

Keynote Speaker of the 16th ISSP World Congress - Sponsored by Shine Tak Foundation

Professor Costas I. Karageorghis

- Professor in sport and exercise psychology, Division of Sport, Health and Exercise Sciences, Department of Life Sciences, College of Health, Medicine and Life Sciences, Brunel University London, UK
- Author of two textbooks and a study guide (all with Human Kinetics), 15 book chapters, 110 peer-reviewed journal articles and 120 professional papers in sport and exercise psychology
- Presently working on multi-modal interventions in physical activity that entail the use of music, video images, virtual/augmented reality and visual primes



Keynote topic

- Exercise Psychology

Research interests

- Psychological, psychophysiological and neurophysiological effects of music in exercise and sport
- Audiovisual-related technological applications in exercise and physical activity

Experience

- Extensive leadership in sport and exercise sciences—Divisional Lead at Brunel University London overseeing research and teaching (2018–2022), Deputy Head of School–Research (2009–2014) overseeing preparations for REF2014 across two subject areas
- Successful research profile with 26 grants (inc. ESRC as a PI), innovative work on music and emotions in sport/exercise and simulated driving, highly cited publications
- Experienced applied practitioner working with athletes and governing bodies in multiple sports (athletics, tennis, rugby union, canoeing, field hockey), and on major international projects that fuse music, tech and sport (e.g. Nike PSA, IMG Run to the Beat musical half-marathons, Red Bull Performance Track, AIR: Audio-Inspired Running, Weav Music)
- Released 10 commercial CDs/playlists for the exercise market with music companies
- Delivered keynote speeches and invited presentations all over the world, including a public lecture at the Library of Congress in Washington, DC, USA

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It's All About the Music: An Odyssey into Exercise Hedonics

Music is an artistic pursuit that is celebrated for its ubiquity and antiquity. Neuropsychologists argue that the human race is ‘hardwired’ for music (e.g., Levitin, 2007), therefore it is unsurprising how music applications have come to infuse the realm of exercise and physical activity. From the park jogger equipped with ergonomically designed headphones, to entire group-exercise formats such as Aquagym or Zumba, music appears to have been seminal in encouraging people to be more active; particularly so in postindustrial societies. This keynote address will adopt a slightly traveloguesque quality—hence the titular “Odyssey”—given that the presenter has been researching and practicing in the music–exercise nexus over several decades. The structured and systematic use of music will be explored through the lens of *exercise hedonics*. The notion of hedonics is important in exercise science given how a focus on positive in-the-moment feelings has the potential to promote exercise adherence (Ekkekakis et al., 2020). This is not to detract from the cognitivist approaches that have defined the subfield of exercise psychology, but rather an adjunct approach that can, potentially, serve to strengthen our scientific offering among the wider public. A theoretical framework will be presented that will function as a lodestar for a series of recent empirical studies and music-related applications. The neurophysiological mechanisms that underlie the effects of music will also be explored. In recent years, the use of neuroimaging methods such as electroencephalography (EEG), functional magnetic resonance imaging (fMRI), and functional near-infrared spectroscopy (fNIRS) have afforded scientists an ‘under-the-bonnet’ perspective of how music can influence the human psyche during exercise (e.g., Wang et al., 2025). A structure that will pervade the address concerns the three main ways in which music can be applied: *pre-task*, *in-task*, and *post-task*. Music’s ‘efficacy zone’ with reference to exercise intensity will be explored, as well as some of its key psychological benefits (e.g., enhancement of affective valence and exercise enjoyment). Delegates will be able to gauge how they could go about making more effective use of music for their own exercise/training, and how it might be applied in group settings to bolster motivation and esprit de corps. The address is oriented primarily toward those with an academic or practical interest in exercise and physical activity, however many of the principles can be applied to sporting endeavors with similar effect.

Recommended reading:

Karageorghis, C. I. (2017). *Applying music in exercise and sport*. Human Kinetics.

Karageorghis, C. I. (2020). Music-related interventions in sport and exercise. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of sport psychology* (4th ed., pp. 929–949).