

Child cognitive development



INTRODUCTION

Jean Piaget looked at the concept of cognitive development from a biological angle. To him, adaptation and organization are the key principles in the human's intellect and growth. He argued that human beings always strive to have a state of balance in their mind. Adaptation comes about when the child experiences cognitive disability, that is, the situation what the child sees the world as expected and what she or he is undergoing. The child therefore buys new information and integrates with the already existing one. Piaget calls this accommodation. This comes about when the acquired new information doesn't fit well into the already existing structures. For instance, a child coming across a squirrel for the first time and discovers that it differs with the rabbit. He/she therefore come up with another representation of a squirrel. The mind has to have some form of information organization hence scheme is the basic structure.

In a child's development, play is an important aspect to consider. This is because ideas and concepts are learned and also, there is an enhancement of language, motor skills and social life through play.

To Piaget, there are four major stages that are involved in cognitive development. Firstly, we have sensorimotor period that occurs between Zero to two years. At this stage, the child as he interacts with the environment creates sets of concepts and the operations of the reality. There is an engagement in motor movements starting with early reflexes and proceeding towards intentional actions. In most cases, these actions are trial and error. It's through their actions that children learn that their behaviors have effects on the environment. Their actions become sophisticated as they

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develop hence becoming deliberate. For example, a child grasps a rattle paper in place in his hand, this can be compared to the older child who picks up and shakes a rattle to make noise.

The pretend stage in most cases starts at the age of eight months. At this level, the child can act out actions and roles of an adult and some familiar events. At three or four, the skills become symbolic; the child can substitute objects for instance, a child feeds a doll using a toy bottle. On the other hand, the older child feeds the baby using a wooden block in pretence that the block acts as the baby bottle. This level provides a good foundation for the child play as the child gets his/her own experience.

Preoperational period is the second stage and it occurs between the ages of two to seven years. The child can not still abstractly conceptualize. He needs touchable situations. At the age of around three or four, constructive play interests the child. Here he or she can manipulate materials and objects in their different worlds and come up with an end product such as sand houses, clay cows sand mountains and so on. As he develops skills in manipulation of materials and objects, they sharpen his skills in thought expressions, ideas and concepts.

At the mastery play level, there is the demonstration of the skilled Moto movements and there is full engagement in forms of imagination or pretend play at the same time. Children easily move about with their environment and are more confident in their actions. There is running and jumping over obstacles on a playground as they pretend to be the cartoon superhero's. This occurs at around four to five years as encounter new play challenges

and experiences. At the age of five, they develop interest in games that have two or more sides and have rules; this is because the thinking is becoming more logical. At this level, they begin to realize activities like Red Rover, Peter Says, and rule games won't not work unless it is followed by everyone. This level involves competition and definition of criteria that establish winners.

The third stage is the concrete operation that which occurs between the ages of seven years to eleven years. As the physical experience goes up, he starts conceptualizing, logically creating structures that explain the physical experience around him. At this point, he can now solve abstract problems for instance; equations on arithmetic can be solved not only with objects but with numbers.

The last stage is the formal operations that occur between the ages of eleven to fifteen years. The cognitive structure at this point has developed and is like that of an adult. He is able to conceptualize and reason. At all developmental stages, there is an interaction of the child with his environment using the so far constructed mental maps. The experience fits easily if it's the repeated one into the cognitive structure so that the state of equilibrium is maintained. He loses equilibrium if the experience is new or different. He therefore adjusts his cognitive structure in a way to accommodate the new conditions.

However, different scholars also have done researches on role of play in child development. This was perhaps the development of Piaget, s theory of learning. Mc Cune & Zanes, 2001 argued that infants and toddlers do involve

themselves in activities that in most cases stimulate their senses and lead to the development of the motor skills. These children actively explore their capabilities by using simple non directional and repetitious plays. To them, as infants play on their own and alone, the toddlers play with or besides other children. Sometimes, they are within speaking distance but make minimal or not communicate at all. Given a situation of two or three children playing with similar toys might pursue totally different activities. Each concentrates on his or her own needs, a reflection of egocentric behaviors with no concept of rules. Such play therefore contributes the Childs growing ability to be able to pay attention and to the total development of physical, social and intellectual growth.(Piaget, 1962)

At primary grades, they play formal and informal games together for example hide and seek, computer games, jump rope amongst others. In this kind of plays, there is development of physical prowess, refinement of social skills, building of concepts such as completion and there is also the enhancement of coordination. Moreover, these games also enable children to do demonstrations of their skills, abilities and talents to themselves and to others. They do these through coded messages, riddles and game numbers. (Eifermann, 1971)

Children's play becomes more organized and more structured at childhood and early adolescent. At this stage, their passion for orderly thinking is seen in the games with rules and the organization of the sporting events. Winning to them is paramount as they begin to conceptualize and internalize that winning is as a result of following rules. At this age, sports are important. As social awareness grows in the child, the attention shifts from the family to <https://assignbuster.com/child-cognitive-development/>

the peer group. At this point, their energies are channeled to youth groups, team sports and clubs. As they do role taking and playing in those organizations, they get to understand how they can best fit in the societal systems. (Hughes, 1999)

Fromberg (2002) argues that new information among children can be owned by playing with the same information. When there is interactive balance of facts gaining and acquisition of skills by the culture and information making owned by someone, then there is learning. This cycle enables children their environment better. (Fromberg, 2002, Mc Williams, 1998). Personal meaning comes about when there is active play. When there is perception of events by children as personally relevant, their neural connectivity of situations, skills and ideas is taken to their long-term memory. (Jensen, 1999) adds that intrinsic motivation is by play and play contexts that is brought about by positive motivations. For instance, curiosity improves motivation which in turn facilitates learning and performance simply by focusing on the attention of the learner. Threats, panic, stress as negative emotions detract from motivation.

According to Piaget, learning is effective when there are positive motivators. There children are free to participate and play when they are relaxed and free from any kind of stress. A toddler who is threatened will shy off and therefore will not participate in any kind of information flow. Piaget's psychological approach to the study therefore lays a lot of emphasis to the full understanding of the children as we attempt to bring them up. This calls for understanding the stage at which the child is at, the environment and the emotional

CONCLUSION

Jean Piaget holds that, development precedes learning that is, it is activated by cognitive problems.

All in all, Jean Piaget's contribution was a milestone in the fields of both the natural and social sciences. People through his theories have been able to understand intrinsically both development of their children in all stages and shaping them to be good and responsible adults. By understanding the development of the child at every stage, it becomes easy for the parent to provide the necessary support to the child and be able to monitor his or her development. Moreover, it's through Jean's contribution that educators have adopted different modes of communication. Having looked at the development of the child at every stage, it becomes easy for the communicator to package his or her information that is relevant to the receiver. For example, a five year old child will learn better if he or she is involved in the kind of game plays. A communicator to achieve this will employ the same communicative tool.

Curriculum development in different institutions has also been a Piaget's contribution. A primary school for instance has got a wider range of pupils. Their programs definitely will not be the same right from intra and extracurricular activities. There are those best for the lower classes where the juniors enjoy playing and the senior one with their own special program. Ways of communicating to different audiences for instance the idea of play in the cognitive development. His idea has also been used to develop both the intra and extra curriculum activities for the different institutions.

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