



## Information Sheet Spring 2013



### *Communication and Social Impairments in Autism Spectrum Disorders*

*By Jessica A. Moore, Ph.D. & Caroline I. Magyar, Ph.D.  
Rochester Regional Center for Autism Spectrum Disorders  
University of Rochester Medical Center*

#### **Overview**

Communication and social impairments are among the hallmark clinical features of an autism spectrum disorder (ASD). Communication impairments vary widely across individuals with ASD. These can range from the absence of speech or severe delay in speech as well as language delay, all the way to well-developed speech and language skills but difficulties with functional communication (e.g. expressing one's needs, wants, and preferences), conversations, and pretend or imaginative play.<sup>1,9</sup> In individuals with speech, atypical speech features are often noted and can include difficulties regulating voice volume and rate of speech, and flat or mechanical tone and inflection. Social impairments can include poor eye contact and eye gaze for regulating social interactions, limited or inappropriate gestures and body posture, difficulty reading others and interpreting social cues and rules, difficulty engaging in reciprocal social interactions, and difficulty taking others' perspectives. Both communication and social impairments can vary widely between individuals and can change in the same individual over time as he/she develops, with improvements often noted in abilities with age.

Currently, researchers believe that these impairments are the result of genetic abnormalities in the brain that affect language development and the ability to think about, understand, and interact within the social environment.<sup>5,9</sup> During day to day interactions these difficulties can cause the individual with ASD to seem aloof, odd, disinterested, awkward and/or inappropriate. This can lead to disruptions in the development of social relationships including family relationships, friendships, and relationships with teachers, co-workers, and supervisors. Assessment and treatment is essential to reduce the effect communication and social impairments have on an individual's well-being and functioning.

The assessment of communication and social impairments needs to be comprehensive, on-going, and should include the use of multiple-methods to evaluate all aspects of an individual's communication and social skills.<sup>8,4</sup> Communication assessment is typically completed by a speech-language pathologist, preferably one who has training in communication related disorders. In some cases, particularly for those individuals with significant delays or impairments in speech, a speech-language pathologist with training and experience in Augmentative and Alternative Communication (AAC) systems should complete the assessment. Comprehensive assessment will typically include evaluation of attention to and understanding of language, speech and communication abilities, vocabulary, features of speech (e.g., tone, rate, volume etc), and use of speech and language (often called pragmatics, which can include social skills). Social skills assessment is typically completed by a school and/or clinical psychologist or social worker/counselor. Common assessment methods include formal language measures for vocabulary, receptive and expressive language, and features of speech; rating scales and checklists for social skills, and observational methods for features of speech, communicative competence, and pragmatics/social skills. Assessment should include the evaluation of communication and social skills across various contexts so that a wide sample of abilities can be measured. In addition, assessment should include interview of caregivers and teachers/instructors/supervisors for information on how well they think the individual communicates and/or socializes within day-to-day situations.<sup>7</sup>

Treatment for communication and language impairments is typically provided by a speech-language pathologist and for social impairments, by a psychologist or social worker/counselor. Treatment methods with the most scientific support for their effectiveness come from the field of applied behavioral analysis (ABA). Methods include discrete trial training, pivotal response training, direct instruction, naturalistic methods, verbal behavior training, functional communication training,<sup>4,5,9</sup> and social skills training including peer modeling and Social Stories<sup>TM,3</sup>. A common AAC used in the treatment of communication impairments is the Picture Exchange Communication System<sup>TM</sup> (PECS). Several comprehensive treatment programs have also been reported to be effective for treating communication and social impairments including the SCERTS® and the LEAP programs. Regardless of the treatment approach used, it is important that the clinician assess and evaluate the individual's response to intervention to ensure that treatment goals and methods used are appropriate and the individual is making progress.

## Find Out More

### Books/Training Manuals/DVDs:

1. Gray, C. (2010). *The New Social Story Book*. Arlington, TX: Future Horizons.
2. McGinnis, E. (2011). Skillstreaming training series. There are 3 different social skills training guides developed by McGinnis covering the child and adolescent age range. Visit [www.researchress.com](http://www.researchress.com) to learn more or to order one or more training guides.
3. Picture Exchange Communication System (PECS) visit the website to order the training manual and other PECS resources: [www.pecsusa.com](http://www.pecsusa.com)
4. For a self-guided training manual and DVD on Teaching Social Skills Using Direct Instruction, visit the Rochester Regional Center website at: [www.golisano.urnc.rochester.edu](http://www.golisano.urnc.rochester.edu) and look under the Community Education and Technical Assistance Page.
5. For additional social skill books and training resources, Google search the following terms: 'social skills books autism'

### Websites

1. To learn more about best-practices in treating communication and language impairments in ASD, visit the American Speech-Language Hearing Association's (ASHA) website and review their guidelines <http://www.asha.org/docs/html/GL2006-00049.html>
2. For more information on PECS<sup>TM 2</sup>: <http://www.autism-society.org/living-with-autism/treatment-options/pecs.pdf>
3. For an online resource on Social Stories<sup>TM</sup> visit the Gray Center website at: <http://www.thegraycenter.org/social-stories/how-to-write-social-stories>

### Social Programs and Opportunities in the RRCASD Region

1. AutismUp in Rochester, NY offers a variety of social opportunities for individuals with ASD. Visit their website at: <http://autismup.org/programs/>
2. Summer Max Program at Canisius College in Buffalo, NY. The Institute for Autism Research offers a 5 week summer camp program for social skills enhancement. Visit their website at: <http://www.canisius.edu/autism-research/participate/>
3. Social Skills Training for Youth with Autism (STARS) Program at Enable, Syracuse NY. Enable offers social skills training to children and teens with ASD. Visit their website at: <http://www.enablecny.org/services/school-aged-children/social-skills-training-for-youth-with-autism>
4. SUNY Upstate Medical Center in Syracuse NY. This Center offers a social skills group for children with ASD ages 7-12 years. Contact Dr. Antshel at: 315-443-9450
5. The Kelberman Center in Utica NY. The Center offers a variety of social opportunities for individuals with ASD. Visit their website at: <http://www.kelbermancenter.org/camps/programs-for-teens/>
6. The Autism Center at Ontario Arc, Canandaigua, NY. The Center offers a variety of social opportunities for individuals with ASD. Visit their website at: <http://www.ontarioarc.org/autism-services>
7. Meetup Group for Women with ASD, Syracuse, NY offers social opportunities for women with ASD. Visit their website at: <http://www.meetup.com/CNY-Aspergers-Women/>
8. Strong Behavioral Health, Child & Adolescent Outpatient Services in Rochester NY. The clinic offers social skills and anxiety management groups for children and teens. Call (585) 279-7800 for more information.

### Treatment Programs Listed in the Information Sheet

To learn more about the SCERTS® Model: <http://www.scerts.com/> & the LEAP Program: <http://www.pelecenter.org/leap.php>

## References

1. American Psychiatric Association (APA). (2000). *Diagnostic and statistical manual of mental disorders* (4<sup>th</sup> ed.). Washington, DC: American Psychiatric Association. Text Revision.
2. Bondy, A., & Frost, L. (1994). The Picture Exchange Communication System. *Focus on Autistic Behavior*, 9, 1-19.
3. Gray, C. & Garand, J. (1993) 'Social Stories: Improving Responses of Students with Autism with Accurate Social Information', *Focus on Autistic Behavior* 8(1): 1-10.
4. Matson J. & Sturmey P. (Eds.) (2011). *International handbook of autism and pervasive developmental disorders*. New York, NY: Springer. \*Various chapters.
5. National Autism Center (NAC). (2009). *National Standards Report*. Randolph, MA: National Autism Center.
6. Reichow, B., Doehring, P., Cicchetti, D., & Volkmar, F. (2011). *Evidence-Based Practices and Treatments for Children with Autism*. New York, NY: Springer. \* Various chapters.
7. Rutter, M., Le Couteur, A., & Lord, C. (2003). *Manual for the ADI-WPS version*. Los Angeles: Western Psychological Services.
8. Volkmar, F., Paul, R., Klin, A., & Cohen D. (Eds.) (2005). *Handbook of autism and pervasive developmental disorders, Vol. 1, Diagnosis, development, neurobiology, and behavior* (3<sup>rd</sup> ed.). Hoboken, NJ: Wiley. \*Various chapters.
9. Volkmar, F., Paul, R., Klin, A., & Cohen D. (Eds.) (2005). *Handbook of autism and pervasive developmental disorders, Vol. 2, Assessment, interventions, and policy* (3<sup>rd</sup> ed.). Hoboken, NJ: Wiley. \*Various chapters.

\* This resource is provided for informational purposes only. Information should not be used as a substitute for professional assessment and judgment. Although the information is believed to be accurate and reliable, all information is provided "as is" without warranties of any kind, either expressed or implied, including but not limited to merchantability, non-infringement or fitness for a particular purpose. The University of Rochester shall not be liable for any damages, including direct, indirect, special or consequential damages, which may arise out of the use of the information contained within this resource.