



KIT

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Resource Article



This month's KIT article, "When Simon Says" Doesn't Work: Alternatives to Imitation for Facilitating Early Speech Development', provides a survey of research supporting six different evidenced-based strategies used for working with families with children who are not talking or imitating.

1. Provide access to Augmentative & Alternative Communication (AAC): Use of manual signs, communication boards/book, etc. are found to support language development by helping children build a meaningful framework for producing new sounds and words. A core vocabulary book (e.g., small photo album) with photos/pictures of a child's preferred people/places/activities is a nice example.
2. Minimize Pressure to Speak: By decreasing communicative pressure (e.g., avoiding direct requests for imitation and "test questions") and instead following the child's lead and using familiar interactions and naturalistic settings, the child's motor performance (e.g., speech production) may be enhanced. Use of a puppet as a conversational partner was successfully used to decrease communicative pressure for some children.
3. Imitate the Child: Imitating the sounds and words of a child reinforces the child's efforts at speech and serves as a model for imitation as a skill. Greenspan's Floortime and the Hanen Program for Parents both tout imitation as not only an important skill to develop but also a conduit to increasing positive interactions with very young children. For example, when the child babbles, "baba" repeat back to the child, "Baa baa black sheep".
4. Use Exaggerated Intonation and Slowed Tempo: Slowing down and exaggerating the intonation of speech involves neural mechanisms used to "bootstrap" speech production. Singing has been found to increase brain activity in the right hemisphere, increase vocalizations, and increase verbal imitation.
5. Augment Auditory, Visual, Tactile, and Proprioceptive Feedback: Sensory feedback provides additional cues to help guide the child toward closer approximate the target sound/word. Some examples that may include: microphones (e.g., PVC pipe, echo microphone), mirror play, gestures, puppet with moveable mouth, touch cues, snack foods placed on articulators.
6. Avoid Emphasis on Nonspeech-Like Articulator Movements - Focus on Function: Sensory motor control for speech is somewhat distinct from non-speech oral

motor activities. There is a lack of clinical support for the use of non-speech oral motor activities (e.g., blowing bubbles, licking a lollipop). However, these same activities can be used to motivate children.

Children who are slow to talk and/or imitate pose a significant challenge for their families and for early interventionists, but the strategies described above have clinical support behind them.

DeThorne, L.S., Johnson, C. J., Walder, L., & Mahurin-Smith, J. (2009). When "simonsays" doesn't work: Alternatives to imitation for facilitating early speech development. *American journal of Speech-Language Pathology, 18*, 133-145.

On the WWW



The Interdisciplinary Council on Developmental and Learning Disorders (ICDL) may best be associated with the late Stanley Greenspan and the Developmental, Individual Difference, Relationship-based DIR Floortime Model. ICDL is a non-profit organization, founded by Greenspan, MD and Serena Wieder, PhD to help identify, prevent, and treat developmental and learning disorders in children.

<http://www.icdl.com/started/homeintervent/index.shtml>

The link above details three types of home interactions to be targeted by parents with their children, especially those 'difficult to engage' children. Although we know that children learn best through play and routines, for some families this does not happen easily, nor does it happen naturally. The following interactions described in this month's website provide a structure to play and routines that can be helpful in improving

engagement, attention, communication and problem solving: (1) Spontaneous, Follow-the-Child's Lead Floortime; (2) Semi-structured Problem Solving; (3) Motor, Sensory, and Perceptual-Motor Activities and Visual-Spatial Activities. Check out the link above to learn more about these strategies.

What Do the Data Say?

What is the prevalence of Autism Spectrum Disorders in the United States?



This question was examined and reported upon in the Center for Disease Control and Prevention Morbidity and Mortality Weekly Report (Surveillance Summaries, Dec. 18 2009/58 [SS10]; 1-20) by Catharine Rice, PhD via systematic retrospective review of evaluation records in 11 sites from the Autism and Developmental Disabilities Monitoring Network (ADDM). Age 8 years was considered by the author to be a reasonable index age for Autism Spectrum Disorders (ASD). The reporting period was 2006. Those children with a diagnosis of ASD, including Pervasive Developmental Disorder not otherwise specified and Asperger disorder, were considered in this review.

Results suggest that in 2006, the prevalence (i.e., the percentage of a population that is affected at a given time) of Autism in 8 year old children in the reported 11 sites* was 9 per 1000. The range of prevalence varied from 4.2 (Florida) to 12.1 in (Arizona and Missouri). For most sites, however, the range varied less significantly from 7.6 to 10.4%. Male children were more likely than female children to have ASD; the male to female ratio ranged from 3.2 to 1 (Alabama) to 7.6 to 1 (Florida). Out of 1000 male children, 14.5 were diagnosed with ASD whereas only 3.2 out of 1000 girls were diagnosed with ASD. The median age of earliest documented ASD diagnosis ranged from 41 months (Florida) to 60 months

(Colorado); it was noted, however, that concerns regarding ASD were present in evaluation records before the age of 36 months for the majority of these children.

Another significant finding was striking increase in the number of reported cases ASD. Ten of the 11 sites provided surveillance data from 2002 and 2006 and when these were compared, 9 of the 10 reported an increase in the number of reported ASD cases, on average roughly 55%.

Finding Highlights:

- Nine in 1000 8-year-old children had a diagnosis of ASD in 2006.
- ASD is more common in boys than in girls.
- Age of ASD diagnosis ranged from 41 to 60 months, though signs of ASD were present before age 36 months.
- ASD is on the rise.

*The states and corresponding site institutions included for this review included: Alabama (U of Alabama-Birmingham), Arizona (U of Arizona), Colorado (Colorado Dept of Public Health and Environment), Florida (U of Miami), Georgia (CDC), Maryland (Johns Hopkins U), Missouri (Washington U-St. Louis), North Carolina (U of North Carolina-Chapel Hill), Pennsylvania (U of Pennsylvania), South Carolina (Medical U of South Carolina), and Wisconsin (U of Wisconsin-Madison).

To see the complete article and learn more, visit the website below.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5810a1.htm>

Consultation Corner



From February through July 2011, we are excited and honored to have Dr. Hannah Schertz from Indiana University in Bloomington as the KIT consultation corner expert addressing the topic *Understanding and Facilitating Joint Attention in Young Children*.

Why is joint attention important in child development?

In the previous issue readers of the newsletter learned about joint attention, the process of visually sharing attention about something of interest to both the child and parent. Joint attention typically emerges by the end of the first year of life but presents difficulty for children who will later receive a diagnosis of an autism spectrum disorder (ASD). When engaging in joint attention, both the child and parent exchange glances between the partner and the object to learn about the other person's interest in the object. The parent may be energized by the child's interest, creating additional excitement and a motivating context for learning

This social sharing is enjoyable, as we see by the child's smiles, but it is important for two other important reasons as well. First, joint attention is a vehicle for learning to communicate because it gives the child something interesting to communicate about. When the child and parent are engaged with an object together, the parent often talks about the object, perhaps by labeling or describing it. Because the child is attending to and interested in both the parent and the object, s/he is tuned in to the learning process and in an active learning mode. Research has found that when parents talk about what a child with ASD is focusing on (instead of trying to direct their attention elsewhere), the child shows better outcomes in both joint attention and language (Siller & Sigman, 2002).

Joint attention appears to serve as a precursor or building block for language, and verbal social communication appears to depend on the development of joint attention. In fact, children with and without later diagnoses of ASD have been found to develop verbal language soon after joint attention is established (Charman et al., 2003; Tomasello & Farrar, 1986). Vygotsky (1934/1986) also showed us the importance of social engagement for language learning.

The second reason that joint attention is important is that it helps the child learn to interact in social ways and to enjoy interacting with people. Much of early learning is embedded in social interaction. For young children with early signs of ASD, this social aspect of learning brings particular difficulties. They are relatively proficient at preverbal attention sharing when it is for the purpose of requesting but have more difficulty when it is for the purpose of commenting (i.e., social sharing). It is social sharing that occurs when children engage in joint attention. By engaging in the social act of nonverbal commenting (or responding to others comments), the child learns to take the communication partner's perspective into account and begin to understand what makes other people tick.

In sum, joint attention is an important developmental milestone in typical development, but it has special importance for young children with ASD. The benefits are that it provides a venue that is well tailored for learning to communicate and it helps the child learn to participate in a social world by making them aware of others' perspectives.

References

Charman, T., Baron-Cohen, S., Swettenham, J., Baird, G., Drew, A., & Cox, A. (2003). Predicting language outcome in infants with autism and pervasive developmental disorder. *International Journal of Language & Communication Disorders, 38*, 265-285.

Siller, M., & Sigman, M. (2002). The Behaviors of Parents of Children with Autism Predict the Subsequent Development of Their Children's Communication. *Journal of Autism & Developmental Disorders, 32*(2), 77-89.

Tomasello, M., & Farrar, M. J. (1986). Joint attention and early language. *Child Development, 57*(6), 1454.

Vygotsky, L. (1934/1986). *Thought and language* (A. Kozulin, Trans.). Cambridge, MA: MIT Press.

Continuing Education for KIT Readers



The Comprehensive System of Personnel Development (CSPD) is offering a continuing education opportunity for KIT readers.

In line with the focus on *Understanding and Facilitating Joint Attention in Young Children*, readers are invited to receive continuing education contact hours for reading the monthly KIT publications (February through June) and completing a multiple-choice exam about the content covered in these KITs.

If you are interested, take the exam online at www.edis.army.mil and upon successful completion, you will receive a certificate of non-discipline specific continuing education contact hours.

**Please send your Consultation Corner questions
and KIT ideas via email to
ediscspd@amedd.army.mil**

