Cognitive Motor Interference in Multiple Sclerosis: Assessment, Consequences and Prevention

Prof. Jacob Sosnoff, PhD

Department of Kinesiology and Community Health
University of Illinois at Urbana-Champaign, USA

ABSTRACT: Individuals with multiple sclerosis (MS) regularly exhibit deficits in motor and cognitive function. Recent evidence suggests that these impairments are related and compounded when motor and cognitive task are performed simultaneously. The changes incurred during simultaneous performance of motor and cognitive tasks are a result of cognitive-motor interference (CMI) and operationalized as dual task costs (DTC). Recently in MS, research has been conducted to understand and analyze the impact of CMI. This talk will review the current evidence, correlates and consequences of CMI in MS. Gaps in the knowledge base as well as pathways forward will be highlighted.

Professor Jacob Sosnoff received his PhD in kinesiology with a specialization in motor control from the Pennsylvania State University in 2005. Currently he is an Associate Professor and the Director of the Motor Control Research Laboratory in the Department of Kinesiology and Community Health of the College of Applied Health Sciences at the University of Illinois at Urbana-Champaign. His research focuses on predictors, consequences and prevention of mobility and balance impairment in persons with multiple sclerosis. He is a founding member of the International MS Falls Prevention Research Network, has published over 100 peer-reviewed articles, and received funding from National Institute of Health, National MS Society and the Consortium of MS Centers.