

Theories of Cognitive Development in Adolescence

Demetriou Valois*

Department of Psychology, University of Gothenburg, Gothenburg, Sweden

ABOUT THE STUDY

Cognitive development is the process by which a child's capacity for thought develops. This growth takes place in a distinct way from ages 6 to 12 and from 12 to 18. Concrete thinking abilities begin to emerge in children between the ages of 6 and 12. The adolescent years are from the ages of 12 to 18. This age group's children and teenagers have greater abstract thought. This type of reasoning is also known as formal logical operations.

Rapid cognitive development occurs during adolescence. Rapid cognitive development is a result of a combination of biological changes in brain connectivity and structure, as well as an increase in experience and knowledge as well as shifting social expectations. These alterations usually start around puberty or shortly thereafter, and certain abilities continue to advance as a teen becomes older. Generally speaking, the prefrontal cortex region of the brain is linked to the development of executive functions, or cognitive abilities that allow for the regulation and coordination of thoughts and behavior. The thoughts, ideas, and concepts formed during this time in life have a significant impact on how one will live in the future and are crucial to the development of one's personality and character.

Theories of cognitive development

Jean Piaget, a French psychologist, has the most well-known and significant hypothesis regarding cognitive development (1896–1980). In contrast to the behaviorists' laboratory research, Piaget's hypothesis was initially presented in 1952. Even though Piaget was concerned in how children interacted with their surroundings, he indicated that they play a more active part than what learning theory suggests. He believed that a child's knowledge is made up of schemas, which are fundamental knowledge constructs used to categorize prior experiences and provide a framework for comprehending new ones. Assimilation and accommodation, two complementary processes that Piaget identified, are continuously changing schemas. The act of assimilating new information involves integrating it into an already-existing paradigm. In other words, humans integrate fresh experiences by connecting them to previously held beliefs.

Contrarily, accommodation is what takes place when the schema itself is altered to account for new information. Piaget claimed that cognitive development entails a continuous effort to strike a balance between assimilation and accommodation, which he referred to as equilibration.

The fundamental tenet of Piaget's theory in of cognitive development happens in a sequence of four different, universal phases, each of which is marked by progressively complex and abstract levels of thought. These phases always take place in the same order, and each one builds on what was discovered in the previous stage. Here are some of them:

- The sensorimotor stage (infancy), which is divided into six sub stages, is when intelligence is displayed through motor activity rather than through the use of symbols. Because it is founded on physical encounters and experiences, is limited but growing. At around seven months old, kids start to develop object persistence (memory). The ability to move about due to physical growth enables the youngster to start gaining new cerebral skills. At the conclusion of this phase, some symbolic (language) skills are formed.
- The pre-operational stage (toddlerhood and early childhood) is divided into two sub stages. During this time, intelligence is displayed through the use of symbols, language development matures, memory and imagination grow, but thinking is non-logical and non-reversible. There is a strong egocentric bias.
- Concrete operational stage (elementary and early adolescence): During this phase, which is characterized by seven types of conservation (number, length, liquid, mass, weight, area, and volume), intelligence is displayed through the methodical and logical manipulation of symbols associated with concrete objects. Development of operational thinking (mental actions that are reversible). Reduced egocentric thought.
- Adolescence and maturity constitute the formal operational stages. His stage of intelligence involves the logical application of symbols to represent abstract ideas. There is a return to egocentric thinking at the beginning of the phase. In industrialized nations, just 35% of high school graduates acquire formal employment; many people do not think formally as adults.

Correspondence to: Demetriou Valois, Department of Psychology, University of Gothenburg, Gothenburg, Sweden; E-mail: valoisdemetron@edu

Received: 22-Aug-2022, Manuscript No. IJSCP-22-19284; **Editor assigned:** 26-Aug-2022, Pre Qc No. IJSCP-22-19284 (PQ); **Reviewed:** 09-Sep-2022, QC No. IJSCP-22-19284; **Revised:** 14-Sep-2022, Manuscript No. IJSCP-22-19284 (R); **Published:** 21-Sep-2022, DOI: 10.35248/2469-9837.22.9.254.

Citation: Valois D (2022) Theories of Cognitive Development in Adolescence. *Int J Sch Cogn Psycho*. 9:254.

Copyright: © 2022 Valois D. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

CONCLUSION

The most significant alternative to Piaget's theories has evolved in the form of the information-processing approach, which employs the computer as a model to provide new insight into how the human mind receives, stores, retrieves, and uses information.

Researchers have utilized the information-processing hypothesis to investigate how children's cognitive development influences factors like their expanding attention spans, capacity for memory storage, and progressively improving abilities to take in information and focus selectively on particular portions of it.