, vocation sport dual career, triple career, and discontinuation from sport). Student-athletes experienced challenges with the renegotiation of their identity when they left university, and a loss of core support services led them to perceive that they had difficulty reaching their elite senior potential after university, highlighting a crucial gap in support during the athletic career. Overall results of the thesis have implications for how stakeholders educate and prepare student-athletes for transitions, and how stakeholders within the student-athletes’ circle interact whilst they are at university.

UK student-athletes’ and stakeholders’ perspectives of the transition out of university: Gap in support systems

Emma Vickers¹, Robert Morris², David Tod², Martin Eubank²
¹Talented Athlete Scholarship Scheme, ²Liverpool John Moores University

Objectives / Purpose / Background
The aim of the current study was to explore the transition out of university for student-athletes, including perceptions of transition, pathways taken, and associated transition challenges.

Design / Background / Key Points
A qualitative design was employed to collect in-depth data of athlete experiences and those who deliver and oversee university athlete support programmes.

Methods / Conclusions
Participants were recruited through the Talented Athlete Scholarship Scheme across 8 universities, and support staff from a high-profile sports university. Data were collected using a focus group with university stakeholders (n = 7) and semi-structured interviews with student-athletes (n = 10). Autoethnographic data from the first author, who was an elite student-athlete, supplemented these data.

Results / Conclusions
The results revealed that in the UK, student-athletes took five different pathways when they left university (e.g., make or break year), encompassing a complex range of driving factors (e.g., desire to compete at an Olympic Games). After making the transition, former athletes experienced challenges covering a holistic perspective (e.g., identity changes). Limited preparation, however, and an incongruence between support provided and athletes’ proactively seeking support may be a factor to why some athletes struggled to cope. Results suggest that there may
be a pool of athletes who are significantly overlooked in the support process when they leave university (e.g., those not exiting into professional programmes).

**Conclusions**

Based on the challenges experienced, to some extent, student-athletes may be over-supported during their time at university, and instead, a focus on empowering athletes to take on increasing responsibilities may be advantageous.

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**1835 Experimental & Applied Poster Presentation**

**Self-talk, auditory distraction, and performance accuracy in basketball free throw shooting**

*Kristian Warren Friedrich, Vassilis Sevdalis*

*Aarhus University*

**Objectives**

Self-talk has been shown to be effective for facilitating performance in sports. For this study, it was hypothesised that a self-talk intervention for basketball players would improve accuracy in a free throw shooting task, as well as help counter the aversive effects of an auditory distraction.

**Design**

In the present study, a within-subjects design was applied.

**Methods**

Twenty-eight basketball players were individually tested, each performing 64 free throws. Two independent variables were introduced in the experiment: an auditory distraction, and a self-talk intervention. For the first half of the experiment, the participants performed free throws with and without auditory distraction. For the second half of the experiment, a self-talk intervention was introduced, and the participants continued to shoot free throws with and without distraction, while applying the self-talk intervention. The dependent variable was performance accuracy (i.e., scoring or missing a free throw).

**Results**

The results indicated that the self-talk intervention had a significant performance enhancing effect, as the shooting accuracy increased after the self-talk intervention was introduced. Performance accuracy gradually improved during the experiment, indicating practice effects. The auditory distraction did not appear to have a detrimental effect on performance, as performance accuracy was similar under auditory distraction and no distraction conditions. There were no relationships between individual differences in players' experience (e.g., years of experience and hours of practicing) and performance accuracy.

**Conclusions**

This study supports previous literature indicating that self-talk is beneficial for performance, and encourages the use of self-talk as a strategy employed by sport practitioners.

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**2029 Experimental & Applied Poster Presentation**

**Investigation of the effectiveness of the ‘Get Onside’ Saracens sport intervention on reoffending at a Young Offenders Institution**

*Sarah Welland, Middlesex University*

**Objectives**

The research aimed to find out if young offenders that take part in an 8-week intensive rugby-based intervention exhibited significantly lower rates of reoffending than those who did not, and to investigate differences in their pro-criminal attitudes.

**Design**

The research was based on a mixed method approach, employing a pre-post intervention design with a non-randomised control group. Qualitative methodology was deemed to add value to the quantitative data collection, as it facilitated an insight into individuals' opinions, views and personal history in addition to their pro-criminal inclinations.
Methods
The sample was young adult males (aged 18-21 years) at a Young Offenders Institution, with one intervention group and one control group of 11 individuals each. The Measure of Criminal Attitudes and Associates (MCAA) tool was used to collect data pre and post intervention, whilst data on reoffending will be collected and analysed over a two-year period. Semi-structured interviews were conducted with both groups and a focus group conducted with the intervention group, to engage with participants about their opinions on engaging in crime, sport in prison and most likely factors in successful rehabilitation.

Results
Qualitative responses are pending formal analysis by ways of interpretative phenomenological analysis (IPA) and quantitative responses are also pending formal analysis.

Conclusions
If the intervention group exhibit fewer incidents of reoffending upon release and display improved attitudes towards criminality compared to their control counterparts, this would provide evidence that indicates the Get Onside programme has a positive strategy for the rehabilitation of young offenders.

1601 Experimental & Applied Oral Presentation
Weight cutting in combat sports: A qualitative exploration of barriers to intervention
Sue Wilbraham, David Elliott, University of Cumbria

Objectives / Purpose / Background
Weight cutting is the process of rapidly losing weight before a combat sport competition weigh-in, to qualify for a fight with a lighter opponent. Although this can provide a perceived weight advantage, methods of rapid weight loss (RWL) such as restriction of food and fluid, sweating in salt baths or saunas, or exercising in vapour impermeable clothing, have consequences for performance, health and wellbeing. Although there have been calls to ban RWL, the practice is still highly prevalent. Therefore, to understand barriers to intervention the current study sought to explore attitudes and experiences relating to weight cutting in combat sports.

Design / Background / Key Points
A qualitative, inductive (bottom-up) approach was taken to allow the participants to provide a rich, detailed, idiographic account.

Methods / Conclusions
Semi-structured interviews were carried out with seven muay-thai fighters, selected due to their experience and interest in RWL.

Results / Conclusions
Braun and Clarke’s (2006) six phase approach was applied to the transcripts and six themes were created which described the participants’ perceptions. Themes describe the culture of cutting weight, the consequences of failing to conform, the fear of not making weight, absence of rules preventing RWL, perceptions of risk, and a lack of supervision or advice during weight cuts.

Conclusions
Findings indicate diffusion of responsibility for competitor safety leaving fighters at risk. At present, the creation and enforcement of rules are deterred by conflicts of interest. Participants’ testimony highlights dangers to amateurs who may emulate professional fighters or seek advice on internet forums. Safeguarding the health and wellbeing of junior fighters should be prioritised.

Keynote Presentation
A holistic perspective on psychological support provision in elite sport
Paul Wylleman, Vrije Universiteit Brussel – TeamNL • NOC*NSF
Based upon his role as performance manager Performance Behaviour at TeamNL of the Netherlands’ Olympic Committee (NOC*NSF), the presenter will focus on the needs, content and organisation of psychological support provided to Olympic and Paralympic athletes, teams and coaches. In first instance the holistic perspective, used as basic framework to identify challenges and needs for support provision, will be highlighted. Specific attention will be paid to elite athletes and coaches’ performance behavior and mental health status. Secondly, reflections will be
shared on the roles of psychologists and their support provision in light of the 2016 Rio Olympic Games and 2020 Tokyo Olympic Games. In third instance, critical insights will be shared on the competences and roles of psychologists, reflecting on challenges in, among others, education, continued professional development and functioning in inter- and intra-disciplinary support teams. Attention will also be paid to the contribution of psychologists in providing support to and developing competences in other specialists (e.g., doctors, physiotherapists, S&C experts, dieticians, technical directors). Finally, recommendations will be formulated on how national sport governing bodies or national Olympic Committee on the one hand and (sport) psychology organisations on the other hand can enhance the role of and support provision by psychologists in elite sport.