## EVIDENCE BASE AND APPLICATIONS OF MUSIC IN ELITE SPORT

## PROFESSOR PETER C. TERRY PhD FAPS FASMF FBASES

A recent meta-analysis of 107 studies (Terry et al., in press) showed that music is associated with significant beneficial effects on feelings, perceived exertion, performance, heart rate, and oxygen consumption. Effects were moderated by physical activity domain, with benefits of music being greater in exercise settings than sport settings; by physical activity intensity, with benefits being greater for low-moderate intensity activity than high intensity activity; and by training status, with untrained participants deriving more benefits from music than trained participants. No significant moderation was evident for the gender or age group of participants, music type (lyrical, instrumental), music selection (self-selected, researcherselected), music delivery (pretask, synchronous, asynchronous), study setting (field, laboratory), or type of physical activity (cycling, running, walking, other; weight-bearing, non-weight-bearing). This empirical evidence base is augmented by many anecdotal reports from successful athletes documenting how they have used music to good effect in elite competition. Among the highest profile devotees of music in sport, swimmer Michael Phelps, the most successful Olympian of all time, habitually listens to music until about two minutes before his races start and has attributed part of his phenomenal success to this practice. The aim of this presentation is to provide a framework for how music can be applied in elite sport and to offer a range of applied examples. Exemplars of using music to inspire and/or to manipulate pre-competition mindset are presented from several Olympic sports. The potential role of music in rehabilitation from injury is exemplified, based on work with a six-time kayak world champion incapacitated by chronic fatigue syndrome and unable to compete. Innovative uses of technology to enhance the effects of music are presented and discussed. The evidence-based framework and examples described in this presentation offer practical tips for applied sport psychology practitioners when implementing music interventions with elite athletes.

## <u>Reference</u>

Terry, P.C., Curran, M.L., & Karageorghis, C.I. (in press). Effects of music in exercise and sport: A meta-analytic review of a century of research. *Psychological Bulletin*.