Abstracts

Monday 28th June, 15.30 – 17.00

<https://stmarys.zoom.us/j/86346517714?pwd=d3ZtdGx2YVA1bWRpaEVjTThaUG9oQT09>

**Theme 2: Performance Science (Session Chair: Carla Meijen)**

**Talk 1: Ciara Everard:** Sports injuries experiences of elite track athletes: A narrative analysis

**Talk 2: James Fleming:** Significant energy deficit and suboptimal sleep during an elite youth tennis training camp

**Talk 3: Luke Edinborough:**Objective sleep quality in U18 professional footballers: A longitudinal observational study using within-subject linear mixed model analysis

Title: Sports injuries experiences of elite track athletes: A narrative analysis

Presenter: Ciara Everard

**Background:** There have been recent calls within sports injury psychology research for a more interdisciplinary approach that encourages consideration of social and cultural factors and promotes collaboration with other disciplines (e.g., sport sociology, sport medicine, sport communication) (Wadey et al., 2018; Wiese-Bjornstal, 2010). Underlying this call is a recognition that sports injuries do not occur in isolation; injuries are influenced by the web of relationships and social milieu that surrounds the athlete (Brewer, 2002). One form of inquiry that can enhance our understanding of how the broader social-cultural landscape might shape injured athletes’ experiences of injury and has proven effective in the wider sport psychology literature is narrative inquiry (Sparkes & Smith 2002).

**Objective:** To conduct a narrative inquiry of elite track athletes to examine how they story their injury experiences. To identify the broader social-cultural injury narratives that circulate in elite sport cultures and explain how they shape and give meaning to injured athletes’ experiences.

**Method**: Fifteen elite track athletes (M= 28.3, SD= 3.62), each participated in two life story interviews. Thirteen of the fifteen participants also completed a third interview. Dialogical narrative analysis (Frank, 2013) was used to identify narrative typologies.

**Results**: Six narrative typologies were identified, named Resilience Narrative, Merry-Go-Round Narrative, Longevity Narrative, Pendulum Narrative, Snowball Narrative and More to Me Narrative.

**Conclusion**: The findings identified extend the sports injury psychology research by being the first study to uncover the injury narratives that exist within elite sport cultures and to highlight how athletes draw upon these narratives to make sense of their injury experiences. The narratives identified have implications for future research and applied practice by highlighting the diverse ways in which athletes can make sense of their experience of injury. Furthermore, the findings identified highlight how athletes experience of injury may be enabled or constrained depending on the narrative resources available to them.

Title: Significant energy deficit and suboptimal sleep during an elite youth tennis training camp

Presenter: James Fleming

During an elite youth tennis training camp, training load, perceptual readiness, energy expenditure, dietary intake, and sleep quality and quantity were investigated. Ten elite youth tennis players (14 ± 1 years) completed a 6-day camp with daily morning and afternoon training. Players wore accelerometer watches to measure activity energy expenditure and sleep. Global positioning system units were worn to monitor external training load (distance covered, max. velocity, PlayerLoadTM). Perceptual readiness was assessed using the modified Brief Assessment of Mood Questionnaire. Dietary intake was obtained from a food diary and supplementary food photography. Players covered significantly more distance and had higher PlayerLoadTM during morning sessions than afternoon sessions (5370 ± 505m vs 4726 ± 697m, p<0.005, *d*=3.2; 725 ± 109a.u. vs 588 ± 96a.u., p=<0.005, *d*=4.0). Players also ran further (5624 ± 897m vs 4933 ± 343m, p<0.05, *d*=1.0) and reached higher max velocities (5.17 ± .44m·s-1 vs 4.94 ± .39m·s-1, p<0.05, *d*=0.3) during simulated match play compared to drill sessions. Mean daily energy expenditure was 3959 ± 630kcals. Mean energy intake was 2526 ± 183kcals, resulting in mean energy deficits of 1433 ± 683kcal. Players obtained an average of 6.9 ± 0.8 hours sleep and recorded 28 ± 7 nightly awakenings. Elite youth tennis players failed to achieve energy balance and recorded sub-optimal sleep quantity and quality throughout the training camp.

***Keywords****:* tennis, nutrition, energy, sleep, performance

Title: Luke Edinborough: Objective sleep quality in U18 professional footballers: A longitudinal observational study using within-subject linear mixed model analysis

Presenter: Luke Edinborough

An athlete’s pain or discomfort tolerance levels can by influenced by various biopsychosocial factors. To date, there is a general lack of research into the female ultra-athlete and their pain experiences and management, particularly during a race setting. The aim of this study is to use a biopsychosocial approach to capture and examine the pain experiences and management strategies of two different female ultra-athletes during their respective race settings.

To do this, following ethical approval and recruitment, we plan to use three data collection methods. Firstly, using Interpretive Phenomenological Analysis (IPA) guidelines, conduct face-to-face semi-structured interviews with each athlete before and after their race. The purpose will be to discuss their planning and preparation experiences going into the race and then to review their race pain experience with them. Secondly, during the race, an adapted think aloud protocol will be used (Ericsson & Simon, 1980) via a recording wristband worn by the athlete who will be trained to record their thoughts, feelings, emotions, mood, and any influential information relating to their pain experiences and how they are coping. Thirdly, the first author will be supporting the athletes during the event who will be making field note observations throughout the race and at each relevant checkpoint recording athlete pain scores via the short form McGill Pain Questionnaire (Melzack, 1987).

Post data collection, interviews and real-time recordings will be transcribed verbatim and analysed using IPA guidelines to produce superordinate themes. Relevant key findings will be discussed using the theoretical frameworks of the Neuromatrix theory (Melzack, 2001), self-regulation, and self-control to gain more ecological insight to their pain experiences and management and to inform practical implications for multidisciplinary practitioners working with these athletes.