

3rd BRICSCESS 2024-New Delhi Invited Speaker



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Assoc. Prof. Dr Garry Kuan is an associate professor of the Exercise and Sports Science Programme, School of Health Sciences, Universiti Sains Malaysia. Presently, Garry is the Secretary-General of the Asian-South Pacific Association of Sport Psychology (ASPASP), the Secretary-General of the Malaysian Sport Psychology Association (MASPA), an executive board member of the Asian Council of Sports Science (ACCESS), and the scientific committee of World Exercise Medicine. In 2019, he was appointed as the chair of the international network of the Young Scientist Network – Academy of Science Malaysia (YSN-ASM) and the sport psychology panelist for the National Coaching Academy of Malaysia. Garry has published over 250 scholarly manuscripts, with over 100 high-impact ISI journals. Previously, Garry served as a senate member of Brunel University, a sports science lecturer and a council member of Victoria University, and a contract sports psychologist with the Australian Institute of Sport. He was also a certified trainer and sports coach for the Active-After School Communities programme, under the Australian Sports Commission. Garry's research has won numerous awards internationally. He is the recipient of the JCI Ten Outstanding Young Malaysian, International Society of Sport Psychology (ISSP) Developing Scholar Award, Outstanding Academician of the Year by Asia Awards, and IFPEFSSA International Eminent Educator Award. During his social time, he plays the first violin professionally and teaches communities to play various musical instruments.

The Innovative Approach of Using Music for Health and Sport: From Conceptual Underpinnings to Applications

Music has the ability to improve personal health, physical education and sports performance. Researchers have suggested that music should be carefully selected to match the requirements of activities and characteristics of both individuals and groups, to produce significant impacts on performance enhancement and motivation. Music has also been shown to have psychophysical effects of lowered perceived effort, arousal control, enhanced affective states and synchronisation effects. Certain music can elevate arousal, and increase beta waves, indicating an actively engaged mind. Conversely, arousing music can suppress theta waves that are associated with the daydreaming state, allowing them to 'pump up' and avoid tiredness. Soothing music, on the other hand, raises alpha waves that are seen during a state of meditation or relaxation. This presentation will provide an overview of the key concepts, theory, underlying mechanisms, empirical research, and application relevant to the use of music in health and sport. A theoretical model will be presented that practitioners can use as a reference point in the design of music-related

interventions. This leads into consideration of the mechanisms—emotional, perceptual, and rhythm-related—that underlie the effects of music in health and sport. Throughout this presentation, the taxonomy of pretask, in-task, and post-task applications of music serves as a common denominator to aid the absorbability of the material. The centrepiece of these presentation is to provide a new framework that presents factors relevant to optimizing music selection in health and sport.