



**Science Behind the Story (SBS)**  
**Me and You (🌈 A Social Story)**  
**(Pre-K – 4-5 yrs)**

Self-awareness, awareness of others, and empathy are important concepts necessary for the development of social behaviors. In this story, children learn that there are similarities and differences in what people see, think and feel.

- 🌈 Children at this age alter their perspective from one that is egocentric to understanding that others are important too.

By the age of 2 years old, children have developed a sense of self and their world is very egocentric (Keromnes et al. 2019; Kesselring and Müller, 2011; Goswami, 2011).

The children are able to recognize themselves and recognize others (Tousignant et al. 2017; Happe, F., & Frith, U. 2014).

While the children may be able to recognize others, they may not yet understand that other people do not perceive the world as they do (Steinbeis, 2016; Brownell and Kopp, 2007). If they see something happen, they automatically think that others see the same thing.

At this age, children do understand that others may have different things that they want or like (Brownell and Kopp, 2007)

- 🌈 Understanding that others can be similar and also different in the way that they look and think is important to understanding the motivation behind behaviors of themselves and others.

This is a good age to introduce the concepts of people being able to be both the same and different at the same time. Children can have fun with the paradoxical nature of this concept. Children at this age have a well-developed sensory areas of the brain (Meltzoff et al., 2009) so using visual cues to point out the same/different nature of things is easy for them to understand.

You can then use the same technique to get them to understand that something they cannot see – such as what others think or the motivation behind what others do – can also be the same or different. Children are just beginning to learn that others may think differently, which is the first step in the concept of theory of the mind (Steinbeis, 2016).

- 🌈 Being able to “see” from another’s perspective helps children to feel empathy for others.

As their social brain areas continue to develop, children will begin to realize that not only do others think differently but that they are motivated by their own past experiences (Hughes, 2004; Wellman, 2018). While they may respond positively to stimuli, such as a big dog, others may not. Children may recognize the difference in what they perceive and what others perceive, but they may not understand the reason behind it. Getting children to talk to others about what they do not understand is a good way for the

children to learn good social skills. By trying to understand what the motivation is behind another's action, children are learning to become empathetic (Decety and Jackson, 2004).

Empathy is important for social health because it helps us communicate more effectively with others (ref). (Decety and Jackson, 2004; Tomasello 1999).

Children are just beginning to understand and infer intention of others (Steinbeis, 2016). So, when children are playing and one accidentally gets hurt, that child may realize the other child did not mean to hurt them or they may ask them why they hurt them. Prior to this development in their social brain, the child would have reacted differently and may have lashed out at the other child because they had gotten hurt.

### **National Standards:**

#### **Next Generation Science Standards**

- Crosscutting Concepts:
  - **Cause & Effect:** Events have causes, sometimes simple, sometimes multifaceted. Deciphering causal relationships, and the mechanisms by which they are mediated, is a major activity of science and engineering.
    - Events have causes that generate observable patterns.

#### **ASCA (American School Counselors Association):**

##### **Personal/Social Development**

- **Standard A:** Students will acquire the knowledge, attitudes and interpersonal skills to help them understand and respect self and others.
  - **PS:A2 Acquire Interpersonal Skills**
    - PS:A2.2 Respect alternative points of view
    - PS:A2.3 Recognize, accept, respect and appreciate individual differences
    - PS:A2.4 Recognize, accept and appreciate ethnic and cultural diversity

### **References:**

Brownell, & Kopp, C. B. (2007). *Socioemotional Development in the Toddler Years: Transitions and Transformations*. Guilford Publications.

Decety, J., & Jackson, P. L. (2004). The functional architecture of human empathy. *Behavioral and cognitive neuroscience reviews*, 3(2), 71–100. <https://doi.org/10.1177/1534582304267187>

Goswami, U.C., (Ed) (2011). *The Wiley-Blackwell Handbook of Childhood Cognitive Development, Second edition*. Blackwell Publishing Ltd. 10.1002/9781444325485.

Hughes, C., & Leekam, S. (2004). What are the links between theory of mind and social relations? Review, reflections and new directions for studies of typical and atypical development. *Social development*, 13(4), 590-619.

Meltzoff, A. N., Kuhl, P. K., Movellan, J., & Sejnowski, T. J. (2009). Foundations for a new science of learning. *Science (New York, N.Y.)*, 325(5938), 284–288. <https://doi.org/10.1126/science.1175626>

Keromnes G, Chokron S, Celume M-P, Berthoz A, Botbol M, Canitano R, Du Boisgueheneuc F, Jaafari N, Lavenne-Collot N, Martin B, Motillon T, Thirioux B, Scandurra V, Wehrmann M, Ghanizadeh A and Tordjman S

(2019). Exploring Self-Consciousness From Self-and Other-Image Recognition in the Mirror: Concepts and Evaluation. *Front. Psychol.* 10:719. doi: 10.3389/fpsyg.2019.00719

Kesselring, T., Müller, U. (2011). The concept of egocentrism in the context of Piaget's theory. *New Ideas in Psychology*. Volume 29, Issue 3. Pages 327-345. <https://doi.org/10.1016/j.newideapsych.2010.03.008>.

Steinbeis N. (2016). The role of self – other distinction in understanding others' mental and emotional states: neurocognitive mechanisms in children and adults. *Phil. Trans. R. Soc. B* 371: 20150074. <http://dx.doi.org/10.1098/rstb.2015.0074>

Tousignant, B., Eugène, F., & Jackson, P. L. (2017). A developmental perspective on the neural bases of human empathy. *Infant behavior & development*, 48 (Pt A), 5–12. <https://doi.org/10.1016/j.infbeh.2015.11.006>

Tomasello, M. (1999). *The cultural origins of human cognition*. Cambridge, MA: Harvard University Press.

Wellman, H. M. (2018). Theory of mind: The state of the art. *European Journal of Developmental Psychology*, 15(6), 728-755.