



SEONZ

SPORT & EXERCISE SCIENCE

— NEW ZEALAND —

ABSTRACTS FROM THE 2018 ANNUAL CONFERENCE

26th-27th October 2018

University of Otago,
Dunedin, New Zealand

Day One: Friday 26 th October (Hutton Theatre)			
16:15	Perceptual and physiological responses to differing ergogenic mouth swilling solutions. <i>Russ Best</i>	The role of informal, unstructured practice in developing football expertise: the case of Brazilian 'Pelada'. <i>Luiz Uehara</i>	
16:30	Hepcidin and iron status in elite female rugby players. <i>Simone Smith</i>		
16:45-18:00	POSTER PRESENTATIONS		
18:00-18:30	Updates from our international counterparts ESSA, ACSM, BASES.		
18:30-onwards	MOU Signing and Celebration + Social function at University of Otago Staff Club		

Day Two: Saturday 27 th October (Hutton Theatre)			
08:00-08:30	Refreshments		
08.30-09:30	Keynote Speaker: <i>Dr Shona Halson</i> , Australian Catholic University		
Parallel Sessions	Hutton (Heat stress)	Tekapo (Sport Med/Biomech)	Barclay (Sport psychology)
9:35	Does the mode of heat acclimation affect the kinetics of adaptation? <i>Lorenz Kissling</i>	History of concussion is associated with higher head acceleration during simulated rugby tackle. <i>Melanie Bussey</i>	Effects of sleep deprivation on perceptual-motor performance under low and high threat. <i>Arne Nieuwenhuys</i>
9:50	The impact of solar radiation exposure on professional team-sport training and recovery. <i>Fergus O'Conner</i>	New Zealand Rugby Community Concussion Strategy: 2018 Pilot Study. <i>Janelle Romanchuk</i>	Life skills acquisition and psychological development in elite cricketers: evaluating the effectiveness of a life development intervention. <i>Adam Miles</i>
10:05	Heat response testing in elite rugby sevens athletes: an eye to Tokyo 2020. <i>Stephen Fenemor</i>	The effects of fatigue on the spine motion of cricket fast bowlers. <i>Corey Perrett</i>	Working memory training in a modified Loughborough soccer passing test impacts skill performance in youth football players. <i>Joseph Hall</i>

53. GPS analysis of a team competing at a national Under 18 field hockey tournament

van der Merwe, F.H; Haggie, M.B.P

Waikato Institute of Technology

The purpose of this study was to utilise global-positioning system (GPS) technology to quantify the running demands of national Under 18 field hockey players competing in a regional field hockey tournament. Ten male players (mean \pm SD; age 17.2 ± 0.4 years; stature 178.1 ± 5.2 cm; body mass 78.8 ± 8.8 kg) wore GPS units while competing in six matches over seven days at the 2018 New Zealand national under 18 field hockey tournament. GPS enabled the measurement of total distance (TD), low-speed activity (LSA; $0-14.9$ km/hr), and high-speed running (HSR; ≥ 15 km/hr) distances. Differences in running demands (TD, LSA, HSR) between positions were assessed using effect size and percent difference \pm 90% confidence intervals. Midfielders covered the most TD and LSA per game and strikers the most HSR during the 6 matches. There were "very large" differences between strikers and midfielders for TD and LSA, strikers and defenders for LSA and HSR, and defenders and midfielders for LSA. These results suggest that these playing positions are sufficiently different to warrant specialised position-specific conditioning training leading into a field hockey tournament.

54. Psycho-Behavioural Momentum: Golf Match-Play Player's Perspectives

¹McCarthy, C.J; ²Parker, J.K; ³Jones, M.I, ⁴Lovell, G.P.

¹University of the Sunshine Coast; ²University of Gloucestershire; ³Exeter University

Introduction: Psycho-behavioural momentum (PBM) has been defined as the positive or negative change in cognition, affect, physiology, and behaviour caused by an event or series of events that affects competitors' perceptions of, the quality of performance, and the outcome of the competition. The aim was to capture, in real time, cognitions, emotions, and behaviours that match-play golfers perceived as important determinants of PBM. **Method:** A qualitative in-match recording technique logged players' (N = 10; Mage = 26.5 years; MGA handicap = -.9) self-reported cognitions, emotions, and behaviours associated with PBM. To complement the match-play data, semi-structured focus group interviews were conducted to corroborate and extend findings from the match-play data. **Results:** Thematic analysis identified three themes key to the experiences of PBM: (1) in-game unexpected events; (2) perceived control of PBM; and (3) temporality of PBM. **Discussion:** Our findings provide further support for existing conceptual psycho-behavioural models that assist in explaining how individuals experience PBM in competitive skill based sports such as golf. **Take home message:** These findings can be used to facilitate the design of efficacious interventions that seek to enhance performance through building athlete awareness of and managing of potential in-game PBM fluctuations.

55. How does heat stress affect the exercise response in females?

Zheng, H; Mundel, T; Lei, T, Badenhorst, C.E.

Massey University

This study investigated the additive effect of heat stress on the physiological and performance responses to exercise in women. Six unacclimated, moderately trained and eumenorrhoeic females (age: 39 ± 11 y; VO_{2max} : 50 ± 8 ml \cdot min $^{-1}\cdot$ kg $^{-1}$) have been recruited for this study thus far. Each completed an experimental trial in 21 ± 1 °C (MOD) and 32 ± 0 °C (HOT) consisting of 20 min fixed-intensity cycling followed by a 30 min self-paced time-trial. The increase in rectal temperature was 0.21 ± 0.15 °C greater in HOT (P = 0.04), accompanied by higher heart rate (by 5 ± 2 beats \cdot min $^{-1}$; P < 0.01) and perceived exertion (by 0.6 ± 0.2 a.u.; P < 0.01). However, mean power output (143 ± 27