#### Article 102

# **Autism Spectrum Disorder: What Counselors Need to Know**

Paper based on a program presented at the 2012 American Counseling Association Conference, San Francisco, CA, March 23-25, 2012.

Elisabeth D. Bennett, Meghan Butler, Elyssa Hunsaker, Opal Cook, and Brittany Leland

Bennett, Elisabeth D., is an Associate Professor and Chair of the Counselor Education Department of Gonzaga University. She has been teaching about, and serving, children and families for three decades.

Butler, Meghan C., is a Master of Community Counseling Candidate at Gonzaga University. She is currently serving students at Gonzaga's Counseling Center.

Hunsaker, Elyssa L., is a Master of Community Counseling Candidate at Gonzaga University. She is interning at Youth, Family, and Adult Connections, a treatment facility for youth, families, and adults.

Cook, Opal M., is a Master of Community Counseling Candidate at Gonzaga University. She currently serves as an intern with Children's Home Society treating children and families.

Leland, Brittany L., is a Master of School Counseling Candidate at Gonzaga University. She is an intern at Lewis and Clark High School where she serves children with Autism Spectrum Disorders.

The Centers for Disease Control and Prevention (CDC; 2011) make clear the prevalence of disorders known as Autism Spectrum Disorders (ASD) noting that one of every 110 children is diagnosed with an ASD. The CDC noted that ASDs are an "urgent public health concern" with a prevalence rate of 1%; boys appear to be three to four times more likely to have ASDs than girls (2011; Fombonne, 2002). They add that our country needs to develop a coordinated service system to increase the health and well-being of children and families of ASD. They note that families from all socioeconomic and ethnic groups and children of all ages are impacted, leading to a need for services across all factions. With ever-increasing numbers of children being diagnosed with ASD, services across counseling specialties are in demand. Counselors from each specialty can better assist if they have both a basic understanding of the disorders along the spectrum and insight regarding best practice for children and families of ASD. This paper will serve to highlight each disorder currently delineated in the Diagnostic and Statistical Manual of Mental Disorders, 4th edition, text revision (DSM-IV-TR; American Psychiatric Association, 2000) as pervasive developmental disorders, future trends in diagnoses, issues specific to children with autism or Asperger's Disorder, and best practice regarding services for children with ASD and their families.

### **Pervasive Developmental Disorders**

Pervasive Developmental Disorders (PDD) is one of ten major categories under the heading of Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence in the DSM. PDD contains five diagnoses. These include Rett's Disorder (RD), Childhood Disintegrative Disorder (CDD), Asperger's Disorder (AS), Autistic Disorder (AD), and PDD, Not Otherwise Specified NOS. All these diagnoses share characteristics of impairment in communication skills, social engagement, and repetitive, stereotyped, and restrictive behaviors (DSM-IV-TR; American Psychiatric Association, 2000). Discussion by the DSM revision task force and professionals in the field is ongoing regarding the nomenclature for the DSM-IV. A new category, Autism Spectrum Disorders (ASD), is suggested that incorporates a heavy emphasis on shared symptoms while allowing for specification by severity of symptoms (Swedo, 2009). Rett's Disorder (RD) and Childhood Disintegrative Disorder (CDD) share the distinguishing factor of delayed onset of symptoms with an apparent lack of developmental abnormality in the prenatal and perinatal period. Symptoms for RD may begin as early as 6 months; nonetheless, the symptoms are often first noted with serious decline between 18 months and 4 years (National Institute of Neurological Disorders and Stroke (NINDS, 2009a). Childhood Disintegrative Disorder symptoms develop after 2 years of age (Palomo et al., 2008). To further distinguish between RD and CDD a brief description of symptoms by disorder follows.

#### **Rett's Disorder**

The pattern and symptoms of Rett's Disorder, found primarily in females, includes a decline in the rate of head growth between approximately 5 months and 4 years of age during which time purposeful hand skills decline into purposeless stereotypic movements such as wringing, clapping, and hand-washing (DSM-IV-TR; American Psychiatric Association, 2000). Previously developed social engagement declines though a reemergence of such often appears later. Poor coordination in gate and trunk movements emerges in conjunction with curvature of the spine (NINDS, 2009a). Expressive and receptive language impairment surfaces which contributes to frustration and irritability. Severe psychomotor retardation occurs with decline in chewing and swallowing. Irregular breathing patterns emerge including breath holding and hyperventilating (NINDS, 2009a). It is noteworthy that children with RD almost always prefer people to objects and enjoy affection (Hardman, Drew, & Egan, 2006). The period of initial decline often goes unnoticed followed by a rapid decline between 1 and 4 years of age, reaching a plateau between 2 and 10 years (NINDS, 2009a). Late motor deterioration may occur after age 10 potentially leading to a further loss of mobility, though there tends to be no further loss of cognitive or communication skills or hand movement. A decrease in recurring hand gestures may occur. Further development of scoliosis as well as muscle inflexibility may occur (NINDS, 2009a). Knowledge of causal factors are inconclusive though it is clear that mutation of the gene, MECP2, found on the X chromosome plays a vital role in the development of RD symptoms (NINDS, 2009a).

## **Childhood Disintegrative Disorder**

Childhood Disintegrative Disorder (CDD) has no known cause (PubMed Health, 2010). Deterioration patterns are similar to RD. In CDD, the child typically appears to develop normally until 3 or 4 years of age. Over the following months the child loses skills previously achieved in areas of motor, communication (verbal and non-verbal), and social skills (PubMed Health, 2010). Specifically, symptoms include a delay or loss of spoken language; impairment in communicative facial expressions and hand gestures; lack of initiation and maintenance of communication patterns and social skills leading to limited-to-no ability to form relationships; lack of play; loss of motor skills; and loss of bladder and bowel control (PubMed Health, 2010). Furthermore, it is common for children with CDD to have seizures and to score very low on IQ estimates (Volkmar & Rutter, 1995). In general, markers of CDD are the loss of previously achieved milestones and lack of meeting milestones thereafter. By the age of 10, the child with CDD looks very much like a child with severe autism (PubMed Health, 2010).

Rett's and childhood disintegrative disorders differ from Asperger's and autism disorders given that children with RD and CCD begin with normal profiles and show marked degeneration; whereas children with Asperger's or autism symptoms do not show decline. Children with ASD do not initially meet normal developmental milestones (*DSM-IV-TR*; American Psychiatric Association, 2000). The primary differences between Asperger's and autism lie in degree of severity of shared key features comprising what is now referred to as the autism spectrum. Pervasive Developmental Disorders Not Otherwise Specified (PDD-NOS) is the diagnosis reserved for children holding some symptoms of the above disorders but without meeting the full criteria for one disorder (NINDS, 2009b). A more thorough understanding of the two primary autism spectrum disorder diagnoses, Asperger's and autism, is warranted and provided below.

#### Asperger's Disorder

Asperger's disorder (AS), like autism (AD), is characterized by a degree of language and communication skill impairment, repetitive thought, routines or rituals, and restrictive patterns of behavior (Woodbury-Smith & Volkmar, 2009). Children with AS typically preserve early language skills, but speak in monotone in an excessively formal manner and take figures of speech literally (VanBergeijk, Klin, & Volkmar, 2008). Repetitive thought is often represented by an exclusive fixation or obsession with a specific object or topic. The drive to know everything about the topic and fixation in conversation lead to increased separation from age mates (Woodbury-Smith & Volkmar, 2009). Though children of AS share the normal range of intelligence with other children, their fixations often lead to enhanced vocabulary and a range of obscure knowledge about their fixation topic so as to set them apart and make them misunderstood as exceptionally smart (Barnhill, Hagiwara, Myles, & Simpson, 2000).

A similar fixation occurs regarding daily routines, thus making behavioral flexibility markedly limited. Inflexibility and delayed motor skills development such as late crawling or walking, climbing, catching, balancing on a bicycle, and awkward movement—such as stereotypical stiff or bouncy gait—further set the child with AS apart from other children (Jansiewicz et al., 2006).

Children with AS struggle to connect with other children, but they generally want to connect. They will approach others with their formal, singly focused, speech which is

often experienced as invasive and strange. Children with AS generally do not read or accurately understand nuances and non-verbal cues readily and lack an understanding of emotional reciprocity which makes spontaneous connection difficult (Frith, 2004). During adolescence and young adulthood it is not uncommon for anxiety and depression to develop as a result of disconnection (Barnhill & Myles, 2001).

#### **Autism Disorder**

Similar to AS, children with autism struggle with social connection. Mark Derby, PhD, an expert in the diagnosis and treatment for ASD, stated about this hallmark feature:

Autism is a disorder that is primarily manifested by the absence of essential skills, most likely, reducing the child's ability to engage in the social dance that occurs between care providers and the child; which, in turn, leads to the behavioral excesses we usually think of as autistic behaviors. (Personal communication, October 7, 2009)

His definition is helpful in conceptualizing the global picture of a child struggling with autism. Additionally, AD hosts symptoms including verbal and nonverbal communication deficits, repetitive behaviors, and obsessive fixations on a single narrow interest (*DSM-IV-TR*; American Psychiatric Association, 2000).

Social struggles include the following symptoms. Children with AD are often unresponsive to facial expressions; avoiding even minimally prolonged eye contact. They prefer to focus for extended periods on particular objects and may appear to generally be indifferent to social interaction (*DSM-IV-TR*; American Psychiatric Association, 2000). Children with autism show deficits such as a lack of babbling and age appropriate hand gesturing such as pointing before age 1. They do not typically have single word phrases by age 1 or double word phrases by age 2. Some remain mute for life, while most develop some language by age 9. Some learn sign language more readily than verbal language (Bonvillian, Nelson, & Rhyne, 1981). Still others may develop echolalia (parroting; Liu-Gitz & Devender, 2010).

To complicate communication issues, children with autism lack consistency between facial/body gestures and verbalizations. Vocal inflections do not reflect nuance and appear to be flat or singsong even when grammar and sentence structure are sound (Charlop, Dennis, Carpenter, & Greenberg, 2010). Lack of eye contact continues even in response to one's name; indeed, there is little to no social responsiveness—not even smiling. This can lead to concerns about hearing impairment which testing refutes (Hoevenaars-van den Boom, Antonissen, Knoors, & Vervloed, 2009).

Instead of play, a small child with autism is more apt to spend time lining up toys (DSM-IV-TR; American Psychiatric Association, 2000). Older children continue such restricted patterns of behavior with intense preoccupation with particular objects/subjects, inflexibility of routines and rituals, an absence of imaginative play, impaired ability to form peer relationships, and repetitive stereotyped use of language (DSM-IV-TR; American Psychiatric Association, 2000). Older children also demonstrate a lack of empathy that stems from difficulty in seeing things from others' perspectives (Shabani et al., 2002). That, and an inability to decipher facial expressions and other non-verbal cues, renders the child with autism perplexed by the social world (Tardif, Lainé, Rodriguez, & Gepner, 2007). Overwhelming confusion, a sense of lack of control, and other frustrations, can lead to emotional deregulation that can take the form of aggressive

actions against others, or self, such as hair pulling, head banging, or biting (*DSM-IV-TR*; American Psychiatric Association, 2000).

Also complicating the overwhelming nature of social interactions, children with autism are often hyper-sensitive to all senses. Simple sensations unnoticed by others might send the child with autism into emotional deregulation. Overstimulation can result from everyday events such as the sensation of fabric seams, thunderstorms, or cleaning supply odors (Güçlü, Tanidir, Mukaddes, & Ünal 2007).

Understanding the emotional experiences of children with AD is crucial. While children generally experience five primary and many secondary emotions, children with AD primarily experience fear and curiosity (Grandin, 1997). Overstimulation from novelty overloads the child, and fear ensues. Quiet, low-stimulus time for a child to unwind and calm can help a child re-engage in curiosity instead of fear (Grandin, 1997).

While the cause of autism remains unknown, there are known anomalies more prevalent in children with autism than the population at large (*DSM-IV-TR*; American Psychiatric Association, 2000). Fragile X syndrome is one anomaly found in 5% of children with autism. Of the Fragile X population, approximately 10-15% have autistic characteristics (Bailey, Hatton, Mesibov, Ament, & Skinner, 2000; Rogers, Wehner, & Hagerman, 2001). Another rare genetic issue prevalent in AD is tuberous sclerosis involving development of benign tumors in vital organs and the brain. As many as 4% of those with autism have this anomaly (Kothur, Ray, & Malhi, 2008).

# The Counselor's Role: Knowledge and Service

When it comes to best practice, there is certainly a role for the counselor in assisting the child, parents, and families of children with autism. Knowing the symptoms of each disorder is necessary, but there are other foundational components of which to be aware. Specifically, it is critical for the counselor: to debunk unhelpful myths and misperceptions about autism spectrum disorders; to identify the needs and wants of children with ASD; to identify the individual strengths of children with an ASD; and to be familiar with the common struggles experienced not only by children on the autism spectrum, but also those struggles experienced by their parents and siblings so as to offer a strengths-based approach to serving the child and family.

## **Debunking Myths and Misperceptions**

Since the first acknowledgment of the syndrome ASD, laypersons and professionals have attempted to discern cause. One early myth that arose is that autism is due to bad parenting. Indeed, it was assumed that mothers who are cold in their emotional displays towards their children (i.e., refrigerator moms) depleted the capacity of the child to connect with not only the mother, but with all other individuals (Maino, Viola, & Donati, 2009). A second myth is that vaccinations cause ASD. There is no valid research to substantiate that claim. The cause of autism remains unknown, but parenting type and vaccinations do not account for ASD which appears to be present at birth (Scahil & Bearss, 2009).

Movies and other sources of media have impact on our perceptions, even concerning ASD. Consequently, a myth perpetuated by the movie *Rain Man* (Guber et al., 1988), is that children with autism are geniuses. Certainly, there are children with

autism who have special talents or abilities. However, children with autism fall throughout the range of intelligence with 70% noted as having some degree of mental retardation (O'Neil, 2008).

Two further myths are that children with autism do not make eye contact or show affection. In truth, they make eye contact—though the length and intensity are limited (Neumann, Spezio, Piven, & Adolphs, 2006). Similarly, they also show affection but avoid the overstimulation of light touching enjoyed by children with higher stimulation tolerance (Güçlü et al., 2007). These limitations lead to yet another myth—that children with autism have no emotions. They do have emotions, but they struggle with emotional expression and awareness (Bachevalier & Loveland, 2006).

Another media-induced, and hope-abetted, myth is that if the child has made progress, this means autism is curable. It is certainly hoped that with early and effective intervention, the symptoms of autism can be muted, but there is no known cure (NINDS, 2009b) This refutes the myth that autism is best addressed when a child is old enough to communicate. Autism is best addressed as early as identified and throughout the lifespan as needed (Filipek et al., 1999; Handleman & Harris, 2000; National Research Council, 2001). Finally, some believe ASD can be outgrown; however, autism is a life-long disorder meriting best practice treatment to assist the child in living as fully as possible.

### **Needs and Wants**

Though it may seem somewhat simplistic, children with ASD share similar needs and wants as children without autism. Considering the needs, wants, and struggles of the child with ASD can lead to individualized, fitting, goals.

As do all children, children with autism want to live within, see, and count on a routine, but they need it to be more clearly defined and consistent with stimulation limited to individual tolerance (Gal, Dyck, & Passmore, 2002). This assists the child in maintaining emotional steadiness and can assist the family in predictable patterns of living with minimal disruption.

Children with autism also want to learn. While many are driven toward a single focus topic, children with ASD need to learn much more in order to effectively live in their families and society. One method of enhancing the learning process is to set up systems whereby the child is granted access to their focus topic only when having attended to some small step of learning in a social or behavioral arena. Applied behavioral analysis (ABA), a specialty that requires advanced training, is one successful learning modality whereby the child is met part-way by reinforcement for each act that moves closer to the desired behavior (Grindle, Kovshoff, Hasting, & Remington, 2009).

Like other children, those with ASD want to be understood. They need to be seen holistically, their limits and their strengths. That understanding builds the foundation of care which is as critical to a child with autism as it is for any other child (Ghaziuddin, Ghaziuddin, & Greden, 2002).

## **Identifying Strengths**

Knowing the individual's strengths can assist the counselor in determining the resources of the client and their family that can be used to increase success in goal attainment thereby producing greater life satisfaction. The perspective that some limitations of a child with ASD can be utilized as strengths can be helpful. For example,

the child's intense focus on a single topic can lead to a career in that arena. Temple Grandin is an excellent example given her preoccupation with, and later success in, the cattle industry (Grandin, 1997). Dr. Grandin has a book titled *Developing Talents* (Grandin & Duffy, 2004) in which she describes the importance of, and methods for, nurturing special interests of higher functioning children with ASD into jobs fitting the struggles and strengths of ASD. Specialisterne, a Danish company, has been employing individuals with ASD to work within the information technology field. Their attention to detail and perseverance with repetitive tasks makes them ideal complements to business generalists. Born out of the desire to create a meaningful work opportunity for his son with autism, the founder of Specialisterne embraced the strengths of this disorder and now charges high fees for their specialized consulting skills (Borenstein, 2011). Chicagobased non-profit Asperitech, does similar work in employing people with Asperger's to test software (Asperitech, 2011).

Respected author, Temple Grandin, who is diagnosed with Autism notes that understanding that individuals with disorders on the autism spectrum tend to have strengths in kinds of thinking—be it visual, music and math, verbal-logical—can lead to a pairing of that strength to the methods for learning both academically and socially. A visual learner may find learning social engagement rules easier when conducted through art and building blocks. Verbal learners may do better with learning modalities involving lists, numbers, and memorization and excel in learning foreign languages or coding social rules via language patterns. Music and math thinkers prefer to learn and communicate via patterns instead of pictures. They excel at finding relationships between numbers or musical notes. Strategies that build on the child's areas of strength and appeal to his/her thinking patterns are most effective. Indeed, teaching of social skills and methods for picking up on and understanding nuances are best taught through the child's preferred thinking style (Grandin, 2006).

Another important strength of children with ASD is categorical thinking. Most are able to learn rules and quickly identify one method of categorizing information, though they are less flexible with alternative categorizations or in generalizing what they have learned (Mintz, 2008). Focusing on the strength of learning rules can lead to an extensive list of "if-then" rules the child knows for traversing social situations more effectively. If taught through a favored modality, and if much practice happens, children with ASD can overcome the difficulties of generalization of information by learning to extend their capacities with multiple categories and many rules (Minshew, Meyer, & Goldstein, 2002).

Being myth-free, coupled with perceiving limitations as potential strengths, creates a venue for growth. For example, knowing that the limitations or lack of common reciprocal social behaviors do not equate to a lack of attachment or care for others can lead to patience, understanding, and insight. Recognizing that children with ASD often have super-sensitivity to stimuli can help parents and siblings structure the home and other environments to be free of unnecessary clutter in sound, sights, smells, and touch. Reducing potential for sensory irritations such as limiting clutter and offering a firm rather than light handshake is helpful to relationship building (Blairs, Slater, & Hare, 2007). Limiting the irritations of overstimulation of clothing (removing tags, trimming seams, removing pockets, limiting texture) can be critical to keeping a child with ASD seated in a classroom and attentive to learning or to the activities around the child (Kern

et al., 2007). Several families counseled by the author have noted that after realizing the limitations of the disorder, they could see the early signs of frustration and irritation of the child as strengths. These strengths could be used as directives to assist in better meeting the child's needs—which limited the frequency, duration, and severity of negative behaviors. Limiting stimuli that was difficult for the child opened the way for the families to notice rewarding attachment based behaviors such as wanting to be in proximity but not tolerating touch, not maintaining eye contact but wanting to be within visual range, and the inclusion of others in fixed routines. These behaviors were then interpreted as strengths and included as part of the families' means of adjusting and making sense of the child's behaviors.

### **Family Stress**

While most parents and siblings of a child with ASD adjust to and accommodate the issues involved, some struggles may continue. One outcome for parents and siblings is the discomfort resulting from onlookers' actions and words (Moyson & Roeyers, 2011). It is common for children with autism to draw attention via their odd sounds and gestures, the strange gait, the lack of reciprocal social engagement, and the fixated verbalizations when they do speak. Such unwanted attention can add a sense of lack of belonging, embarrassment, as well as frustration for siblings and parents (Petalas, Hastings, Nash, Dowey, & Reilly, 2009). Another struggle arises from the amount of time and attention a child with autism absorbs given the chronic care involved in ensuring safety, meeting basic needs, and securing services. Parents are regularly exhausted providing this care, and siblings experience jealousy and anger over unbalanced parental attention and resource expenditure (Moyson, & Roeyers, 2011). Lack of relational reciprocity from the child with autism and general lack of engagement or response can create frustration for parents and siblings. Parents and siblings experience a sense of pending loss given the potential outcomes for the child with Autism. They worry about the stress and wellbeing of their parents and their own role as future caregivers (Petalas et al., 2009). Additional worries include being on the receiving end of acting out or aggressive behaviors. An internal pressure for a sibling may be the drive to compensate for the deficits of the child with ASD. This can lead the sibling to strive for perfection in order to provide joy for their parents (Harris & Glasberg, 2003). Indeed, parents and siblings have a near-constant state of discomfort without respite from daily care for an autistic child and may benefit from services of their own.

### **Treatment for Autism Spectrum Disorders**

Before treatment is employed, a thorough assessment by a trained psychometrician is needed. Measurement of academic achievement, adaptive behavior, cognitive capacity, developmental history, emotional and behavioral patterns, motor skills, sensory patterns, social capacities and behaviors, and speech and language abilities is necessary (Autism Resources: Assessment Procedures, 1997). Functional behavioral analysis may be beneficial as well. Older children may benefit from vocational assessments. Once an assessment is completed, producing a thorough picture of the child and family, specific therapies and behavioral interventions are implemented to address symptoms that are known to bring about effective outcomes for many children and

families of ASD. These can be organized into educational, behavioral, medical, occupational, and supportive interventions which are most effective when the individual's interests, strengths, and limitations are taken into account (O'Neil, 2008).

#### **Educational Interventions**

One of the most important activities conducted by a counselor working with families and children with a disorder on the autism spectrum is to educate others regarding symptomology (Hebert & Koulouglioti, 2010). Parents and siblings who have a thorough understanding of the child's issues and struggles as well as strengths and preferences have the opportunity to be more patient and helpfully involved in the child's life. School classmates of children on the autism spectrum who understand the disorder and know what symptoms mean can better accommodate the upheavals and oddities that may occur in class and on the playground. This can enhance inclusion and appreciation of the child inside and outside of school (Jones & Fredrickson, 2010). The counselor plays an important role in providing family interventions, classroom guidance sessions, and community meetings to educate about ASDs. A helpful rule of thumb is to provide as much education as can be ingested at a pace and depth appropriate to the developmental level and interest of the receiver.

#### **Social Skills Intervention**

Another type of educational intervention employed by the counselor is social and language skills training (Sansosti, 2010). Creating social skills trainings based on a list of logical, sequential, if-then, social and communication rules can assist those with less severe dysfunction. Teaching to the individual's preferred learning style and cognitive strengths can assist in more efficacious learning. The counselor should not assume the child can generalize one rule for a particular situation onto another situation (Devlin, 2009). Each issue will need its own set of rules in simple step-by-step fashion.

Social skills training may be conducted in group format (Frankel et al., 2010). An educational component teaches the rules of social engagement and reciprocity followed by practice with age-mate group members applying rules. Such practice can assist the child to be more successful in interactions with others (Sansosti, 2010). Siblings can be utilized in this capacity in order to practice successful social interactions at home (Jones & Schwartz, 2004).

### **Cognitive Behavioral Individual Counseling**

One-on-one counseling between a child with higher functioning ASD and a counselor can be beneficial, especially for more explosive or anxious children who can use assistance in emotionally regulating, reducing obsessive interests activity, and lessening excessive dependence on repetitive routines. Insight-oriented treatments are not indicated for the child with ASD but may be helpful for family members in making adjustments (White, Ollendick, Scahill, Oswald, & Albano, 2009).

### **Behavioral Interventions**

Advanced training in applied behavioral analysis can assist the counselor in effectively working with children with ASD (Grindle et al., 2009). The list of possibly helpful behavioral interventions is long and best used with an understanding of

appropriate matching of struggles to intervention. The Autism Society created a chart depicting treatments appropriate for specific symptoms by age ranges of early, elementary, and middle/high school ages. The chart illustrates comparisons between the Centers for Medicare and Medicaid Services, National Autism Center, and National Professional Development Center on ASDs regarding evidence-based practices (Autism Society, "Nonmedical Interventions," n.d.a).

#### **Medical Interventions**

There is no particular medication effective for reducing or eliminating the symptoms of autism. However, there are medications that may ameliorate specific related symptoms such as those effective for treating depression, anxiety, or obsessive compulsive disorders in those who do not have a disorder on the Autism Spectrum (Floyd & McIntosh, 2009). For example, both Risperidone and Aripiprazole may be effective for reducing irritability in ASD. Guanfacine may help with hyperactivity and attention issues. Selective Serotonin Reuptake Inhibitors (SSRIs) may help with depressive symptoms as well as repetitive behaviors (Robb, 2010). Olanzapine and Naltrexone may also assist with repetitive behaviors. Anticonvulsants are often effective in controlling seizures (Floyd & McIntosh, 2009). Counselors can provide a vital link by encouraging compliance with the medical professional's prescribed regimen.

## **Occupational Interventions**

Occupational or physical therapies may be helpful especially for children with sensory integration or poor motor skills and coordination. An assessment of the child's environments (home, school, and other) may help to identify levels of stimuli that can be reduced or activities that can be conducted that will decrease anxiety and increase motor skills (Schaaf & Miller 2005). A counselor can be a powerful support to families working to implement the advice of the occupational or physical therapist. Organizations such as libraries and movie houses utilize principles gleaned from occupational therapies and offer opportunities to children with ASDs and their families such as library times and movie nights conducive to the needs and limitations of ASD families. For example, families can participate in sensory friendly films during which lighting is up, sound is lowered, and the audience is allowed to move about as needed (Ernst & Saidenberg, 2011; Autism Society, "Sensory Friendly Films," n.d.b).

#### **Supportive Interventions**

One of the most effective roles the counselor plays is assisting the family to create and maintain routine and structure that helps all family members and keeps unnecessary stimulation down. Counselors further support the family by providing a place for family members to vent while validating feelings. Counselors help the family to adjust their thoughts and actions to fit the realities of living with a child with autism. The counselor teaches the family how to structure, build reward systems, and otherwise contribute to global family stability (Meadan, Halle, & Ebata, 2010). The counselor also acts as advocate, consultant, and treatment team member for the child and family within agencies, schools, and medical and other treatment facilities. Finally, the counselor works to educate the public regarding autism via the school system. This includes teachers, staff, administrators, and the general public through public forum and legislation to

assure the health, wellbeing, and life fulfillment of children with ASD (Russell, Kelly, & Golding 2010).

# **Final Tips**

It is critical for the counselor to be creative. Each child will have distinctly different characteristics with individual strengths and needs. Effective counseling is difficult without awareness and ingenuity. The counselor must be flexible and firm as well as intriguing. Children with ASD need a concrete and stable, yet interesting, counselor who does not over-stimulate, who understands the individual child, and who works with the child and family to create a more fulfilling life for all parties involved.

### References

- American Psychiatric Association. (2000) *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC. Author.
- Autism Resources: Assessment Procedures. (1997). Best practices for designing and delivering effective programs for individuals with Autistic spectrum disorders:

  Recommendations of the Collaborative Work Group on Autistic spectrum disorders.

  Retrieved from http://www.behavior-consultant.com/aut-dx-devices.htm
- Autism Society. (n.d.a.). *Nonmedical interventions*. Retrieved from http://www.autism-society.org/living-with-autism/treatment-options/nonmedical-interventions.html
- Autism Society. (n.d.b.) *Sensory friendly films*. Retrieved from http://www.autism-society.org/get-involved/events/sensory-friendly-films/
- Asperitech: Software testing harnessing the power of Asperger's syndrome and HFA. (2011). Retrieved from http://www.aspiritech.org/
- Bailey, D. B., Jr., Hatton, D. D., Mesibov, G., Ament, N., & Skinner, M. (2000). Early development, temperament, and functional impairment in autism and Fragile X Syndrome. *Journal of Autism and Developmental Disorders*, 30(1), 49-59.
- Bachevalier, J., & Loveland, K. A. (2006). The orbitofrontal-amygdala circuit and self-regulation of social-emotional behavior in autism. *Neuroscience and Biobehavioral Reviews*, 30(1), 97-117. doi:10.1016/j.neubiorev.2005.07.002
- Barnhill, G., Hagiwara, T., Myles, B. S., & Simpson, R. L. (2000). Asperger syndrome: A study of the cognitive profiles of 37 children and adolescents. *Focus on Autism and Other Developmental Disabilities*, 15(3), 146-153. doi:10.1177/108835760001500303
- Barnhill, G. P., & Myles, B. S. (2001). Attributional style and depression in adolescents with Asperger syndrome. *Journal of Positive Behavior Interventions*, 3(3), 175-182. doi:10.1177/109830070100300305
- Blairs, S., Slater, S., & Hare, D.J. (2007). Clinical application of deep touch pressure with a man with autism presenting with severe anxiety and challenging behavior. *British Journal of Learning Disabilities*, 35(4), 214-220.
- Bonvillian, J. D., Nelson, K. E., & Rhyne, J. M. (1981). Sign language and autism. *Journal of Autism and Developmental Disorders*, 11(1), 125-137. doi:10.1007/BF01531345

- Borenstein, D. (2011, June 30) Putting the gifts of the autistic to work. *New York Times*. Retrieved from http://opinionator.blogs.nytimes.com/2011/06/30/putting-the-gifts-of-the-autistic-to-work/
- Center for Disease Control and Prevention. (2011). *Autism spectrum disorders (ASDs)*. Retrieved from http://www.cdc.gov/ncbddd/autism/index.html
- Charlop, M. L., Dennis, B., Carpenter, M. H., & Greenberg, A. L. (2010). Teaching socially expressive behaviors to children with autism through video modeling. *Education & Treatment of Children*, 33(3), (West Virginia University Press), 371-393
- Devlin, N. (2009). The Rules Grid: Helping children with social communication and interaction needs manage social complexity. *Educational Psychology in Practice*, 25(4), 327-338.
- Ernst, A., Saidenberg, P., Access, inclusion, advocacy: Students, the autism spectrum and school libraries. (2011). *Knowledge Quest: Journal of the American Association of School Librarians*, 39(3), E1-E9.
- Filipek P. A., Accardo, P.J., Baranek, G.T., Cook Jr., E. H., Dawson, G., Gordon, B., Gravel, J.S., Johnson, C.P., Kellen, R. J., Levy, S. E., Minshew, N. J., Prizant, B. M., Rapin, I., Rogers, S. J., Stone, W. L., Teplin, S., Tuchman, R. F., Volkmar F. R. (1999). The screening and diagnosis of autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 29(2), 439-484.
- Floyd, E. E., & McIntosh, D.E. (2009). Current practice in psychopharmacology for children and adolescents with autism spectrum disorders. *Psychology in the Schools*, 46(9), 905-909. Retrieved from *EBSCOhost*.
- Fombonne, E. E. (2002). Epidemiological trends in rates of autism. *Molecular Psychiatry*, 7(3), 4. Retrieved from *EBSCOhost*.
- Frankel, F., Myatt, R., Sugar, C., Whitham, C., Gorospe, C., & Laugeson, E. (2010). A randomized controlled study of parent-assisted Children's friendship training with children having autism spectrum disorders. *Journal of Autism & Developmental Disorders*, 40(7), 827-842. doi:10.1007/s10803-009-0932-z
- Frith, U. (2004). Emanuel miller lecture: Confusions and controversies about Asperger syndrome. *Journal of Child Psychology and Psychiatry*, 45(4), 672-686. doi:10.1111/j.1469-7610.2004.00262.x
- Gal, E., Dyck, M., & Passmore, A. (2002). Sensory differences and stereotyped movements in children with autism. *Behaviour Change*, 19(4), 207-219. doi:10.1375/bech.19.4.207
- Ghaziuddin, M., Ghaziuddin, N., & Greden, J. (2002). Depression in persons with autism: Implications for research and clinical care. *Journal of Autism and Developmental Disorders*, 32(4), 299-306. doi:10.1023/A:1016330802348
- Grandin, T. (1997). Thinking the way animals do. Western Horseman, 11, 140-145.
- Grandin, T. (2006). *Thinking in pictures: My life with autism*. New York, NY: Vintage Press.
- Grandin, T., & Duffy, K. (2004). Developing talents: Careers for individuals with Asperger syndrome and high-functioning autism. Shawnee Mission, KS: Autism Asperger Publishing Company.
- Grindle, C. F., Kovshoff, H., Hasting, R. P, & Remington, B. (2009). Parents' experiences of home-based applied behavior analysis programs for young

- children with autism. Journal of Autism & Developmental Disorders, 39(1), 42-56
- Guber, P., Peters, J., McGiffert, D., Mutrux, G., Johnson, M., & Molen, G. R. (Producers), & Levinson, B. (Director). (1988). *Rain Man* [Motion picture]. United States:MGM/UA Distribution Company.
- Güçlü, B. Tanidir, C., Mukaddes, N. M., & Ünal, F. (2007). Tactile sensitivity of normal and autistic children. *Somatosensory & Motor Research*, 24(1/2), 21-33.
- Handleman, J. S., Harris, S., eds. (2000). *Preschool education programs for children with autism* (2nd ed.). Austin, TX: Pro-Ed.
- Hardman, M. L., Drew, C. J., & Egan, M. W. (2006). *Human Exceptionality: School, community, and family* (8th ed.). Boston, MA: Pearson/Allyn and Bacon.
- Harris, S. L., & Glasberg, B. A. (2003). *Topics in autism: Siblings of children with autism: A guide for families (2nd ed.)*. Bethesda, MD: Woodbine House.
- Hebert, E. B., & Koulouglioti, C. (2010). Parental beliefs about cause and course of their child's autism and outcomes of their beliefs: A review of the literature. *Issues in Comprehensive Pediatric Nursing*, 33(3), 149-163.
- Hoevenaars-van den Boom, M. J., Antonissen, A. C., Knoors, H., & Vervloed, M. P. (2009). Differentiating characteristics of deafblindness and autism in people with congenital deafblindness and profound intellectual disability. *Journal of Intellectual Disability Research*, 53(6), 548-558.
- Jansiewicz, E. M., Goldberg, M. C., Newschaffer, C. J., Denckla, M. B., Landa, R., & Mostofsky, S. H. (2006). Motor signs distinguish children with high functioning autism and Asperger's syndrome from controls. *Journal of Autism and Developmental Disorders*, 36(5), 613-621. doi:10.1007/s10803-006-0109-y
- Jones, A., & Fredrickson, N. (2010). Multi-informant predictors of social inclusion for students with autism spectrum disorders attending mainstream school. *Journal of Autism & Developmental Disorders*, 40(9), 1094-1103. Jones, C. S., & Schwartz, I. S. (2004). Siblings, peers, and adults: differential effects of models for children with autism. *Topics in Early Childhood Special Education*, 24(4), 187-198.
- Kern, J. K., Trivedi, M. H., Grannemann, B. D., Garver, C. R., Johnson, D. G., Andrews, A. A., Savla, J.S., Mehta, J.A., & Schroeder, J. L. (2007). Sensory correlations in autism. *Autism*, *11*(2), 123-134.
- Kothur, K., Ray, M., & Malhi, P. (2008). Correlation of autism with temporal tubers in tuberous sclerosis complex. *Neurology India*, *56*(1), 74-76. Liu-Gitz, L. R., & Devender, R. (2010). A replication of the RIRD strategy to decrease vocal stereotypy in a student with autism. *Behavioral Interventions*, *25*(1), 77-87.
- Maino, D. M., Viola, S. G., & Donati, R. (2009). The etiology of autism. *Optometry and Vision Development*, 40(3), 150-156.
- Meadan, H. T., Halle, J. W., & Ebata, A. T. (2010). Families with children who have autism spectrum disorders: stress and support. *Exceptional Children*, 77(1), 7-36.
- Mintz, J. (2008). Working with children with Asperger's Syndrome in the mainstream classroom: A psychodynamic take from the chalk face. *Psychodynamic Practice*, 14(2), 169-180.
- Minshew, N. J., Meyer, J., & Goldstein, G. (2002). Abstract reasoning in autism: A disassociation between concept formation and concept identification. *Neuropsychology*, 16(3), 327-334. doi:10.1037/0894-4105.16.3.327

- Moyson, T., & Roeyers, H. (2011). The quality of life of siblings of children with autism spectrum disorder. *Exceptional Children*, 78(1), 41-55.
- National Institute of Neurological Disorders and Stroke (NIH 09-4863). (2009a, Nov). Rett's Syndrome Fact Sheet. Retrieved from http://www.ninds.nih.gov/disorders/rett/detail rett.htm
- National Institute of Neurological Disorders and Stroke (NIH 09-1877). (2009b, Sept.). Autism Fact Sheet. Retrieved from http://www.ninds.nih.gov/disorders/autism/detail autism.htm
- National Research Council. (2001). *Educating children with autism*. Washington, DC: National Academy Press.
- Neumann, D., Spezio, M. L., Piven, J., & Adolphs, R. (2006). Looking you in the mouth: Abnormal gaze in autism resulting from impaired top-down modulation of visual attention. *Social Cognitive and Affective Neuroscience*, 1(3), 194-202. doi:10.1093/scan/nsl030
- O'Neil, S. (2008). The meaning of autism: beyond disorder. *Disability & Society*, 23(7), 787-799.
- Palomo, R., Thompson, M., Colombi, C., Cook, I., Goldring, S., Young, G. S., & Ozonoff, S. (2008). A case study of childhood disintegrative disorder using systematic analysis of family home movies. *Journal of Autism and Developmental Disorders*, *38*(10), 1853-1858. doi:10.1007/s10803-008-0579-1
- Petalas, M. A., Hastings, R. P., Nash, S., Dowey, A., & Reilly, D. (2009). "I Like That He Always Shows Who He Is": The perceptions and experiences of siblings with a brother with autism spectrum disorder. *International Journal of Disability, Development & Education*, 56(4), 381-399. PubMed Health. (2010, May 13). Childhood disintegrative disorder. Retrieved from http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0002502/
- Robb, A. S. (2010). Managing irritability and aggression in autism spectrum disorders in children and adolescents. *Developmental Disabilities Research Reviews*, 16(3), 258-264. doi:10.1002/ddrr.118
- Rogers, S. J., Wehner, D. E.; & Hagerman, R. (2001). The behavioral phenotype in Fragile X: Symptoms of autism in very young children with Fragile X syndrome, idiopathic autism, and other developmental disorders. *Developmental and Behavioral Pediatrics*, 22(6), 409-417.
- Russell, G. J., Kelly, S., & Golding, J. (2010). A qualitative analysis of lay beliefs about the aetiology and prevalence of autistic spectrum disorders. *Child: Care, Health & Development*, 36(3), 431-436Sansosti, F. J. (2010). Teaching social skills to children with autism spectrum disorders using tiers of support: A guide for school-based professionals. *Psychology in the Schools*, 47(3), 257-281.
- Schaaf, R. C., & Miller, L. J. (2005). Occupational therapy using a sensory integrative approach for children with developmental disabilities. *Mental Retardation & Developmental Disabilities Research Reviews*, 11(2), 143-148.
- Scahil, L., & Bearss, K. (2009). The rise in autism and the mercury myth. *Journal of Child and Adolescent Psychiatric Nursing*, 22(1), 51-53. doi:10.1111/j.1744-6171.2008.00152.x
- Shabani, D. B., Katz, R. C., Wilder, D. A., Beauchamp, K., Taylor, C. R., & Fischer, K. J. (2002). Increasing social initiations in children with autism: Effects of a tactile

- prompt. *Journal of Applied Behavior Analysis*, 35(1), 79-83. doi:10.1901/jaba.2002.35-79
- Swedo, S. (2009). Report of the DSM-V neurodevelopmental disorders work group.

  Retrieved from http://www.dsm5.org/ProposedRevision/Pages/proposedrevision.aspx?rid=94
- Tardif, C., Lainé, F., Rodriguez, M., & Gepner, B. (2007). Slowing down presentation of facial movements and vocal sounds enhances facial expression recognition and induces facial-vocal imitation in children with autism. *Journal of Autism and Developmental Disorders*, 37(8), 1469-1484. doi:10.1007/s10803-006-0223-x
- VanBergeijk, E., Klin, A., Volkmar, F. (2008). Supporting more able students on the autism spectrum: College and beyond. *Journal of Autism & Developmental Disorders*, 38(7), 1359-1370.
- Volkmar, F. R., & Rutter, M. (1995). Childhood disintegrative disorder: Results of the DSM-IV autism field trial. *Journal of the American Academy of Child and Adolescent Psychiatry*, 34, 1092–1095.
- White, S., Ollendick, T., Scahill, L., Oswald, D., & Albano, A.M. (2009). Preliminary efficacy of a cognitive-behavioral treatment program for anxious youth with autism spectrum disorders. *Journal of Autism & Developmental Disorders*, 39(12), 1652-1662.
- Woodbury-Smith, M. R., Volkmar, F. R., (2009). Asperger syndrome. *European Child & Adolescent Psychiatry*, 18(1), 2-11.

Note: This paper is part of the annual VISTAS project sponsored by the American Counseling Association. Find more information on the project at: http://counselingoutfitters.com/vistas/VISTAS\_Home.htm