



KIT

“Keeping In Touch”

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Resource Article



This month’s KIT resource article, “Joint Attention and Vocabulary Development: A Critical Look” by Nameera

Akhtar & Morton Ann Gernsbacher challenges the assumption that joint attention is a necessary and sufficient precursor to vocabulary development. In doing so the authors do not dispute that there is a correlation between joint attention and vocabulary development.

Akhtas and Gernsbacher question the causal relation between joint attention and vocabulary development. Joint attention is typically conceptualized as an explicit shared visual attention between a dyad and a third object/event. Considered in this way, they examined the connection between word learning *without* joint attention (as in the case of typically developing children, children with Autism and children with Williams syndrome) and the lack of word learning *with* joint attention (as in the case of children with Down syndrome). They begin by deconstructing the notion of joint attention

and in doing so shed light on the connection between joint attention and word learning in children.

When considering joint attention, the authors suggest that *mutual engagement* may not be as important a factor in vocabulary development as a *shared focus*. The difference is slight but may explain some of the correlation between word learning and joint attention. Joint attention can be further understood by examining initiating vs. responding to joint attention, overt vs. covert joint attention, by considering alternative modalities of joint attention (rather than solely visual) and by considering cultural variations of joint attention.

Responding to joint attention, as opposed to initiating joint attention, was found to be most highly correlated with vocabulary development in typically developing children. The distinction between responding and initiating could explain why children with Autism and those with Williams syndrome have developed vocabularies even though they have poor joint attention – in each group the prominent deficit in joint attention is more pronounced for initiating than for responding to joint attention.

There is plenty of research studying the more overt/explicit behaviors indicating joint attention, such as gaze shift/looking, pointing, head turns. However, the authors caution that looking doesn't equate to attending and conversely not looking does not equate to not attending. The idea that joint attention encompasses more covert/implicit types of behavior (e.g., indirect observation, overhearing) is supported by the example of a typically developing child learning words from a person with whom they are not interacting (e.g., mutually engaged).

Joint attention is also generally examined via the visual modality. In spite of this, expanding the idea of joint attention to include non-visual modalities (e.g., auditory, tactile, kinesthetic, etc) is promoted. They offer the example of word learning experiences in blind children; they also site a study in which children were taught the name of an object that they hadn't yet seen via auditory and tactile cues. And finally, cultural variations influence the way joint attention is manifested, yet the standard way of studying joint attention has been one-on-one (i.e., dyadic) whereas others tend to be polyadic (group). For example, Guatemalan Mayan toddlers are more likely to maintain simultaneous attention to multiple events/objects/people when compared to middle-class American toddlers who are more likely to attend to one thing at a time. The standard definition of joint attention most often does not take into account the polyadic (group) interactions and given the increasing numbers of children in the United States attending group childcare settings, perhaps it should.

Akhtar, N. & Gernsbacher, M. A. (2001). *Language and Linguistic Compass* 1/3, 195-207. Retrieved May 2011 from http://psych.wisc.edu/lang/pdf/akhtar_jointattention_2007.pdf

On the WWW

<http://www.autisminternetmodules.org/index.php>

This month the KIT web resource is an amazing compilation of more than 30 modules on autism and autism related intervention.



Following is a list of just a few of the modules:

- Antecedent-based intervention
- Discrete trial training
- Naturalistic intervention
- Parent-implemented intervention
- Rules and routines
- Structured teaching
- Time delay
- Visual supports

Each module includes useful information as well as a pre and post assessment. Several modules include videos, step-by-step instructions as applicable to the intervention, case studies, frequently asked questions, discussion questions, and activities. Be sure to check out this site as it also contains great resources for interventionists and parents.



What Do the Data Say?

Is there a causal relationship between the MMR vaccine and autism?



It was the 1998 study by Dr. Wakefield published in the British medical journal the Lancet that fostered the notion that vaccines may cause autism. In 2010, Wakefield's flawed study was retracted. It was found that Wakefield did not disclose that he was a paid adviser in legal cases involving families suing vaccine manufacturers for harm to their children and he handpicked children for his research. Yet, while other studies since 1998 have found no link between vaccines and autism, parents remain fearful. This may be in part due to the possibility that the early signs of autism are often not recognized until the child nears two years of age, when many childhood vaccines are given. Extensive reports from the American Academy of Pediatrics, the Institute of Medicine and the Centers for Disease Control and Prevention conclude that there is no proven association between Measles-Mumps-Rubella (MMR) vaccine and autism.

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*.

What are effective intervention strategies for teaching/facilitating joint attention?

Previous articles discussed joint attention, its importance in early development, its precursors, and why to promote it early for toddlers with autism spectrum disorders (ASD). In this article I discuss strategies for promoting joint attention.

Recall that looking at faces and turn-taking appear to serve a foundational role in the development of joint attention. Therefore, if we follow a natural developmental path, helping the child to look at the parent's face more consistently is a good first step since we know that this presents some difficulty for toddlers with ASD. In the beginning, the interventionist should educate the parent about the importance of this step (how it provides a building block for social sharing of attention which, in turn, is a building block for language) and what is expected of the child. Parents can then be guided to use strategies such as holding a desired object near their face during play, moving their face in and outside the child's field of vision, waiting expectantly, or using games such as peek-a-boo to promote looking at the parent's face. It is a good idea to encourage parents to plan several play sessions each day in which they focus on encouraging each stage of intervention. In addition, they can give special attention to integrating this into every activities and interactions.

To promote turn-taking, after educating the parent on its importance in preverbal social communication (see previous

articles), the interventionist can help the parent devise rhythmic back-and-forth games based on the child's interests. It is a good idea to refrain from using toys since they can distract the child from the turn-taking play. A good way to begin is to imitate a natural action that the child makes and see if the child will respond in turn. After responding with exact imitation of the child's action and establishing a rhythm of play, the parent can vary the game in interesting ways. The parent should be encouraged to follow the child's lead and to help the child feel a sense of order in the repetitive play.

After the child has engaged consistently in the repetitive back-and-forth turn-taking play, it is a good time to introduce toys and to help the child respond to the parent's joint attention overtures. Joint attention involves "showing" an unfamiliar toy to the child and encouraging the child to exchange looks between the toy and the parent (who is showing excitement about the toy). It is important that these looks be initiated by the child rather than forced by the parent. The goal is to entice the child to exchange looks between the toy and the parent but not to direct the child to do so or to physically move the child's face to force a look.

As the child begins to respond to the parent's lead in joint attention interaction, often the child begins to initiate joint attention on his or her own. As the child becomes more tuned into the parent's shared interest in the toy, s/he is likely to "show" the toy to the parent rather than always following the parent's lead. As the child begins to engage in joint attention, the parent can experiment with alternative ways of "showing", such as using pointed

looks, holding out an object, pointing to a distant object, or talking about the object.

For toddlers with ASD, these intervention strategies are important for three reasons. First, they meet the child at his or her level of readiness, the preverbal level. Second, the approach hones in on the developmental domain of social communication, the area of greatest challenge for them. Finally, the focus on joint attention and its developmental precursors sets the stage for the natural development of verbal forms of social communication.

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