Case Study: An Individual with Autism and an Intellectual Disability

Elizabeth M. Young
Rebecca L. Hamilton

Follow this and additional works at: http://digitalcommons.longwood.edu/grs
Case Study: An Individual with Autism and an Intellectual Disability

Rebecca L. Hamilton and Elizabeth M. Young
Aftab A. Khan PhD.
Longwood University

ABSTRACT
The current study is a single-subject case study. For this study, we measured the academic level of an individual with autism and an intellectual disability as compared to typically developing peers. We interviewed his special education teachers and also observed him administered a test to him a total of 6 times. There were three standardized tests administered: Woodcock Reading Mastery Tests-Revised, Kaufman Test of Educational Achievement-3, and Key-Math-3. These three standardized tests measure the participant’s overall level of academic achievement, as well as breakdown his strengths and weaknesses in specific areas of reading and math. We analyzed the scores from these standardized tests to gain understanding of the student’s academic ability in order to provide recommendations for the instructional level in which the student should be taught.

BACKGROUND
C.S. attends a middle school in Chesterfield County. He has both an intellectual disability and autism. C.S. is in a self-contained classroom for students with intellectual disabilities for reading, math, and social skills. He goes into a general education classroom for science, social studies, computer art, and gym with an aide for support; however, C.S. is not on an IOL for any subject. Instead, his teachers put together a VAAP binder as a supplement of the SOL. C.S. frequently disrupts the class when he is frustrated or overwhelmed by yelling out lines from movies. This is also currently an issue in his general education classrooms because he gets made fun of for his outbursts.

Autism Spectrum Disorder is characterized as “persistent deficits in social communication and social interaction, and restricted, repetitive patterns of behavior, interests or activities” (American Psychiatric Association, 2013). There is not solely one cause of autism. Autism is influenced by genetics and the environment (Bellocchi, 2017). Intellectual Disability (ID) is characterized as “a disorder with an onset during the developmental period that includes both intellectual and adaptive behavior deficits” (American Psychiatric Association, 2013). Adaptive behavior is use of social and practical skills. ID has a few causes: abnormal gene inheritance, mother’s use of alcohol or drugs, problems at birth, and disease at a young age (For example, Whooping Cough). Intellectual disabilities have four levels of severity: mild, moderate, severe, and profound.

RATIONALE/PURPOSE
The purpose of this study is to compare C.S.’s achievement scores to those of his peers and to determine his current academic achievement level, strengths, and weaknesses; therefore we have administered a test of academic achievement.

HYPOTHESIS
We predicted that C.S.’s scores will be lower than peers his age and grade. We also predicted that C.S.’s math composite on the KTEA-3 would match his standard score on the math total on Key-Math-3. We predicted that C.S.’s reading composite on the KTEA-3 would match his standard score on the total reading cluster on the Woodcock Reading Mastery Tests-Revised.

METHOD
Participants
• Case Study
• 1 participant
• 13 years old
• 7th grade

Materials
• Kaufman Test of Educational Achievement
• Key-Math-3
• Woodcock Reading Mastery Tests-Revised

Comparisons
C.S.’s standard scores on the Key-Math-3 total test and the KTEA-3 math core composite were compared because these tests measure performance in the same academic area. As expected, C.S.’s standard score was identical for both (SS = 71). C.S.’s standard scores on the WRMT-R total reading cluster and the KTEA-3 reading core composite were compared because these tests measure performance in the same academic area. Unexpectedly, C.S.’s standard score on the reading core composite of the KTEA-3 (SS = 65) was significantly lower than his standard score on the total reading cluster on the WRMT-R (SS = 90). C.S.’s score was significantly below average on the KTEA-3 composite, while his score fell in the average range on the WRMT-R cluster.

Recommendations
We would recommend working with C.S. in several areas of academics. Based on the scores on the KTEA-3, his teachers should work to help C.S. improve his oral language skills and teach him comprehension strategies as he should increase his success in other areas. We would also recommend using a standardized test that has a nonverbal form. This is because C.S. performed much better on items where he could write or point to answers. Throughout the three assessments we have administered to C.S. (KTEA-3, Woodcock Reading Mastery Tests- Revised, and Key-Math-3), we have noticed C.S. struggles on tests that he needed to give a verbal answer for. Data shows that C.S. may benefit from quizzes and class activities that allow C.S. to use his written language skills rather than his oral language skills until his oral language skills are more developed. We would also recommend using a standardized test that has a nonverbal form in order to get a more accurate representation on C.S.’s current academic level of achievement. This is because C.S. performed much better on items where he could write or point to answers. We would recommend working with C.S. in several areas of math. Based on his focus items, he should work on two-step problems, familiarizing himself with decimals, fractions, exponents, and variables. Based the WRMT-R scores, we advise C.S.’s teachers to, until C.S. makes improvement, provide him with content reading materials that are on around a 5th grade-6th grade level. Content above grade 6.5 will be too difficult for C.S. to comprehend. We recommended that his teachers ask him questions about what he has read during and after reading, because he is not comprehending what he is reading.

REFERENCES
American Psychiatric Association (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Washington, DC