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Ecological Validity of Traditional Neuropsychological Tests: Role of Memory, Executive Skills, and Learning in Predicting Everyday Functioning in a Clinical Population

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ECOLOGICAL VALIDITY OF TRADITIONAL NEUROPSYCHOLOGICAL TESTS:

ROLE OF MEMORY, EXECUTIVE SKILLS, AND LEARNING

IN PREDICTING EVERYDAY FUNCTIONING IN A CLINICAL POPULATION

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Psychology

Sharon M. Jung

Indiana University of Pennsylvania

August 2015

Indiana University of Pennsylvania
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Title: Ecological Validity of Traditional Neuropsychological Tests: Role of Memory, Executive Skills, and Learning in Predicting Everyday Functioning in a Clinical Population

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Neuropsychological evaluations are often conducted to obtain information regarding a patient's cognitive functioning, which may be used to predict a patient's functional ability. Past research examining the ecological validity of neuropsychological tests for predicting functional status has resulted in mixed findings. The current study examined the role of measures of executive functioning, memory, and learning in predicting functional skills among individuals with psychological disturbance versus individuals with neurocognitive disorder. Everyday skills were assessed using the Independent Living Scales (ILS), which assesses cognition as it affects daily functioning. Archival data were collected and analyzed on 57 outpatients from Allegheny General Hospital. Another sample of 198 patients was included to perform a confirmatory factor analysis to provide empirical justification for aggregating tests into index scores. Using forced-entry, hierarchical multiple regression analyses, results revealed that the Executive Functioning Index significantly predicted ILS performance among the group with neurocognitive disorder. In contrast, the Delayed Memory Index was a significant predictor of ILS scores among the group with psychological disturbance. After accounting for age, education, and depression, Logical Memory II and Trail Making Test Part B were significant predictors of ILS performance for the psychological disturbance group. For the neurocognitive disorder group, Trail Making Test Part B significantly predicted ILS scores even after controlling for the effects of age, education, and

depression. These results suggest that some traditional neuropsychological tests can demonstrate

useful levels of ecological validity among certain populations.