

COMMUNICATION CONSIDERATIONS A-Z

Social Cognition & Theory of Mind

1. What is social cognition and theory of mind?

Humans are social animals and we spend a great deal of time in social relationships. As children develop, they gain a better understanding of peers and adults around them. They become aware that people can differ on what they believe, know, and want. Their values and goals can be different from our own. Some people call this "mindreading other people's minds". Scientists often call this kind of understanding social cognition or theory of mind.

Adults and children use our understanding of social cognition everyday. As young as 18 months of age, infants look to a parent's face for "advice" in situations, such as how should I feel about that big dog? They seem to look for information about what the parent is thinking about this situation – is it frightening or not? Later, at age 4, children can typically understand that people can have misunderstandings and false beliefs, as when mom thinks dad will be home after work, but he forgot to tell her that he had a doctor's appointment. Or that Little Red Riding Hood really thought the wolf was grandmother (but the reader does not). A student in middle school uses social cognition when he can discuss the role of differing beliefs and attitudes in the Civil Rights movement of the 60's and contrast them with beliefs and attitudes that are pervasive today. As adults, we use our skills in social cognition everyday, such as when we prepare a presentation to inform colleagues, determining what information they already know, what they need to know, and what potential misunderstanding there might be. We use these skills when we buy a present for loved one, trying to get the perfect gift.

In short, our ability to understand the attitudes, beliefs, values, desires, and knowledge of others plays a large role in our lives.

2. What issues are there related to social cognition and children with a hearing loss?

Deaf and hard-of-hearing students are at risk for delays in social cognition

The content of our minds is not a visible thing. We can only figure out what others know or believe from their behavior, such as their facial expression, what they do, and from what they say. Our communication contains a lot of information about what we think and believe. For example, when a parent walks about the house with a puzzled expression and says, "I thought I put my keys in the kitchen but they are not there!", the child gets explicit information about what the parent is thinking.

Research shows that language provides a great deal of raw material for the development of social cognition and theory of mind. For hearing children, parents who talk more about what they are thinking and feeling have children who are more advanced in these skills.

For children who are deaf or hard of hearing, research has shown that a child's language skills are highly correlated with social understanding and theory of mind. Children with more age-appropriate language skills are more likely to have age-appropriate skills in social cognition. This is true for both children learning only spoken English, as well as those using various forms of sign language, including ASL. Children with cochlear implants are also at risk.

We also know that for families who incorporate sign communication, the parent's skills in signing predicts their child's skills related to theory of mind and social cognition. Parents who know sign vocabulary for words like think, know, pretend, and believe are more likely have children with better skills in social cognition. Language matters and how parents use language matters.

Skills in social cognition can affect academic learning

There are many academic areas where skills in social cognition are essential to learning. In reading, skills in social cognition allow a child to understand the perspective of different characters, such as distinguishing the perspectives of Little Red Riding Hood and the wolf. The earliest picture storybooks contain a large number of references to how people feel, what they believe, and their misunderstandings and deceptions. Without understanding these notions, stories are often a boring sequence of physical events.

Skills in social cognition also play a role in understanding many aspects of history, social and cultural studies, art, and politics. For example, when learning about the concepts of civil disobedience that were the foundation for the American Civil Rights movement in the 60's, one has to understand the beliefs that surround concepts of nonviolence, discrimination, equality, and fundamental concepts of human rights. Much of what we learn is embedded in the beliefs and understandings of people at that point in time, in contrast what we currently know.

Skills in social cognition affect social interaction

Schools are social environments and in addition to learning academic skills, children and youth are learning how to live among others. Young children need to learn fundamental principles of sharing,

kindness, and solving problems through talking, rather than physical conflict. This requires perspective taking. Older children learn to negotiate with peers and parents. They become better at considering the feelings of others in their actions and communication. These are all skills that are essential to our adult lives both at work and at home. Social skills are important to our personal lives and our careers.

Children at risk in social skills may have more difficulty managing social interactions at school. They may miss social cues that children with more mature skills might pick up. For example, if a young child tries to "win" a social debate about a fact, it might be fine to say, "My mom told me that it was true". But if a teen tries this same strategy, it might seem immature to peers.

As we all know, middle school and high school can provide intense experiences related to social groups and peer acceptance, rejection, or neglect. These directly affect a student's sense of self, self-esteem, and their sense of a place in the world. A student's ability to interact with peers has widespread ramifications in aspects of social development.

3. What should every parent or professional know about social cognition?

A student's access to the social life of the classroom is important to development of social skills, to social-emotional well-being, and to academic success.

Some educational programs may view social issues as secondary to academic issues. They may not see the school's role as supporting the development of social skills. However, if your child or student is isolated from peers and teachers by communication barriers and language delays, social issues must be addressed. It is completely appropriate to request IEP goals that focus on these issues.

Any placement with hearing peers must be evaluated with consideration to how well the student is an authentic member of the classroom, with true opportunities for social interaction.

Summer camps for children with a hearing loss provide a good opportunity for peer interaction without the social awkwardness of interpreters or noisy listening environments.

An educational placement with an interpreter may make social interaction and integration more difficult in some situations.

Accessing education through an interpreter is complex. It is very easy for the teacher and the classroom teacher to view the interpreter's job as conveying the teacher's talk to the students. But this limited view of the interpreter's role may leave a student even more isolated from his or her hearing peers. The educational team may need to work with the interpreter so that interaction with peers is facilitated. The interpreter may need to work with the hearing peers on how to use an interpreter. They may need help in understanding that social communication with the deaf or hard-of-hearing student is doable and desirable with an interpreter.

Parents and teachers can help develop skills in social cognition and theory of mind.

Talking about your feelings, beliefs, values, and thoughts is an important way to help a child develop these skills. Exposure in the home is essential. So think aloud, especially about misunderstandings, differing beliefs, and confusions. This helps your child "see" into your mind.

Storybooks and movies are a great source of concepts related to social cognition. Even preschool books have these concepts. Sometimes the concepts are essential to the story but not really discussed. For example, in Little Red Riding Hood, most versions never say, "Little Red Riding Hood thought the wolf was grandmother." You have to figure it out when she says, "What big eyes you have, grandmother!" You can help by discussing these concepts in addition to just reading the story. Help make what the characters are thinking more obvious by putting their thoughts and emotions into language. Don't depend on your child's ability to figure it out.

Many deaf and hard-of-hearing students develop healthy skills in social cognition.

Being at risk for delay does not mean all children will be delayed. Expose, expose, expose and have high expectations for your child to talk about beliefs, emotions, and thoughts. Don't assume it is too complex for your child. Hearing children start talking about these concepts around age three years old.

4. Where else can I find information?

Astington, J. W. (1993). The child's discovery of the mind. Cambridge, MA: Harvard University Press. Wikipedia has a readable overview of Theory of Mind, which is a type of skill in social cognition: en.wikipedia.org/wiki/Theory_of_mind

Theory of Mind and Intervention at http://www.speechpathology.com/articles/article_detail. asp?article_id=249

Author

Brenda Schick, PhD, studies the development of language, including sign language, as well as its relationship to cognition in deaf children. Recent work has focused on the development of a Theory of Mind in deaf children and how it relates to a child's language skills. Dr. Schick is also interested in the factors that affect learning in an interpreted education. She is the co-developer of the Educational Interpreter Performance Assessment (EIPA), a tool designed to evaluate the skills of interpreters in public schools and the developer of www.classroominterpreting.org. She is the co-developer of a sign language curriculum designed for parents, Sign With Me, as well as a series of children's books that have been translated into ASL by deaf adults and children, Read With Me. She has served as the school board president for Rocky Mountain Deaf School, a bilingual charter school for deaf children in metro Denver. She was a classroom teacher for oral deaf children. She is currently an associate professor at the University of Colorado at Boulder, in the area of child language development. She considers herself lucky, having grown up in a Deaf family.

Communication Considerations A to Z^{∞} is a series from Hands & Voices that's designed to help families and the professionals working with them access information and further resources to assist them in raising and educating children who are deaf or hard of hearing. We've recruited some of the best in the business to share their insights on the many diverse considerations that play into communication modes & methods, and so many other variables that are part of informed decision making. We hope you find the time to read them all!