

Case 8: Autism Spectrum Disorders

Learning objectives

- Define autism spectrum disorders, explain their prevalence and causes, and outline the development of the autism spectrum disorder field.
- Describe characteristics of individuals with autism spectrum disorders.
- Explain how autism spectrum disorders are identified.
- Describe recommended educational practices for students with autism spectrum disorders.
- Explain the perspectives and concerns that parents and families of students with autism spectrum disorders may have.

Case

Geneva

Geneva is a seventh-grade student who has faced many challenges in her life. She was identified as having an intellectual disability and autism when she was only one year old. Her parents describe how difficult it was to get her to sleep as a young child and how worried they were about her future. In elementary school, Geneva spent most of her time in a separate classroom for students with significant disabilities. This decision was made because of her high need for structure and order and her tendency to hit others or bite them when she was frustrated. With intensive intervention and the guidance of a paraprofessional, she gradually began to spend small amounts of time in general education classrooms with peers. Now in middle school, Geneva participates in general education science and art classes, but she still requires a small-group, structured learning setting for much of the school day. Her general education teachers have learned to follow a clear schedule in their classrooms, and if a change is planned, they remind Geneva often. Geneva is learning from a modified curriculum; that is, she is not expected to complete the high-stakes testing that her peers must take, and so her teachers work on her IEP goals and objectives in both general education and special education settings. One goal for Geneva this year is to walk unaccompanied from class to class.

Introduction

If you watch for information about individuals with autism in the media, you might wonder whether some professionals are making mistakes: In newspaper stories, magazine articles, movies, and novels, individuals with autism sometimes are portrayed as brilliant but eccentric, sometimes as significantly impaired, and sometimes as turned almost completely inward, as though incapable of dealing with the realities of day-to-day living. In fact, all of these descriptions could be based in truth. Autism, today usually referred to as autism spectrum disorder (ASD), has been described as an enigma because individuals identified as having this disability may have widely different characteristics that set them apart from typical peers and from peers with other disabilities (Simpson & Myles, 1998).

What Are Autism Spectrum Disorders?

Development of the Field

Throughout the 1950s and 1960s, medical professionals generally believed that autism was caused by detached, uncaring mothers—sometimes called “refrigerator mothers,” a reference to their coldness—who failed to appropriately nurture their infants (Janzen, 2003). As a result of this belief, many mothers were unfairly accused of making their children autistic by failing to provide the warmth and love that enable young children to thrive. Researchers soon began to question this contention, but it was not until the 1970s that published studies of twins demonstrated a genetic basis for autism. Over the next ten years, these studies were extended and revised, completely debunking the myth of deficient mothering as a cause of autism (Rutter, 2000).

In 1981, the distinction between autism and Asperger syndrome was forever drawn when Lorna Wing wrote about thirty-five children and adults with the latter disorder, sparking a wave of interest in its study and treatment. Since that time, professionals have learned a great deal about these two related but distinct disorders. For example, they have determined that individuals with these disorders may have mild symptoms or may be significantly affected (Wing, 1991). Autism was identified as a separate category of disability in the Individuals with Disabilities Education Act (IDEA) beginning in 1990, and in 1994 it was added as a specific disorder in the American Psychiatric Association’s (APA) widely used *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (American Psychiatric Association, 1994).

Definitions of Autism spectrum Disorders

Federal Definition

When autism was added to IDEA in 1990, it was defined as follows:

- (i) Autism means a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three, that adversely affects a child’s educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences.
- (ii) Autism does not apply if a child’s educational performance is adversely affected primarily because the child has an emotional disturbance.
- (iii) A child who manifests the characteristics of autism after age three could be diagnosed as having autism if the criteria in paragraph (c) (1) (i) of this section are satisfied.

Prevalence of Autism Spectrum Disorders

The prevalence of autism spectrum disorders is hotly debated. IDEA provides an estimate of the prevalence of autism as 0.18 percent of all students ages six to twenty-one (U.S. Department of Education, 2004), or about 118,000 students. However, that estimate is based on school data which are usually incomplete. The DSM-IV-TR reports a prevalence rate of autism of 5 per 10,000, but these data do not address Asperger syndrome or PDD-NOS. Upon studying the children in one town, Scott, Baron-Cohen, Bolton, and Brayne (2002) found that 57 in 10,000 had what they termed autistic spectrum condition, which included autism, atypical autism, PDD-NOS, and Asperger syndrome. As you can see from these estimates, no consensus exists on the prevalence of this disability.

Causes of Autism Spectrum Disorders

As with many disabilities, the specific causes of autism spectrum disorders are not truly understood. Professionals generally agree that symptoms of these disabilities are triggered by malfunctions in the **brain** (Szatmari, Jones, Zwaigenbaum, & MacLean, 1998) and that trauma related to abuse or neglect by caregivers is not a cause (Gillberg & Coleman, 2000).

Although the early belief that autism spectrum disorders were caused almost exclusively by environmental factors such as maternal neglect has long been proven untrue, most professionals agree that these factors can influence the number and intensity of symptoms (London & Etzel, 2000).

What Are the Characteristics of Autism Spectrum Disorders?

Cognitive and Academic Characteristics

Children and youth with ASD often have irregular patterns of cognitive and educational strengths and deficits, with the majority of individuals with autism disorder having some level of intellectual disability and those with Asperger syndrome having average to above-average ability (Barnhill, Hagiwara, Myles, & Simpson, 2000; Jordan, 1999). Although children and youth with autism share some characteristics with students with other disabilities, their unique features set them apart and sometimes create significant challenges for those who serve them. These distinguishing characteristics include overreliance on rote memory, problems with theory of mind, and problem solving challenges.

Social and Emotional Characteristics

The social and emotional challenges that students with autism spectrum disorders encounter are directly related to their other special needs. In particular, language disorders, unconventional language use, and immaturity often characterize these students.

Behavior Characteristics

A final domain to consider in characterizing students with autism spectrum disorders is behavior. Some of the challenges these students may have include self-stimulatory behaviors, difficulty with generalizations, and sensory responses.

How Are Autism Spectrum Disorders Identified?

The definition of autism in IDEA is very general, and so it is common for this disorder to be diagnosed using the criteria in *DSM-IV-TR*. However, identifying these students is rather complex because the symptoms occur in so many different ways. As for all students, a team, including the parents, must participate in the assessment and eligibility process.

Assessment Practices and procedures

Many students are identified as having an autism spectrum disorder before they enter school. Assessing for this disability usually includes checking whether a student displays the characteristics known to be associated with autism spectrum disorders. In addition, information is gathered concerning the child's cognitive, academic, and adaptive behavior skills. Finally, the child's developmental history is reviewed and observations of behavior are assessed.

Eligibility

After assessment data are gathered, the team of educators, medical professionals, parents, and related services personnel address the questions that guide special education decision making:

- Does a disability exist?
- Does it have a negative impact on educational performance?
- Is the student eligible for special education services?
- Will the student benefit from those services?

As for all students with disabilities, the most important part of the identification process is not what label is assigned but what services are provided to meet the student's needs. Continuous data collection, monitoring, and analysis through assessments and flexible interventions are essential to effectively educate such a student.

What Are Recommended Educational Practices for Students with Autism Spectrum Disorders?

Surprisingly little research has been conducted to identify best-practice interventions for students with autism spectrum disorders (National Research Council, 2001). Generally, though, recommended practices include early intervention, intensive instruction, planned but brief instructional periods, and sufficient one-to-one or small-group instruction to meet students' goals (National Research Council, 2001). All of these practices are designed to address the social, behavior, and sensory challenges of these students, and many of the practices benefit other students with disabilities as well. Similarly, many of the academic interventions introduced for students with learning disabilities, emotional disabilities, intellectual disabilities, and communication disorders also enhance learning for students with autism spectrum disorders.

Environmental Supports

Environmental supports are changes in a student's surroundings that are considered key to effective programming. Some of the most common environmental supports include visual supports, a home base, and assistive technology.

Instructional Practices

Many instructional strategies have been demonstrated to be effective with students with autism spectrum disorders. Three examples that illustrate successful strategies are priming (i.e., help students be familiar with academic material prior to its use in school), discrete trial training (i.e., follow basic patterns), and prompting (i.e., give cues).

Social Skills Supports

Perhaps the most important area of intervention for students with autism spectrum disorders is social skills. Social skills interventions generally are positive behavior supports designed to enhance opportunities for social interaction, reduce problem behaviors, and build new competencies that have a positive impact on quality of life (Dunlap & Koegel, 1999; Gutstein & Whitney, 2002; Myles et al., 2000). Specific issues that can be addressed include understanding the thoughts and feelings of others, following social rules, and learning self-monitoring (Barnhill, Cook, Tebbenkamp, & Myles, 2002; Myles & Simpson, 2002).

What Are the Perspectives of Parents and Families?

Like parents of children with other disabilities, parents of children with autism spectrum disorders often feel concern about their children's welfare in the years ahead, their children's ability to function independently at some point, and the community's acceptance of their children (Koegel et al., 1992). Mothers of children with autism also report more stress in their lives than do mothers of children with other disabilities (Rodrigue, Morgan, & Geffken, 1990).

Parents of children with autism spectrum disorders benefit from the availability of both formal and informal social support, but such support must be individualized to meet the needs of each family. Potential sources of support include classroom teachers, IEP team members, pediatricians and other health professionals, and other families of children with autism. Families often find that attending a local support group provides much-needed information and support.

Back to the Case

Geneva

Geneva's parents have expressed concern about her future. She is at the age when discussions about her postsecondary adult life should begin. Regardless of which work or educational setting is selected or the circumstances of her living situation, Geneva will need skills for adult living.

-Select two skills that may present problems or concerns for Geneva. Explain your rationale for selecting them.

-Besides walking independently to class, what other activities can be planned that will help Geneva work toward a more independent life? Your answer should reflect a collaborative effort, including general and special education teachers, paraprofessionals, Geneva's family members, and same-age-peers.

Students with Autism Spectrum Disorders—Extracted from Marilyn Friend (2008) *Special Education: Contemporary Perspectives for Schools Professionals*, Chapter 12.

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