



Let's Pretend: The relationship between play and theory of mind in typical children and children with ASD

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Definitions

Joint attention (JA): the triadic co-ordination of attention between the child, another person and an object or an event. Joint attention is a precursor to theory of mind.

Pretend Play: “acting as if something is when it is not” (Rutherford, Young, Hepburn & Rogers, 2007, p. 1025).

Mental state terms: words used in talking about the mind e.g., think, know, believe, expect, guess. In *TalkAbility*[™], mental state terms are referred to as “tuning-in” words.

Theory of Mind: The ability to understand that other people’s thoughts and feelings differ from our own. We call it a theory because no one can ever know exactly what’s going on in someone else’s head, including that person’s beliefs, intents, desires and knowledge. The theory of mind (ToM) impairment in autism describes a difficulty someone would have with perspective taking. In *TalkAbility*, a theory of mind is referred to as ‘tuning-in’ (Sussman, 2006).

Socio-dramatic Play: This kind of play always involves playing with others. In its most

highly developed form, it looks like a real dramatic performance because there is a plot with a beginning, a middle and an end (Sussman, 2006).

The links between pretend play and theory of mind

There is a wide body of research that shows links between the development of pretend play and a theory of mind in typically developing children (Astington & Jenkins, 1995; Lalonde & Chandler, 1995; Taylor & Carlson, 1997). More specifically, it has been suggested that pretend play is a stepping stone in the child's development that facilitates theory-of-mind abilities (Vygotsky, 1978). According to Lillard, "Many theorists have suggested that fantasy play may even cause social-cognitive development" (1993, p.351).

The fact that children engage in pretend play long before they develop a theory of mind, lends support to the argument that pretend play might provide the foundation for the kind of flexible thinking required for the development of a theory of mind. Schwebel, Rosen and Singer (1999) propose that, "Accurate inference of a pretender's thoughts or beliefs has been linked to a later mastery of perspective taking and theory-of-mind tasks" (p.334). In order to understand the relationship between pretend play and theory of mind, let's look at the underlying skills required both for pretending and the understanding of other people's minds, especially understanding different perspectives. Leslie (1987), in a seminal paper, identified three skills that seem to be involved in creating a make-believe scenario. These involve the ability to:

- substitute one object for another by pretending that the object is something else (e.g., using a banana for the phone or a stick for a thermometer).
- create the make-believe by assigning properties to the object or the situation (e.g., pretending the doll's face is dirty or there's a fire in the house).
- use an imaginary object (e.g., pretend that a spoon is there when it's not).

So, it seems that pretend play requires the child to coordinate multiple perspectives i.e., to hold two realities about the same thing in his mind. He has to think of the real object and what he's supposed to imagine the object is. To carry this theory one step further, when a child sees his mother do this same kind of pretending, he must understand what's going on in her mind (i.e., she's changing reality) in order to understand the pretence.

Theory of mind, the understanding of other people's perspectives being different from one's own, requires the same kind of flexible thinking as pretending. One has to have an ability to handle multiple points of view and think simultaneously about the world in at least two ways when trying to understand what's going on in the minds of others. For example, with a robust theory of mind, a child can understand that not everyone has the same knowledge about things he's looking at if the others aren't looking at the same things. In addition, it requires flexible thinking to understand that people can believe things to be true even if they aren't (i.e., people can hold a false belief). For example, just

because someone says, “I think that it’s getting colder,” doesn’t mean that it really is colder.

Leslie (1987) has drawn a direct analogy between pretend play and mental state terms (i.e., words used in talking about the mind such as *think, believe, expect*). These kinds of words may be used even when the beliefs they imply differ from actual reality, as in the previous example, “I think that it’s getting colder.” In the same way, when a child uses object substitution or creates a make-believe situation (e.g., pretending to be a doctor) he is required to hold on to two realities, the real world and the pretend world.

Additional support for the view that pretend play and theory of mind are closely related comes from the literature on joint attention. When a young child can share an interest with another person about an object, he’s beginning to understand that other people have their own experiences and views of the world - essential skills for developing a theory of mind and being able to build an imaginative world with another child.

While this view of pretend play and theory of mind isn’t universally accepted (Fein, 1975; Fisher & Pipp, 1984), there is an abundance of research supporting the relationship between the two and the hypothesis that one (pretending) facilitates the development of the other (theory of mind).

Impairments in both understanding and generating pretend play are characteristic of autism, as are impairments in the development of theory of mind. Indeed, no pretend play by 18 months is usually indicative of a diagnosis of autism. That means that the theory-of-mind practice that is supposed to happen for typically developing children during pretend play, especially socio-dramatic play, isn’t happening for children on the autism spectrum. Therefore, our role as clinicians is to help parents facilitate its development. This is what parents learn to do in *TalkAbility – The Hanen Program®* for Verbal Children on the Autism Spectrum.

Using pretend play to facilitate the development of theory of mind

Parents can learn to apply strategies that encourage forms of pretending that facilitate flexible thinking and, ultimately, contribute to the development of a theory of mind in their child.

The following are some of the ways parents can begin this process:

- **Follow the child’s lead and model pretend play** - even before children do any pretending, parents can begin by helping their child develop joint attention by **sharing the same focus** with their child while he plays with toys and objects and then modeling pretending with realistic-looking toys.

- **Up the ante** - as children learn to pretend, parents must be cognizant of their child's level of pretend play and set goals one step above the level he's at (Sussman, 2006). For example, one goal for a child who can only pretend using realistic toys is to substitute them with less realistic toys, e.g., instead of using a toy thermometer, the parent can use a stick or no prop at all.
- **Provide the right toys** - children on the spectrum will have more success if the substitute object has a similar shape to the real object (Bingham, 2008). Interestingly, there is some research to support the premise that children with autism might find it easier to pretend without toys than with toys that already have a specific function. The reason given is that the children find it hard to block out the true function of the real object (Bingham, 2008).
- **Join in and play** - parents can expand their child's pretend play by joining in while he's playing and adding something new in a playful manner (Sussman, 2006). For example, if the child's goal in playing pretend store is to create the make-believe by attributing properties to the situation, the parent is encouraged to join in and say something like, "Let's pretend you sell puppies at your store."

Children with autism spectrum disorder are often literal and resistant to the introduction of these non-literal ideas, so parents need some problem-solving strategies to help them introduce the new ideas. For example, parents can "plan ahead to avoid problems later". This might mean talking with the child first about any changes in the play the parent is going to make, so the child won't be surprised by any part of the make-believe (Sussman 2006).

The Special Role of Socio-dramatic Play in Facilitating Theory of Mind

While solitary pretend play is thought to facilitate the ability to hold dual representations of one object or situation, it is joint pretence or socio-dramatic play that is probably most critical to the development of sophisticated representational ability (Astington & Jenkins, 1995; Perner, Ruffman & Leekam, 1994; Youngblade & Dunn, 1995). In socio-dramatic play, children learn to understand the different perspectives of others by agreeing (or disagreeing) on "a shared pretend focus or negotiating roles" (Schwebel, Rosen & Singer, 1999, p. 335). For example, when one child says to the other, "Let's pretend that we're both firemen and we have to put out the fire at the school," he's inviting the other child to enter into his mind and share his fantasy with him.

Parent's Role in Socio-dramatic Play

Since flexibility and perspective taking are difficult for children on the autism spectrum, parents are encouraged to be the ones who first challenge their child with new ideas. This

will give the child practice negotiating and problem-solving in a safe environment with a more accepting adult before playing with other children (Sussman, 2006).

When children play together, the ultimate goal is for the parent to stand on the sidelines, coaching the children when they need some help. Parents, however, might feel the need to step in too soon, for example when the children are disagreeing about roles or plot development. In doing so, they could spoil opportunities for the children to gain an understanding of one another's point of view.

Summary

There is a great deal of evidence that pretend play is critical to the development of theory-of-mind abilities and that the former facilitates the latter. Since both pretend play and theory of mind are dependent upon children's ability to share interests and attention with another person, intervention for young children needs to focus on fostering joint attention and some early pretend skills, such as using objects to stand for imaginary things. Children will benefit most from pretending with another adult or child in socio-dramatic play. In this environment, the young child on the spectrum will have an opportunity to appreciate the ideas and perspectives of another person in an enjoyable and naturalistic context.

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