Shechtman, O., Awadzi, K., Classen, S., Lanford, D., & Joo, Y. (in press). Validity and critical driving errors of on-road assessment for older drivers. *American Journal of Occupational Therapy*.

ABSTRACT

Objectives: to examine the validity of our on-road driving assessment and to quantify its outcomes.

Methods: Older drivers ($n = 127$) completed a driving assessment on a standardized road course. Measurements included demographics, driving errors, and driving test outcomes: the categorical *Global Rating Score* (pass/fail), and the numerical *Sum of Maneuver Score* (0-273).

Results: There were significant differences in the *Sum of Maneuver Score* ($F=29.9$; $p \leq 0.001$) between drivers who passed the driving test and those who failed it. The *Sum of Maneuver Score* cutoff value of 230 points was established as the criterion: it yielded the most optimal combination of sensitivity (0.91) and specificity (0.87). The strongest predictors of failing the driving test were adjustment to stimuli and lane maintenance errors.

Conclusions: The numerical *Sum of Maneuver Score* differentiated effectively between drivers who failed and passed the test. Combining it with critical driving errors, we generated a decision tree for informing clinical decision making among driving evaluators.