Title: Music Therapy Assessment Tool for Awareness in Disorders of Consciousness (MATADOC): a standardized diagnostic music-based measure for minimally responsive populations

Abstract

Diagnosis, assessment, and planning intervention for Prolonged Disorders of Consciousness (PDOC) populations are all complex due to severe motor, sensory, and cognitive impairments. The auditory modality is the most sensitive for identifying awareness (Gill-Thwaites & Munday, 1999), however the current standardized behavioural measures fail to provide adequate measurement of auditory responsiveness (Magee et al., 2015). The Music Therapy Assessment Tool for Awareness in Disorders of Consciousness (MATADOC) has been standardized for diagnosis and intervention planning for adults with PDOC (Magee et al., 2014, 2015). The principal subscale has good inter-rater and test-retest reliability (α =0.76) using evidence-based criteria for PDOC measures (Seel et al., 2010). It has satisfactory internal consistency and excellent concurrent validity when compared to another standardized PDOC measure. A pilot study examining the utility of the MATADOC with children with PDOC found MATADOC items in the visual and auditory domains produced outcomes suggestive of higher level functioning when compared to outcomes provided by other PDOC measures (Magee, Ghetti & Moyer, 2015). Preliminary findings suggest that the MATADOC provides a useful protocol and measure for behavioral assessment and clinical treatment planning with pediatric PDOC. Current research is establishing validity with a larger pediatric cohort (n=80) and exploring its clinical utility with adults with end-stage dementia.

Biography

Dr Wendy L. Magee is Associate Professor in the Music Therapy Program at Temple University, Philadelphia, USA. She has practiced in neurological rehabilitation since 1988 as a music therapy clinician, researcher, manager and trainer. She is an active researcher with diverse neurological populations and a published Cochrane reviewer: an update of the Cochrane Review *Music Interventions for Acquired Brain Injury* will be published in early 2016. Her research topics span music therapy with adults and children with Disorders of Consciousness, stroke, traumatic brain injury, Parkinson’s Disease, Multiple Sclerosis, Huntington’s Disease, and the application of new and emerging music technologies in health and education with her published book *Music Technology in Therapeutic and Health Settings* (Jessica Kingsley Publishers). She is the recipient of a number of research awards including a Leverhulme Fellowship in the UK (2009) and the American Music Therapy Association Arthur Flagler Fultz Research Award (2015). For more information, see: http://www.temple.edu/boyer/about/people/wendymagee.asp

Keywords: music therapy; Disorders of Consciousness; assessment measure; brain injury

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