

A dark blue silhouette of a person in a running pose, centered on a solid blue background. The runner is captured in mid-stride, with one leg forward and arms pumping. The overall aesthetic is clean and athletic.

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SESinNZ: reconnecting Academics and Practitioners

Sport and Exercise Science New Zealand
Annual Conference, 13-14 October 2017
Avantidrome, Cambridge

Proudly in association with ICPAFR (International Council for Physical Activity and Fitness Research)



Programme

Day One: Friday 13 th October (Level 2 Avanti Rooms)	
8:00 onwards	Registration and refreshments
	Welcome
9:00-10:00	Keynote Speaker: Associate Professor Nic Gill: All Blacks Strength and Conditioning Coach and Assoc. Prof at Auckland University of Technology - The Integration of Sport Science into the Performance Jigsaw.
10:00-10:30	Oral Presentations 1. Beaven CM Biomechanics of successful versus unsuccessful place kicking in Rugby Union 2. Pieters T Using Global Positioning System Analysis to Quantify the Movement Characteristics of Sub Elite Rugby Union Players in Training and Match Performance
10:30-11:00	Morning Tea
11:00-12:00	Keynote Speaker: Dr John Hellemans: Sports Medicine Practitioner with High Performance Sport New Zealand and SportsMed Christchurch, Former National Triathlon Coach, The Netherlands will discuss the sports scientist and the coach: working together.
12:00- 13:00	Lunch and Poster Session I
13:00-14:00	Panel Discussion – Reconnecting academics and practitioners Chair: Dr Matt Driller Panel Associate Professor Nic Gill Dr John Hellemans Dr Daniel Plews Shaun Owen
14:00-14.15	Walk and Stretch
14.15 – 15.45	Oral Presentations & Invited Speakers Dr. Peter Lamb , University of Otago, Visualising and Clustering Playing Styles in Elite Rugby and Netball Match Data Dr Brett Smith , University of Waikato, Examination of the Validity and Efficacy of GPS Generated Metabolic Load Measures. 3. Sims ST Myths and Methodologies: Scientific design for sex difference studies 4. Kissling L Effects of Resistance Exercise on Peripheral Artery Blood Flow
15:30-16:00	Afternoon tea
16:00-17:30	Oral Presentations and AGM 5. Best R Menthol mouth rinsing evokes mixed responses in trained runners. 6. Gaffney K Whey Protein Supplementation Improves Insulin-Mediated Microcirculation After 10 Weeks in Exercising Men with T2D 7. Goodhew C Energy Drink Consumption Rates and Influences in Extreme Sport Enthusiasts 8. O'Donnell S Match-day napping on perceived energy and performance in elite female athletes 9. Shambrook P Does varying exercise intensity during the post-prandial period affect glucose regulation? 10. Swanwick E The effects of pre-exercise blood glucose on responses to short duration high intensity exercise
18:30-19:00	Time at leisure
19:00-onwards	Informal social function at Alpino Cucina & Vino, Cambridge

Padulo J, Granatelli G, Ruscello B, D'Ottavio S. The place kick in rugby. *J Sports Med Phys Fitness*. 2013;53(3):224-231.

Sinclair J, Taylor PJ, Atkins S, Bullen J, Smith A, Hobbs SJ. The influence of lower extremity kinematics on ball release velocity during in-step place kicking in rugby union. *Int J Perform Anal Sport*. 2014;14(1):64-72.

Ford S, Sayers M. Lower limb movement variability during rugby union place kicking. 33rd International Conference of Biomechanics in Sports; June 29 - July 03, 2015, 2015; Poitiers, France.

Menthol mouth rinsing evokes mixed responses in trained runners

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Menthol is used to evoke pleasant feelings of coolness and freshness. Sports science has focused upon the topical or oral application of menthol to athletes, either directly on the skin or menthol soaked garments, and as a mouth rinse or in beverages. Interest has largely been in endurance activity, with increased time to exhaustion and time trial performance shown. Participants are also typically of limited or recreational fitness, therefore we recorded the perceptual responses to menthol mouth rinsing in trained runners, at typical training and racing intensities. Seven runners (5km PB: 15:24 ± 00:39) completed a modified running economy test in 15°C and 28°C, with (+M) and without menthol. Thirst, Thermal Comfort (TC) and Thermal Sensation (TS) were recorded. Unclear responses for TS were found within temperatures; a likely to most likely positive increase in TS was shown between 15°C and 28°C. Thirst and TC responses were unclear within temperatures, but thirst was elevated at higher speeds between temperatures. Finally, TC was improved at 16 and 18km/h in 15°C+M. These varied responses suggest either an individual tolerance to menthol, or that trained athletes are less susceptible to the perceptual thermal challenges of exercise, than lesser trained populations.

References

Stevens, C. J., & Best, R. (2017). Menthol: a fresh ergogenic aid for athletic performance. *Sports Medicine*, 47(6), 1035-1042.

Enhancing psychomotor efficiency: Analogy instructions versus explicit instructions?

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With repetition, performance of a motor task generally becomes less taxing. Psychomotor efficiency is characterized by movement efficiency and cognitive efficiency (i.e., suppressed non-essential brain activity). Increased EEG alpha power in the left temporal lobe of the brain is thought to be a neural marker of psychomotor efficiency, distinguishing experts from novices. Explicit instructions are often provided to learners to promote skill learning; however, the necessity to consciously process explicit instructions may disrupt psychomotor efficiency. Analogies are an alternative means of instruction that package movement instructions into a