

"Tuning In" to Others: How Young Children Develop Theory of Mind

By Lauren Lowry Hanen Certified SLP and clinical staff writer

If you've ever talked to a young child on the phone, you may have encountered the following situation:



Denzel hasn't yet figured out that he needs to give his dad extra information about what he is doing, because his dad can't see what he is holding. Denzel thinks his dad sees and thinks the same thing he does. The understanding that people don't share the same

thoughts and feelings as you do develops during childhood, and is called "theory of mind". Another way to think about it is a child's ability to "tune-in" to other peoples' perspectives [1]. This ability doesn't emerge overnight, and it develops in a predictable order.

How Theory of Mind Develops in Typical Children

During infancy and early childhood, children learn the early skills that they'll need to develop their theory of mind later on. These skills include the ability to:[2,3]:

- pay attention to people and copy them
- recognize others' emotions and use words to express them ("happy", "sad", "mad")
- know that they are different from other people and have different likes/dislikes from others
- know that people act according to the things they want
- understand the causes and consequences of emotions (If I throw my toy, Mom will be mad)
- pretend to be someone else (like a doctor or a cashier) when they play

Between ages 4-5, children really start to think about others' thoughts and feelings, and this is when true theory of mind emerges. Children develop theory of mind skills in the following order [1, 4, 5]:

- Understanding "wanting" Different people want different things, and to get what they want, people act in different ways.
- Understanding "thinking" Different people have different, but potentially true, beliefs about the same thing. People's actions are based on what they think is going to happen.
- Understanding that "seeing leads to knowing" If you haven't seen something, you don't necessarily know about it (like the Dad in the example above on the telephone). If someone hasn't seen something, they will need extra information to understand.
- Understanding "false beliefs" Sometimes people believe things that are not true, and they act according to their beliefs, not according to what is really true.
- Understanding "hidden feelings" People can feel a different emotion from the one they display.

Children's theory of mind continues to develop after age five. For the next several years they learn to predict what one person thinks or feels about what another person is thinking or feeling [4]. They also begin to understand complex language that relies on

theory of mind, such as lies, sarcasm, and figurative language (like "it's raining cats and dogs") [4]. Some experts argue that theory of mind development continues over a lifetime as one has more opportunities to experience people and their behaviour [6, 3].

How's your theory of mind?

Imagine you are handed a box of your favourite candy. When you open the box, you see that it is filled with pencils instead of candy. If your friend suddenly came into the room and saw the closed box with pictures of candy on it, what would he or she think was inside?

If you answered "candy", then you understand "false beliefs", which means you know that someone can believe something that is not true because they don't share the same knowledge that you do.

*When 3 year olds are asked this question, they answer "pencils", because they have not reached this stage of understanding in their theory of mind development [7].

- understand why people do and say the things they do
- have a conversation
- tell a story
- understand characters' perspectives in storybooks
- make friends
- engage in pretend play

Certain groups of children have difficulty with theory of mind development:

- children with autism spectrum disorder
- children with social communication difficulties
- children with attention-deficit/hyperactivity disorder
- signing deaf children who have hearing parents who do not use sign language (these children are not exposed to sign language until they begin school, and this late exposure affects their theory of mind development)

These groups of children often need treatment to help them develop their theory of mind.

Children with autism develop theory of mind skills in a different order than in typical development – their understanding of "hidden feelings" emerges before they understand "false beliefs" [8].

Helping Young Children Tune In

The way parents talk to and play with their child can help children's understanding of others' thoughts and feelings. In fact, studies have shown that when mothers use words that refer to thinking and feeling when they talk to their child, it helps their child's theory of mind development [9, 10]. Here are some simple things you can do at home with your child to promote his or her theory of mind [1, 2]:

- Follow your child's lead In order to tune-in, children need to be paying attention to other people. This can't happen if you are talking about or playing with things that your child is not interested in or attending to. Observe your child's interests and then get down to his or her physical level so that you are face-to-face. This will help your child pay attention to you and tune-in to your facial expression. Give up your ideas of what he should do or how he should play, and join in his play by copying his actions and adding to his or her play ideas. Once you are paying attention to the same thing, you will have an opportunity to use "tuning-in" language.
- Use "tuning-in language" This means putting your own and your child's perspective into words. Imagine what your child is wanting, thinking or feeling, and say something about it, like "oh, you want a cookie", "Don't worry. You thought I was gone, but I'm here!", or "I'm upset because you threw your toy" [3]. You can also explain why other people do the things they do for example, "Sally looks happy. She must really like her present".
- Role play with your child when you pretend together Role play helps develop theory of mind because it encourages children to think about and act out other peoples' perspectives. When children first learn to role play, they pretend to be individuals whom they have experienced in everyday life, like pretending to be Mommy, a doctor, bus driver or teacher. Stay in role when you role play together. For example, if you are pretending to be a doctor and your child is the patient, say and do things a doctor would do, and avoid being a real-life parent for the moment.
- Use books to talk about the characters' thoughts and feelings Talking about the characters' thoughts and feelings, their different ideas and reactions, and what characters might do next in the story helps promote early theory of mind. But research shows that it is also important to connect these ideas to the child's own experiences [3]. For example, if you are talking about a character that looks sad because she lost her favourite toy, you could connect that to a time when your child was sad because he lost something special.

Every time you interact with and talk to your child, you have an opportunity to put into words what you are both thinking and feeling. These types of conversations will deepen his understanding of his own thoughts and feelings, how others may have different thoughts and feelings from his own, and how we all act based on what we are thinking and feeling.

More information about theory of mind development in young children can be found in $TalkAbility^{TM}$ [1], a research-based guidebook and intervention program aimed at promoting the social and special language abilities necessary for conversations and friendships.

References

- 1. Sussman, F. (2006). *TalkAbility™ People skills for verbal children on the autism spectrum: A guide for parents*. Toronto, ON: Hanen Early Language Program.
- 2. Westby, C. & Robinson, L. (2014). A developmental perspective for promoting theory of mind. *Topics in Language Disorders*, *34*(4), 362-383.
- 3. de Villiers, J. G. & de Villiers, P. A. (2014). The role of language in theory of mind development. *Topics in Language Disorders*, *34*(4), 313-328.
- 4. Wellman, H. M. & Liu, D. (2004). Scaling theory of mind tasks. Child Development, 75, 759-763.
- 5. Peterson, C. C., Wellman, H. M. & Slaughter, V. (2012). The mind behind the message: Advancing theory-of-mind scales for typically developing children, and those with deafness, autism, or asperger syndrome. *Child Development*, 83(2), 469-485.
- 6. Miller, S. A. (2012). Theory of mind: Beyond the preschool years. New York, NY: Psychology Press.
- 7. Perner, J., Leekam, S. R., & Wimmer, H. (1987). Three-year-olds' difficulty with false belief: The case for a conceptual deficit. *British Journal of Developmental Psychology*, *5*, 125-137.
- 8. Kimbi, Y. (2014). Theory of mind abilities and deficits in autism spectrum disorders. *Topics in Language Disorders*, *34*(4), 329-343.
- 9. Slaughter, V., Peterson, C., & Mackintosh, E. (2007). Mind what mother says: Narrative input and theory of mind in typical children and those on the autism spectrum. *Child Development, 78,* 839-858.
- 10. Ruffman, T., Slade, L., & Crowe, E. (2003). The relation between children's and mothers' mental state language and theory-of-mind understanding. *Child Development*, *73*(3), 734-751.