Articles in peer review journals and book chapters


**Abstract:** We are not well informed regarding the ability-achievement relationship for twice-exceptional individuals (very high cognitive ability and a diagnosed disability, e.g., autism spectrum disorder [ASD]). The research question for this investigation (N = 59) focused on the predictability of achievement among variables related to ability and education in a twice-exceptional sample of students (cognitive ability of 120 [91st percentile], or above, and diagnosed with ASD). We determined that WISC-IV Working Memory and Processing Speed Indices were both significantly positively correlated with achievement in math, reading, and written language. WISC Perceptual Reasoning Index was uniquely predictive of Oral Language test scores. Unexpected findings were that ASD diagnosis, Verbal Comprehension Index, and forms of academic acceleration were not related to the dependent variables.


**Abstract:** A case study of the psychometric characteristics of two profoundly gifted girls, one with autism spectrum disorder (ASD) and the other without ASD, is used to describe the nuances and subtleties most relevant in understanding the relationship between extreme giftedness and social difficulties. Through the presentation of the results from psychoeducational and psychosocial assessments, we demonstrate how data from a comprehensive evaluation can distinguish between the manifestation of extreme giftedness and concomitant social impairment indicative of ASD. Comparison of the assessment results highlights the relevance of cognitive and achievement information as well as the need for specific measures to diagnosis ASD. The girls demonstrated virtually identically superior cognitive and achievement performances. However, an in-depth analysis of additional measures, especially those specific to ASD, indicates that information about adaptive behavior and executive functioning can reveal important distinctions that are helpful in understanding the need for unique interventions specific to ASD.


**Abstract:** The ever-broadening roles of school counselors range from traditional (advisor for college planning) to novel (advocating for students with learning difficulties or giftedness). A newly recognized group of learners, with both learning
difficulties and academic strengths, known as twice-exceptional learners, has emerged. After a synopsis of federal legislation that has shaped the field of twice-exceptionality, the authors use two case examples to highlight the contribution of prevailing educational myths to the lack of attention to twice-exceptional students. They conclude with comprehensive recommendations.


Abstract: Gifted and talented students who also have a specific learning disability (SLD) are typically referred to as twice-exceptional and are among the most underserved students in our schools. Previous special education laws promoted a wait-to-fail approach; therefore, gifted students with SLD often were overlooked because their average academic performance was not "failure" enough. The flip side to this was the fact that students’ giftedness, as measured by general ability tests, often was masked by average, yet relatively weak, academic achievement. They were not only waiting to fail, they were failing to flourish. The authors present the data gathered from 14 gifted students with SLD, specifically a disorder of written expression. Students were determined to be gifted if they earned a score of 120 (Superior) on the Verbal Scale of a cognitive ability test. They were considered to have a written language disability through an evaluation of their written language skills. The average Verbal IQ for the group was close to a standard score of 130, whereas the average Written Language Score was close to a standard score of 99. In addition to the cognitive profile for these students, the authors obtained measures of their psychosocial functioning. On average, parents, teachers, and students reported typical adaptive behavior, yet group elevations also were present on several clinical scales. The authors’ main conclusion is that a comprehensive assessment plays a critical role in (a) determining whether a student is twice-exceptional, (b) identifying the possibility of psychosocial concerns, and (c) developing educational recommendations.


Abstract: Reply by the current authors to the comments made by Benjamin J. Lovett on the original article. Our article describing the characteristics of gifted students with a specific learning disability (SLD) in written language was criticized for emphasizing an ability achievement discrepancy as an indication of a written language disability and for not ruling out alternative explanations for the observed difficulties. The three primary alternative explanations include measurement error, (lack of) motivation, and/or past experiences. In our reply, we offer extensive evidence that refutes these alternative explanations. The critique also offers an interpretation, which we determined to be inaccurate, of our data; therefore, we correct the misinterpretation. We conclude with a confirmation of our original findings: identification of gifted students with specific learning disabilities requires a comprehensive psycho-educational evaluation that
includes an examination of the cognitive profile generated from individually-administered tests of ability and achievement. In combination with a psychosocial profile that addresses behavior, self-concept, interests, and motivation, educators have the necessary information to guide them in identifying and developing the unique talents of gifted children with SLD.


**Abstract:** Increased awareness of twice-exceptional students is important for all educators and psychologists; however, for school psychologists, improved understanding of twice-exceptionality will enhance their unique role in assessing twice-exceptional students and in recommending appropriate interventions in schools. In this article, the authors address giftedness and disability as separate topics and then connect them as they relate to twice-exceptionality. The authors explore twice-exceptionality in 3 separate case studies, with a specific focus on attention-deficit/hyperactivity disorder, autism spectrum disorder, and specific learning disability. The article includes a discussion of the Individuals With Disabilities Education Act 2004, specifically as it relates to specific learning disability and giftedness. The authors conclude with 10 recommended practices that include the importance of a comprehensive evaluation to understand a student’s strengths and weaknesses as well as the critical nature of differential diagnosis as a foundation for making recommendations for intervention.


**Abstract:** Research on Autism Spectrum Disorder (ASD) is thriving; however, scant empirical research has investigated how ASD manifests in high ability youth. Further research is necessary to accurately differentiate high ability students with ASD from those without the disorder, and thus decrease the risk of misdiagnosis. The purpose of the present study is to provide an empirical account of the intellectual, adaptive, and psychosocial functioning of high ability youth with and without ASD utilizing a group study design. Forty youth with high cognitive ability and ASD and a control group of 41 youth with high cognitive ability and no psychological diagnosis were included in the study. In comparison to the control group, the ASD group showed poorer functioning on measures of processing speed, adaptive skills, and broad psychological functioning, as perceived by parents and teachers. These findings have significant implications for diagnosing ASD among those with high ability, and the development of related psychological and educational interventions to address talent domains and areas of concern.

Abstract: Twice-exceptionality is gaining increasing recognition in the gifted education literature but little is understood about the knowledge and awareness of this concept within the educational and psychological community, or about professionals’ experience working with this population of learners. Three-hundred and seventeen individuals completed an online Twice-Exceptional Needs Assessment, which consisted of 14 questions assessing issues pertaining to twice-exceptionality knowledge and experience, as well as knowledge of policies relevant to both gifted and special education. Results indicated that educators were more familiar with standards within their specific area of expertise (e.g., gifted or special education) and that fewer professionals were familiar with the use of Response to Intervention with twice-exceptional children. Gifted education professionals had significantly more knowledge and experience with twice-exceptionality than did professionals in other domains. We conclude with implications for educators and recommendations for expanding professional understanding of twice-exceptionality outside the field of gifted education to meet twice-exceptional students’ multifaceted needs.


Abstract: We report preliminary results from comprehensive assessments of the initial group of 18 gifted and talented students with co-occurring autism spectrum disorder (ASD). Our sample originally included 19 students who were referred by their parents because of a possible ASD diagnosis. Of these, 18 (16 boys and 2 girls) were diagnosed with ASD in our clinic. Of the 18 students with ASD, 14 were in elementary school, two in middle school, and two in high school; their ages ranged from 6-17. As previously stated, a comprehensive evaluation is required for accurate diagnosis of both gifts and disabilities. Therefore, all 19 participants were administered a battery of tests that were designed to identify areas of academic and cognitive strength, and social-emotional needs, as well as confirm or rule out a diagnosis of ASD. The Wechsler Intelligence Scale for Children-Fourth Edition, the Woodcock-Johnson Tests of Achievement-Third Edition, the Vineland Adaptive Behavior Scales, Second Edition, the Autism Diagnostic Interview-Revised, the Autism Diagnostic Observation Schedule, the Behavior Assessment System for Children, Second Edition, and the Piers-Harris Children's Self-Concept Scale, Second Edition were administered. Preliminary results from the Iowa Twice-Exceptional Project demonstrated that a comprehensive assessment needs to be the first step toward identifying strengths and areas for growth in a gifted and talented student with ASD. For example, among our group of students, there are distinct, large differences within their academic, ability, and adaptive functioning profiles that have ramifications for educational interventions. Additionally, it has become clear that a comprehensive, developmental assessment must be completed with both the student and the parent or the primary caregiver so that interventions can be individualized to match each student's needs. Lastly, there seems to be common behavioral and emotional
patterns that are observed by parents and teachers; yet, students often do not have similar self-perceptions. Although interventions always need to be tailored to the individual student, some general suggestions can be made for optimizing the twice-exceptional student's educational experience. Examples of accommodations in various areas of functioning that could benefit a gifted and talented student with ASD are provided.


Abstract: Gifted students with coexisting disabilities, also known as twice-exceptional, are increasingly recognized in America’s schools. This increasing awareness needs to be met with equal enthusiasm for empirical investigation into the identification and treatment needs of this group of students. In this article, a 20-year review of the empirical literature examining twice-exceptionality, specifically gifted students with learning disabilities, attention deficit hyperactivity disorder, or autism spectrum disorder, was conducted. Research strongly suggests that gifted students can have a coexisting disability and that comprehensive, individualized approaches toward diagnosis are necessary. Less is known about effective treatments and interventions that simultaneously highlight strengths and accommodate for areas of growth. Future research directions are offered that ideally will encourage scholars to discover more about effective diagnostic and intervention techniques for this very important group of gifted learners.


Abstract: The cognitive and academic profiles of high ability students with autism spectrum disorder were examined. Inclusion criteria were a diagnosis of autism (high functioning) or Asperger syndrome and at least one ability and/or achievement index standard score of 120 or above. Results indicated that despite the restricted range of cognitive abilities, students diagnosed with Asperger syndrome had significantly higher Verbal Comprehension Index scores than did students diagnosed with autism. However, students with autism had significantly higher scores on tests of math fluency and written expression than did students with Asperger syndrome. Implications for assessment, diagnosis, and intervention are discussed.


Abstract: Parent, teacher, and self-perceptions of 54 high ability students with autism spectrum disorder (ASD) were assessed through administration of the Behavioral Assessment Scales for Children, Second Edition. Parent reports resulted in clinically elevated scores on the Atypicality, Attention Problems, Depression, Hyperactivity, Withdrawal, Activities of Daily Living, Adaptability, and Social Skills subscales, and
teacher reports resulted in clinically elevated scores on the Atypicality, Depression, Withdrawal, and Adaptability subscales. Self-report scores were in the average range. Parents and teachers of adolescents reported greater adaptability and fewer symptoms of atypicality than parents and teachers of children. Psychosocial functioning appears impacted in high ability students with ASD and developmental differences in severity may exist.


**Abstract:** Intellectually gifted students with attention-deficit/hyperactivity disorder (ADHD) face unique academic and social challenges, yet little research has been conducted with this population. The purpose of this study was to examine the self-esteem and self-concept of intellectually gifted children with and without a coexisting diagnosis of ADHD. Data were gathered from 112 children, aged 6 to 18, identified as having high cognitive ability (IQ of 120, 91st percentile, or above); 54 participants also met diagnostic criteria for ADHD. Despite having similar IQs, gifted students with ADHD had lower scores on measures of self-esteem, behavioral self-concept, and overall happiness than gifted students without a comorbid diagnosis. Among all participants, children had higher reported overall happiness than adolescents. Professionals working with gifted students with ADHD should be aware of the potential for coexisting self-esteem difficulties and, if warranted, address these issues in educational and clinical environments.

**Articles Currently In Press**


**Dissertations**

