Evaluating Driving as a Valued Instrumental Activity of Daily Living

Anne Dickerson¹, Timothy Resitetter¹, Miriam Monahan^{1,2}, Elin Schold Davis^{1,3}

¹East Carolina University, Greenville, NC, United States, ²Fletcher Allen Health Care, Colchester, VT, United States, ³American Occupational Therapy Association, Bethesda, MD, United States

Introduction: With increasing longevity, the need to depend on vehicles for mobility will continue as well as increased risk of medical conditions that affect driving. The need for driver rehabilitation specialists will become severe and unless the occupational therapy profession addresses this specific domain of practice, the need will be met by others. Experienced occupational therapists should be able to make appropriate recommendations about the instrumental activities of daily living (IADL), including driving, in response to skilled observation. The following study provides research evidence that using an occupational therapy observational functional performance tool can be used to assist with this decision.

Objective: The research question was to determine if those participants who pass, fail, or need restrictions as indicated by a driver rehabilitation specialists administered behind-the-wheel (BTW) assessment perform differently on an IADL assessment. To increase evidence-based support, data was combined from two driving evaluation centers that used the same assessment.

Method: Using an observational performance assessment, 55 participants were compared on their performance of the Assessment of Motor and Process Skills (AMPS) by calibrated and trained raters and a behind-the-wheel driving evaluation done by experienced driving evaluators.

Results: The multivariate test between groups was significant (F = 6.537, p < 0.01) indicating effects of BTW ability on AMPS scores after adjusting for gender. Follow-up univariate comparisons indicated that on-road driving had a significant effect on AMPS process scores (F = 13.787, p < 0.01).

Conclusions: There was a significant relationship between the process skills of the AMPS and whether the driver passed, failed, or needed restrictions suggesting that occupational therapists using observational performance evaluation of IADL can assist in determining who might be a safe or unsafe driver.

Contribution: With the need for driving specialists, occupational therapists need to be prepared to address this valued daily task. An algorithm, based on the evidence from studies, describes how driving specialists can be utilized effectively and efficiently with general practice therapists meeting the need for driving evaluations. This will meet the need of the public as well as ensure that occupational therapists remain the valued professional to fulfill this need.