



Piaget's Stages of cognitive development



Sensorimotor Stage (birth to age 2)

- ▶ It is called sensorimotor because babies and young children at this stage explore the world via the use of their senses and motor skills (Richards and Schmidt, 2010). According to Slavin (2018), “all infants have inborn behaviors called reflexes” (p.26). For instance, if someone touches a newborn’s lips, the baby begins to suck; if they place their finger in the palm of an infant’s hand, the infant grasps it, etc. “These and other innate behaviors are the building blocks from which the infant’s first schemes form” (Slavin, 2018, p. 26).
- ▶ According to the American Psychological Association, this stage evolves over a number of subphases of increasingly complex behavior. During the sensorimotor stage, infants acquire their first knowledge of the world by interacting with the environment and develop basic understanding of time and space.



Sensorimotor Stage (birth to age 2)

- ▶ The main characteristics and achievements during this stage are:
 - Familiarizing with their environment through senses and actions (moving around and exploring).
 - Learning about the world through basic actions such as sucking, grasping, looking, and listening
 - Learning that things continue to exist even when they are out of sight (object permanence)
 - Realize that they are separate beings from the people and objects around them
 - Realize that their actions can cause things to happen in the world around them

(verywellmind.com / simplypsychology.org)



Preoperational Stage (ages 2 to 7)

- This stage is the beginning of primitive conceptualization and the acquisition of representational skills, especially language (Richards and Schmidt, 2010). During this stage, young children become able to record experience in a symbolic fashion and to represent an object, event, or feeling in speech, movement, drawing, and the like (APA Dictionary of Psychology).
- More characteristics of this stage include:
 - being egocentric and struggling to see things from the perspective of others
 - Getting better with language and thinking, but still tend to think in very concrete terms
 - Having problems with conservation and reversibility

(Slavin, 2018; verywellmind.com)



Concrete Operational Stage (ages 7 to 11)


- ▶ The third major stage of cognitive development in which children can decenter their perception, are less egocentric, and can think logically about physical objects and about specific situations or experiences involving those objects (APA Dictionary of Psychology). Children will therefore be able “to understand concrete problems and take multiple perspectives into account” (Richards and Schmidt, 2010, p. 91).
- ▶ More characteristics of this stage include:
 - Begin to think logically about concrete events
 - Begin to understand the concept of conservation; that the amount of liquid in a short, wide cup is equal to that in a tall, skinny glass, for example
 - Thinking becomes more logical and organized, but still very concrete
 - Begin using inductive logic, or reasoning from specific information to a general principle

(verywellmind.com)



Formal Operational Stage (age 11 to Adulthood)

- ▶ With the formal operational stage comes the ability to deal with potential or hypothetical situations. In addition to hypothetical and abstract thinking, this stage is also marked by the development of other complex intellectual functions, such as logical processes, conceptualization, and judgment (APA Dictionary of Psychology; Richards and Schmidt, 2010; Slavin, 2018).



STAGE	APPROXIMATE AGES	MAJOR ACCOMPLISHMENTS
Sensorimotor	Birth to 2 years	Formation of concept of “object permanence” and gradual progression from reflexive behavior to goal-directed behavior.
Preoperational	2 to 7 years	Development of the ability to use symbols to represent objects in the world. Thinking remains egocentric and centered.
Concrete operational	7 to 11 years	Improvement in ability to think logically. New abilities include the use of operations that are reversible. Thinking is decentered, and problem solving is less restricted by egocentrism. Abstract thinking is not yet possible.
Formal operational	11 years to adulthood	Abstract and purely symbolic thinking is possible. Problems can be solved through the use of systematic experimentation.

Piaget’s Stages of Cognitive Development
From Slavin (2018, p. 27)



References

- ▶ Piagetian Theory. American Psychological Association: APA Dictionary of Psychology. Accessed 27/04/2023.
- ▶ Richards, J. C. & Schmidt, R. (2010). Longman Dictionary of Language Teaching and Applied Linguistics, 4th ed. Edinburgh Gate: Pearson Education Limited.
- ▶ Slavin, R. E. (2018). Educational Psychology: Theory and Practice, 12th ed. NY: Pearson.
- ▶ <https://www.verywellmind.com/piagets-stages-of-cognitive-development-2795457#citation-3>
- ▶ <https://www.simplypsychology.org/piaget.html>