ABSTRACT

DISSERTATION/THESIS/RESEARCH PAPER/CREATIVE PROJECT: Norm-Referenced Cognitive and Achievement Scores as Predictors of State-Wide High-Stakes Test Scores with Students Referred for Special Education

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Relatively recent federal education initiatives, such as No Child Left Behind (NCLB; 2001), have focused on school accountability for student achievement including achievement of traditionally at-risk populations, such as students in special education, students from low-income or high poverty areas, and students who speak English as a new second language. Additionally, these federal initiatives also mandate that all students take the same test measuring grade level standards despite research that has demonstrated that students from at-risk populations are sometimes at a disadvantage on high-stakes tests. Furthermore, initiatives such as NCLB are often at odds with other education initiatives such as IDEA, which states that students in special education should be tested at their respective level. Therefore, the current study proposed to examine the relationship between Cattell-Horn-Carroll cognitive abilities and performance on a state-wide high-stakes achievement test. There currently are no studies examining such a relationship.

This study used Multivariate Regression Analysis, in order to investigate the relationship between CHC cognitive and achievement abilities and performance on a state-wide high-stakes achievement test, namely the ISTEP+, with 45 children who had been referred for a

psychoeducational evaluation to determine special education eligibility and who had also taken the ISTEP+. No statistically significant result was found between the WJ-III-COG broad CHC abilities and performance on the English/Language Arts and Math performance of the ISTEP+. Furthermore, no statistically significant result was found between the WJ-III-ACH and Math performance on the ISTEP+. However, a statistically significant result was found between the WJ-III-ACH Passage Comprehension subtest and the English/Language Arts portion of the ISTEP+. The results indicated that students who had higher scores on the Passage Comprehension subtest also had higher scores on the English/Language Arts portion of the ISTEP+.

The current study took a step forward in the area of the relationship between CHC and academic achievement, particularly state-mandated high-stakes testing given the dearth of research in this area. Given the data from the current study indicating a statistically significant relationship between Passage Comprehension and English/Language Arts from the ISTEP+, the current study has practical implications for school psychologists, especially when school psychologists are being asked to make predictions regarding a student's academic achievement. Results of the current study might help elucidate reading problems and recommended interventions for those reading problems.