What is Autism?

Autism is a complex neurological disorder that typically appears during the first two years of life and affects the functioning of the brain and interferes with normal development of verbal and nonverbal communication, social interaction and sensory development. Autism is a spectrum disorder meaning it affects each person in different ways and can range from very mild to severe and is often referred to as Autism Spectrum Disorder (ASD).

Below is a general overview of tendencies shown by individuals with autism from the Centers for Disease Control and Prevention. Every individual with autism is different and may show some of these signs:

- Not responding to their name by 12 months
- Not pointing at objects to show interest by 14 months
- Not playing "pretend" games by 18 months
- Avoiding eye contact
- Preferring to be alone
- Trouble understanding other people's feelings or talking about their own feelings
- Delayed speech and language skills
- Repeating words or phrases over and over
- Giving unrelated answers to questions
- Getting upset by minor change
- Obsessive interests
- Flapping hands, rocking body, or spinning in circles
- Unusual reactions to the way things around sound, smell, taste, look or feel

Autism Criteria

In the DSM-IV-TR (2000), Autism is not listed as a single disorder. Because Autism is a spectrum disorder, there exist five different mental health disorders, which when combined, complete the Autism Spectrum. These five mental health disorders are: Autistic Disorder, Asperger's Syndrome, Rett's Disorder, Childhood Disintegrative Disorder, and Pervasive Developmental Disorder Not Otherwise Specified. ***(see attached DSM-IV-TR Criterion Sheet for these diagnoses)***

It should be noted, however, that under the planned changes in the DSM -5, slated for release in May 2013, Autism Spectrum Disorder will replace the above diagnoses, combining them into a single set of criterion. Following is the proposed criterion for the new DSM-5 as shown on the American Psychiatric Association DSM-5 Development Website.

Autism Spectrum Disorder

Must meet criteria A, B, C, and D:

A. Persistent deficits in social communication and social interaction across contexts, not accounted for by general developmental delays, and manifest by all 3 of the following:

1. Deficits in social-emotional reciprocity; ranging from abnormal social approach and failure of normal back and forth conversation through reduced sharing of interests, emotions, and affect and response to total lack of initiation of social interaction,

2. Deficits in nonverbal communicative behaviors used for social interaction; ranging from poorly integrated- verbal and nonverbal communication, through abnormalities in eye contact and body-language, or deficits in understanding and use of nonverbal communication, to total lack of facial expression or gestures.

3. Deficits in developing and maintaining relationships, appropriate to developmental level (beyond those with caregivers); ranging from difficulties adjusting behavior to suit different social contexts through difficulties in sharing imaginative play and in making friends to an apparent absence of interest in people

B. Restricted, repetitive patterns of behavior, interests, or activities as manifested by at least two of the following:

1. Stereotyped or repetitive speech, motor movements, or use of objects; (such as simple motor stereotypies, echolalia, repetitive use of objects, or idiosyncratic phrases).

2. Excessive adherence to routines, ritualized patterns of verbal or nonverbal behavior, or excessive resistance to change; (such as motoric rituals, insistence on same route or food, repetitive questioning or extreme distress at small changes).

3. Highly restricted, fixated interests that are abnormal in intensity or focus; (such as strong attachment to or preoccupation with unusual objects, excessively circumscribed or perseverative interests).

4. Hyper-or hypo-reactivity to sensory input or unusual interest in sensory aspects of environment; (such as apparent indifference to pain/heat/cold, adverse response to specific sounds or textures, excessive smelling or touching of objects, fascination with lights or spinning objects).

C. Symptoms must be present in early childhood (but may not become fully manifest until social demands exceed limited capacities)

D. Symptoms together limit and impair everyday functioning.

Autism Occurrence Trends/Rates

Autism occurs in all racial, social and socioeconomic groups but is more likely to occur in boys than in girls. In a 2008 study conducted by the Autism and Developmental Disabilities Monitoring (ADDM) Network, a collection of groups funded by the United States Center for Disease Control, data collected from health and special education records of children living in 14 areas of the United States during 2008 were used to estimate the prevalence of Autism in children. Results found that approximately 1 in 88 children have been identified as having an Autism Spectrum Disorder. Among families that have one child with an ASD, recurrence of ASD in another sibling is between 2 and 8 percent. In addition, almost 5 times as many boys were identified with ASDs than girls (1 in 54 compared to 1 in 252). This disorder is the third most common developmental disorder, more common than Down Syndrome.

Personal and Social Development

Although personal and social development can vary depending on where a child falls on the Autism spectrum, all disorders share similar challenges. Problems with social interaction are a shared characteristic of the autism spectrum disorders; it's especially present in Asperger's Syndrome, as it's a predominant characteristic. Among other social challenges, individuals with autism have a difficult time interpreting others emotions and this can often make social interactions with peers, teachers and parents difficult. "One aspect of the difficulties people with Autism is illuminated in the 'theory of mind' hypothesis" (Petters, pg.81). According to Peters, theory of mind means the ability to read a person's hidden or implied emotions although something else may be directly portrayed. This means they have difficulty understanding irony or sarcasm. As one autistic student told me with a dead pan expression, "I have difficulty emoting".

Individuals with Autism and Asperger's also struggle with the idea of reciprocity. This is the back and forth pattern and flow that make up all social interactions. They will often respond in a short, blunt manner or do not respond at all. This can be interpreted as rude, although it's almost always unintentional. Obviously, those autistic children who are none verbal don't take part in conversations at all. Parents often report they feel they carry on the whole conversation and relationship. Autistic students don't understand how to ask questions and engage another person in conversation. The Autistic child doesn't understand how to initiate or maintain a conversation with other individuals. This limits the child's ability to make friends and develop valuable social skills.

Autistic children often lack eye contact, may not smile and their posture may not convey interest. These characteristics inhibit them from making friends and engaging in social interactions. They may also not interpret or give encouraging gestures and nodding. All these physical signs can give off negative messages to those around them. Peer relationships during childhood and adolescence play an important role in being able to practice social skills and will become part of a person's identity. In this respect,

social development then affects personal development as children either see themselves as a person able to have social relationships or not. Due to the nature of autism, autistic children often discourage peer interaction. The use of evidence based practices can provide autistic children with the skills to overcome these challenges.

The Role of the School Counselor

The role of the counselor changes depending on the grade level. In elementary schools, counselors can help facilitate the implementation of social skills lessons, as well as classroom lessons to educate the other students of their autistic classmate. This can be combined with lessons about appreciate of individuals and their differences. The school counselor at the elementary level can also help with routines and checklists. They can be a point person for the student to check in with. As students transition from elementary to middle, and then from middle to high school, the counselors should work with each other to facilitate a smooth transitions. For autistic students, this means getting them aquatinted with their new environment and teachers and explaining and practicing their schedule and routine. In grade school and middle school a large focus should be put upon helping the student develop peer relationships. This is crucial to have by the time the student has entered adolescence. At the high school level, although social skills and peer relationships remain important, the school counselors focus should be transition planning for post-secondary life. Although it seems that this could wait until 11th or 12th grade, transition planning should begin in 9th grade. This is a collaborative process between teacher, parents and students. The school counselor should work with the student, parents and teacher in discovering and deciding the following details:

- Income support opportunities
- Residential options
- Medical needs
- Employment opportunities
- Post-secondary training options
- Community and leisure options
- Maintenance of family and friends
- Advocacy/Guardianship

In order to decide between these options it is important to evaluate the students strengths and weakness and their desired outcomes. The school counselor can play an important role in supporting the student as they decide the path they wish to take by: encouraging volunteering, providing work experience options, encouraging participation in extracurricular, helping with dress and interview skills, and continued support on social skills.

Post School Outcomes

Post school outcomes for students with autism vary greatly depending upon where they fall on the spectrum. For many students the post school outcomes are quite positive; evidence shows that there is a high rate of post-secondary school attendance as well as entrance into the work force. Post school outcomes also vary depending on transition preparation and job readiness, or readiness for further education.

Post School outcomes according to

The National Longitudinal Transition

Study (2009)

79.7% of individuals with autism attend some

form of post-secondary school (vocational, 2yr, 4yr)

42.5% received a degree, license or certificate

from a post-secondary institution.

37.9% received a degree, license or diploma

from a 4yr university.

79.5% Worked for pay other than around the house.

Best Practices for Teaching Student with Autism

- Organize the student's activities- daily schedules, mini schedules, checklists, choice boards (this is a best practice for many students.
- Visual instructions or directions in addition to verbal. Explain things directly. Break down verbal instructions into small cues, step by step.
- Assist the child in understanding the organization of the environment. Labeling bins and supplies boxes, knowing where things go.
- Support and encourage appropriate behavior. Teach social skills. This can be done through stories depicting social cues and responses and pictorials.
- Teach self- control. This can be done through rewarding expected behaviors and the use of pictorials.
- Choose age appropriate materials even if they have to be modified.
- Provide opportunity for choice. Students with autism often have a hard time making themselves understood; additionally much of their life is structured by adults. To facilitate social development they need practice in making choices. Do not give open ended choices at first, but rather one or two options then build from there.
- Pay attention to processing and pacing. Students with autism may need more time to process and respond.
- Use concrete examples to teach abstract ideas.

Tips for managing challenging behavior

- Identify the behavior, where and when it occurs? What happens before it and how people react? It's important to understand that some challenging behavior may not be harmful to the student are

others. Decide if the behavior is truly a problem. Does it interfere with learning of the student or others? Does it result in diminished peer interaction?

- Try to find the reason or motivation behind the behavior. It can help to include the parents in this discussion. Perhaps slightly changing the environment can aide in eliminating the behavior.
- Identify and describe alternative behavior to the student.
- Reward positive and appropriate behavior.

Interventions

The National Professional Development Center (NPDC) have identified 24 separate evidence-based practices (EBPs) used as intervention techniques for children and youth with autism spectrum disorders. Some of the practices are categorized by their more general intervention goals. One group is referred to as behavioral teaching strategies. These are based on the foundation of applied behavioral analysis and are closely associated with the use of the functional behavioral assessment. These strategies relate to teaching students about antecedents and consequences of behavior. These techniques include:

- Prompting – Teaching the student about the antecedent of particular behaviors which will help them prepare for the behavioral situation when it arises.
- Reinforcement – Teaching the student about the consequence of particular behaviors, helping the student prepare for that particular situation when it occurs.
- Task analysis and chaining – similar to prompting, this strategy uses a behavioral education model that teaches the student about antecedents by breaking them down into steps and links those steps together.
- Time delay – antecedent teaching that focuses on effortless learning for the student.

There is another category of interventions that are focused on helping to reduce or eliminate interfering behaviors. This category of strategies is based primarily on the principals of positive behavior support which rely on individual interventions surrounding functional behavior assessments. Examples of positive behavioral support strategies include:

- Functional Behavior Assessment (FBA) – Used in determining the function of a student's behavior by focusing on the antecedent, the behavior and the consequences.
- Stimulus Control/ Environmental Modification – This involves modifying a student's environment so as to best fit the learner's behavior.
- Response Interruption/ Redirection – This refers to the blocking of interfering behavior by redirecting the student towards appropriate behavior.
- Functional Communication Training (FCT) –FCT tries to implement more appropriate behavior in the place of interfering behavior by focusing on the function of the behavior and seeing that the appropriate behavior serves the same purpose for the student.
- Extinction – by withdrawing a reinforcing stimulus for an inappropriate behavior, extinction works to reduce or eliminate that behavior.

- Differential Reinforcement – This strategy works to replace an inappropriate behavior with more appropriate behaviors by reinforcing alternative or less inappropriate behaviors.
- Self-management – Students learn to monitor their and reinforce their own behavior by recording and reporting on their behaviors.

In addition to these categories of evidence based interventions to be used in working with individuals with autism spectrum disorders, there are a number of other non-affiliated strategies to use as well, including:

- Discrete Trial Training (DTT) – Utilizing a methodical strategy of one-on-one instruction for teaching various skills
- Naturalistic Interventions – Focuses on utilizing typical settings and scenarios for teaching particular skills so as to make those skills translatable to the student's actual life.
- Parent-implemented Interventions – These interventions are based on the belief that the parent is the most effective teacher for their child.
- Peer-mediated Instruction/ Intervention (PMII) – This strategy is designed for peers of students with autism, teaching those classmates how to initiate and carry on interactions, thus aiding more social interactions for the student with autism.
- Picture Exchange Communication System (PECS) – focused on facilitating functions of communication, this strategy involves the student and teacher actually handing pictures and symbols to one another for the purposes of communication.
- Pivotal Response Training (PRT) – This strategy is aimed at teaching the student take advantage of learning by seeking out opportunities for learning in their everyday life.
- Social Narratives – Used to help the student to adjust their behavior or adjust to the situation, the student writes narratives that describe specific examples of social situations.
- Social Skills Training Groups – Small groups that maintain the goal of learning, practicing and getting feedback for social skills.
- Structured Work Systems – with the goal of practicing skills that have been taught already, the student utilizes structured settings that provide visual and physical constants.
- Video Modeling – using observation via assistive technology, the student practices behavior through pre-rehearsal.
- Visual Support – these are tools that the student can use to record events and activities independently.
- Computer-aided instruction
- VOCA/Speech Generating Devices (SGD) – portable electronic devices used for communication for non-verbal students, also used to teach students communication skills.

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