

Wimmer and Perner 1983

Alexandra M. Daro, M.A.

Jonathan B. Santo, Ph.D.

University of Nebraska at Omaha

False beliefs occur when individuals are unaware of a change in a situation that makes their beliefs different from reality. Children developing a theory of mind learn to distinguish their own beliefs about a situation from other individuals' beliefs about the same situation. Through this process, children move away from assuming their thoughts are shared by everyone in their day to day experiences (an egocentric perspective normal to this developmental stage), and toward an understanding of others as individuals with minds, thoughts, and beliefs separate from their own.

Wimmer and Perner conducted a series of experiments to investigate how young children process situations in which they have information that other individuals do not. In the first experiment, children four- to nine-years-old were placed into one of two conditions. Children in both conditions were told stories in which a main character places an object in one area and then leaves the room. A second character comes in, moves the object, and leaves. The first character then comes back, looking for the object. At this point, the children were asked where the first character would look for the object. The correct answer is that the first character will look for the object where it was originally placed and not where it was moved to. The children were then told more of the story, and directed to either help a third individual find the object (cooperative), or prevent a third individual from finding the object (competitive). In both conditions, the children were asked where the first character would tell the third character to look. The correct answer

depended on condition: either the location where the first character placed the object at the beginning of the story (cooperative) or a location different from where the first character placed it (competitive). The results of the first experiment indicated the older children did better at the tasks than younger children, and those children who correctly interpreted the false belief of the first character were also better at constructing both competitive and cooperative responses.

In experiment two, the same story frame was used, but there were three different conditions, designed to address theories for the younger children's poor performance. The first condition was the same as in experiment one, minus the cooperative and competitive story additions. The second condition was designed to address the theory that the younger children were failing the original task because they were not thinking back to the beginning of the story. The children were told to think back to when the first character placed the object in the original location, and then were asked where the first character would look for the object. The third condition was designed to address the theory that the available locations were too alike for the younger children to be able to mentally represent them as separate locations. The story was altered so that the object would be totally removed (for example, a chocolate bar was used up while baking a cake) by the second character to remove the necessity of representing two locations. The children were asked what the first character would do, instead of where the first character would look. The youngest children, three- to four-year-olds, showed no improvement in performance with the new conditions. The four- to five-year-olds performed well when the object was removed by the second character, but poorly otherwise. The five- to six-year-olds performed well in both new conditions, but showed the same pattern of performance in the first condition as they did in experiment one.

In experiments three and four, two theories were tested. First, whether the children were unable to pick up on the false belief because the change in the object's location was too complicated. In this experiment, the second character placed the object back in its original position for half of the participants. The results showed that many children still had trouble constructing a cooperative/competitive response even when the second character placed the object back in its original location. Second, whether the children were unable to pick up on the false belief because they were unable to pick out the deceit itself. In this experiment, the children were told the goal of the first and second character, and the utterance made by the first character. Four- to five-year-old children were not able to correctly infer the deceit in the story, but five- to six-year-olds were.

Accordingly, Wimmer and Perner concluded that between four and six years of age children develop a cognitive skill, namely the ability to recognize and act upon the beliefs of others, which is distinct from other skills developed around this time.

Further Reading:

Wimmer, H., & Perner, J. (1983). Beliefs about beliefs: Representation and constraining function of wrong beliefs in young children's understanding of deception. *Cognition*, 13(1), 103-128.