

Piaget's Stages of Cognitive Development

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Now it's time to get into the stages of development, with a Swiss psychologist named Jean Piaget. Piaget spent years watching children in order to analyze how their minds developed. He focused in on their cognitive development. Cognitive development is how a person perceives, thinks, and gains an understanding of his or her world through the interaction and influence of genetic and learned factors.

Piaget uses two terms to describe children's responses to items: assimilation and accommodation. Assimilation occurs when a child uses old methods or experiences to deal with new situations. For example, babies tend to explore the world by putting things in their mouth. When they see a block, they put it in their mouth. When they feel a window, they try to put it in their mouth.

Accommodation occurs when a child changes old methods to adjust to new situations. For example, they might begin stacking blocks instead of putting them in their mouth.

Piaget came up with four stages of cognitive development. The first stage is the sensorimotor stage, which is exactly what it sounds like. Babies from ages zero to two explore the world through their senses: looking, hearing, tasting, smelling, and grasping. Object permanence is a milestone during the sensorimotor stage. It's the awareness that things continue to exist when not perceived. The game peek-a-boo is a great way to help babies achieve object permanence.

To test a baby for object permanence, you can dangle a pair of keys in front of her and then cover those keys with a cloth. If she pulls the cloth off of the keys and grabs them, she has achieved object permanence. If she stares off blankly and does not attempt to find the keys, she has not yet achieved object permanence.

The next stage of cognitive development is the preoperational stage. This stage lasts from the age two to about six or seven. Kids are developing their language, representing things with words and images, and using intuitive rather than logical reasoning. For example, they might think that the sun goes down because it's time for bed. They engage in pretend play, like playing house or pretending that they are animals. At this stage, they do not understand conservation, which is the concept that quantity remains the same even if it changes shape.

Let's say you have two four-year-old children in the preoperational stage. For lunch you decide to make them hotdogs. You show them that the hotdogs are the same size, but if you cut one child's hotdog into nine pieces and the other child's hotdog into four pieces, the child with the four pieces is going to be upset, thinking that they got less. This is because they do not understand conservation, that the quantity of the hotdogs is still the same. Preoperational kids do not get this concept yet.

This is why it's important to get preoperational children the same number of presents for holidays. Even if you explain to the children that you spent the same amount of money on them, if one child receives five gifts and the other receives three gifts (that cost the same as the five gifts), the child may still think

it's unfair because the other child received more. Make sure to check out the YouTube clip posted on MyHills that shows conservation exercises done with a preoperational child. The kid in the video is super cute.

Another characteristic of the preoperational stage is egocentrism, which means difficulty taking on another person's point of view. For example, a preoperational child who collects teddy bears may think it's a great idea to get his dad a teddy bear for his birthday. Many people would misinterpret the gesture as manipulation, assuming that he wants to give it to his dad so that he could play with the bear himself. However, in his egocentric mind, because he loves bears, he thinks that his dad must love bears, too.

One way psychologists measure egocentrism is by using the three-mountains test. It's a table display with three mountains, a house, a cross, and sometimes various other objects. The therapist moves a toy bear to different locations of the table and asks the child to describe what the bear sees. Egocentric children will describe the scene from their own view and not from the bear's view.

The third stage of cognitive development is the concrete operational stage. This age range is usually between seven and eleven years old. Children are better able to think logically about concrete events. They understand conservation, that quantity remains the same even if the shape changes. So, the number of pieces that a hotdog is cut into no longer matters, because they realize that a hotdog is a hotdog no matter how many pieces it is cut into. At this stage children understand reversibility, like that two plus seven equals nine and nine minus seven equals two. They don't need to reset the math problem. A preoperational child would have to rethink and rework that problem.

The final stage is the formal operational stage. Some theorists recognize a postformal operational stage as well. This takes place from twelve years old through adulthood, when people are able to use abstract reasoning, to compare theories, and to think more critically.

During the teen years, egocentrism seems to return with the self-consciousness that everyone is watching and evaluating their actions. The "imaginary audience" is the belief that adolescents have that everyone is watching all of their actions, and they often perform as if in a show. The "personal fable" is an adolescent's belief that he or she is invulnerable, unique, and special. Teens often engage in risky behavior like driving recklessly or having unprotected sex, thinking that accidents, surprise pregnancies, or STDs won't happen to them.

So to recap, we have the sensorimotor stage in which object permanence is achieved. We have the preoperational stage in which we see egocentrism. We have the concrete operational stage in which children understand conservation and reversibility. And we have the formal operational stage in which people are able to reason abstractly.

The descriptions for all of these stages were developed by years of work from Jean Piaget.