



Autism Spectrum Disorder (ASD): Facts Education Professionals Need to Know

By Diane Harr and Jerrod Brown

Abstract

Autism Spectrum Disorder (ASD) is the fastest growing pervasive developmental disability in the United States. Emerging in early childhood, ASD encompasses a broad number of symptoms, deficits, and degrees of severity. These symptoms often include deficits in communication, social interaction, and behavior. When not accurately recognized and diagnosed, these deficits can contribute to suboptimal educational outcomes such as poor grades, repeating grade levels, and failure to graduate. To prevent such deleterious education outcomes, individualized programming may be necessary for students to obtain success in educational settings. Improved familiarity with ASD is essential in increasing awareness and understanding among education professionals, ultimately improving short- and long-term outcomes for students diagnosed with this disorder.

Keywords: Autism spectrum disorder, deficits, education, individualized programming

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Introduction

Autism Spectrum Disorder (ASD) is a group of disorders that emerge in childhood and feature behavioral (e.g., limited and/or obsessive behavior) and social (e.g., restricted social interaction and communication) impairments that range from mild to severe (Freckelton & List, 2009; Rumney & MacMahon, 2017; Thompson et al., 2017; Woodbury-Smith et al., 2005). ASD is one of the fastest growing pervasive developmental disabilities in the United States, with the identified prevalence of ASD in children rising from 1 in 150 in 2000 to 1 in 68 in 2012 (Centers for Disease Control and Prevention, 2014). In light of this increasing recognition, it is very likely that education professionals will regularly encounter students on the spectrum. When not accurately recognized and diagnosed, these deficits can contribute to suboptimal educational outcomes such as poor grades, repeating grade levels, and failure to graduate. As such, educators should anticipate the presence of students with ASD and become familiar with potential interventions that may improve the success of these students. Advanced education and training opportunities are essential in increasing awareness and understanding of ASD among education professionals (Alexander, Ayres, & Smith, 2015; Corkum, Bryson, Smith, Giffin, Hume, & Power, 2014; Lindsay, Proulx, Scott, & Thomson, 2014). This brief article highlights 12 key points about ASD that educators need to know:

Unique: Each student is unique and requires individualized programming. As such, careful consideration of how to improve education programs (e.g., assessment, engagement, skill-building, and evaluation) for students with ASD is necessary. Regardless of whether primary instruction occurs in general education or special education classrooms, individualized programming is an important component of instruction (Weiss & Rohland, 2015; Whitby, Lyons, & Baxter, 2015). To this end, it is important for education professionals to better understand the unique learning styles of students with ASD.

Identification: Early and accurate diagnosis is of paramount importance (Kawakami, Ohnishi, Sugiyama, Someki, Nakamura, & Tsuji, 2012). Without appropriate assessment and identification, students with ASD could be at a significant disadvantage throughout the education process (Rehfeldt, Dillen, Ziomek, & Kowalchuk, 2010). Planning and collaboration with pre-referral strategies, unbiased and comprehensive assessment, and implementation of evidence-based instructional strategies are keys to successful identification and intervention (Eikeseth, 2009).

Communication: Social communication of individuals with ASD is limited by deficits in theory of mind and empathy (Blackshaw, Kinderman, Hare, & Hatton, 2001). Communication is further complicated by difficulty assigning meaning to different pieces of information as a result of weakened central coherence (López, Donnelly, Hadwin, & Leekam, 2004). Language processing is often literal with students on the autism spectrum, and these students may have differing levels of receptive and expressive language (Akbar, Loomis, & Paul, 2013). Receptive language involves understanding and interpreting what is said, whereas expressive language involves verbal and non-verbal communication with others (Howlin, Mawhood, & Rutter, 2000; Ingersoll, Dvortcsak, Whalen, & Sikora, 2005). Because the foundation of learning is language, it is vitally important for education professionals to understand skill levels and challenges surrounding both receptive and expressive language.

Sensory: Students with ASD often have sensitivity to sensory input. When prompted by intense sensory stimuli, students with ASD could be more likely to respond with problematic behaviors to alleviate their distress in some cases. Such behavioral issues can often be avoided or diminished with communication and awareness of sensory difficulties. In particular, outcomes for these students can be improved when educators are able to identify and implement interventions that help autistic students to integrate senses of sight, hearing, touch, smell, and taste. Addressing these sensory sensitivities can allow students to

interact more positively with their environment and other people (Iarocci & McDonald, 2006; Lane, Young, Baker, & Angley, 2010).

Social: Social interactions can be challenging for students with ASD and social skills are an integral part of instructional programming. Sometimes termed social disconnection, students with autism often have great difficulty interpreting and focusing upon people in a social world. Even when they might be socially engaged, the social impairments of ASD may make it difficult for students with the disorder to identify when to terminate social encounters. Social skill deficits can also contribute to social isolation and even teasing and bullying by other students in some circumstances (Humphrey & Symes, 2010). Teaching, modeling, and reinforcing appropriate social behaviors assist students in relating with their social world (Fisher, Moskowitz, & Hodap, 2013).

Diagnostic Comorbidity: Many students diagnosed with ASD also experience secondary mental health-related problems such as anxiety, attention deficit disorder, and bipolar disorder (Sterling et al., 2015). In fact, 70% of children with ASD are diagnosed with a comorbid condition (Mattila et al., 2010). Comorbid mental health conditions left unrecognized and untreated can further contribute to poor academic outcomes for this population. Peer victimization experienced by children with ASD may also lead to a number of mental health concerns (Cappadocia, Weiss, & Pepler, 2012). Because comorbidity is so common with autism spectrum disorders, accurate identification and multi-disciplinary planning is imperative. An integrated educational plan can offer positive outcomes for students with ASD.

Sleep: Sleep regulation is a central component for enhancing behavioral, cognitive, emotional, and learning functioning (Jiang, Van Dyke, Zhang, Gozal, & Shen, 2011; Wang, Grone, Colas, Appelbaum, & Mourrain, 2011). Problems associated with sleep are a common issue for many children with ASD. Some researchers estimate that 80% of children with ASD experience sleep-related problems (Allik, Larsson, & Smedje, 2006; Couturier, Speechley, Steele, Norman, Stringer, & Nicolson, 2005; Goldman, McGrew, Johnson, Richdale, Clemons, & Malow, 2011). Sleep deficiency in children with ASD can exacerbate functional impairments throughout the day (Kotagal & Broomall, 2012), creating additional academic challenges for this population. Fixations on previous events of the day may also contribute to increased difficulties of falling asleep at bedtime (Kotagal & Broomall, 2012). As such, it is imperative for educators to become knowledgeable about the impact poor sleep has on educational outcomes for students with ASD.

Transitions: Students with ASD often have difficulty transitioning from one task or environment to another. Additionally, loss of structure can be problematic for youth with ASD transitioning into adulthood (Taylor & Mailick, 2014). As a result, education professionals may need to assist students and their families with developing a plan for transition once graduation has taken place. Often, this takes the form of visual reminders and modeling of upcoming change and transition.

Repetitive Behavior: The obsessive nature that is present for some individuals with ASD could be problematic in educational environments (Mouridsen, Rich, Isager, & Nedergaard, 2008; Woodbury-Smith et al., 2005). For example, students on the spectrum sometimes engage in repetitive, self-stimulating behaviors. These behaviors may be a way of releasing anxiety for students. Such behaviors may be particularly likely in stressful and over-stimulating situations. In such instances, speech may become confused and repetitive or the student may not have the ability to vocally respond at all for a short period of time. Modifying the environment and seeking possible reasons for anxiety may be helpful.

Special Interests: Areas of specific interest or focus are common in students with ASD (Caldwell-Harris & Jordan, 2014). This combination of a propensity for obsession or fixation and an inability to identify and recognize social cues may contribute to students with ASD experiencing problematic outcomes associated with their special interests (Woodbury-Smith et al., 2010; Ray, Marks, & Bray-Garretson,

2004). Assistance with recognizing these interest areas and structuring time to focus on them may be important for students with ASD. Educators will want to observe how and when students with ASD engage in ritualistic and focused behavior. If such engagement hinders the student's development and social functioning, implementation of strategies to ease or reduce the behavior are warranted.

Strength-based: Students academically and socially benefit from a strength-based approach rather than only focusing on deficiencies. Integration of special interests and abilities can aid students with ASD in their interpersonal relationships with other students. Moreover, to increase effectiveness, students with ASD need individualized approaches that take into account the unique developmental and learning needs of the person and promote predictability, structure, consistency, and repetition (Serna et al., 2015). Such instructional interventions will also allow for classroom peers to recognize positive contributions and skill-sets from classmates with ASD.

Collaboration: It is imperative that educators collaborate with colleagues, families, and outside agencies to identify and implement instructional programming with a focus on post-secondary transitioning. A key component of collaboration is also staying current on the most up-to-date research findings related to ASD within educational settings. Multi-disciplinary communication and planning provides for a comprehensive understanding of each student's educational needs while allowing for positive outcomes in their future work experiences.

Conclusion

Recent prevalence estimates indicate that students with ASD are likely found in the majority of U.S. classrooms. The range of social and behavioral symptoms of these students can present a difficult challenge to education professionals. Even when diagnosed, ASD can contribute to poor outcomes for the student inside and outside the classroom. This emphasizes the importance of educational professionals receiving advanced education and training opportunities in the area of ASD. Foremost, education professionals should develop skills to work more effectively with this population through such trainings. These opportunities should include content that increases the familiarity of education professionals with characteristics of ASD including communication deficits, sensory sensitivities, and co-occurring disorders and impairments. Further, educational professionals would benefit from increased knowledge of strategies that emphasize the strengths and minimize the weaknesses of ASD. This is important for the entire education system, as students with ASD have a great deal to contribute to development of their classmates. If effective, these interventions hold the promise of improving short- and long-term outcomes and, in turn, helping students reach their maximum potential.

Biographies

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Jerrod Brown, Ph.D., is an Assistant Professor and Program Director for the Master of Arts degree in Human Services with an emphasis in Forensic Behavioral Health for Concordia University, St. Paul, Minnesota. Jerrod has also been employed with Pathways Counseling Center in St. Paul, Minnesota for the past fifteen years. Pathways provides programs and services benefiting individuals impacted by mental illness and addictions. Jerrod is also the founder and CEO of the American Institute for the Advancement of Forensic Studies (AIAFS), and the Editor-in-Chief of Forensic Scholars Today (FST) and the Journal of Special Populations (JSP). Jerrod has completed four separate master's degree programs and holds graduate certificates in Autism Spectrum Disorder (ASD), Other Health Disabilities (OHD), and Traumatic-Brain Injuries (TBI).

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