

Piaget
underestimated
childrens cognitive
abilities in his theory



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Piaget's developmental theory is based on four stages on the child's development. The first is the Sensori motor stage which is from birth to two years. This is when an infant differentiates itself from objects. The infant also have no object permanence. The infant demonstrates simple reflexes from the first habits, up to the coordination of means and goals. Intelligence at this stage is highly based on movements rather than language, this can be also known as schemata. The Sensori motor stage was later more defined with six stages, the first stage (0-1month) use of reflexes, stage two (1-4months) primary circular reactions, three (4-8months) secondary circular reactions, four (8-11months) co-ordination of secondary schemes, five (12-18months) tertiary circular reactions and the final stage (18-24months) invention of new means by mental combinations.

The second stage is Preoperational stage which is from two to seven years, Piaget defined that as " an action that can return to its starting point, and that can be integrated with other actions also possessing this feature reversibility" Piaget 1948. The child at this stage learns to use language and to represent objects by words and images. The child also becomes egocentric, this is when the child doesn't have the ability to take someone else's view. The language that the child might use are most likely to be idiosyncratic (Piaget 1956). The child also identify objects by a single feature an example would be the child calling each adult male dad. This is regardless whether there are the father or not, the fact that the adult is a male, makes them believe that they are the father.

The third stage is concrete operational which is from seven to eleven years.

This is when the child achieves conservation of quantity, weight, and

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volume. A good example for this would be when estimating the correct water mass on different shapes of glass. There is still egocentricity, but in the representation of objects, the perfect example for this would be the mountain task and the second type of egocentricity is in social relations (Piaget 56).

The final stage is formal operational stage which is from eleven and beyond (Some resources would consider from eleven to fifteen). This is when the child begins to have the ability to plan and think ahead, been able to think in terms of abstract. The child would be able to collect information and problems and identify the solution. Thinking beyond his or herself, avoiding egocentrism (Lin 2002).

The first underestimation made by Piaget would be at the sensori motor stage. Some researchers have claimed that infants do in fact posse object permanence at earlier stages than what Piaget somewhat predicted. Tom Bower (1982) carried series of experiments at Edinburgh University one of these carried infants as young as eight months. The infants were watching the screen passing the objects and were measured by heart rate. In half of the experimental trials the object was still present after the screen passed by, but on the other half, the object would have disappeared. The series showed that there was an increase of heart rates when the objects disappeared suggesting that there were more surprised when the object didn't reappear. Bower found that infants as young as eight weeks can turn their eyes to anticipate whether the object would reappear or not on the other side of the screen. Both of these results suggest that Piaget might have underestimated this measure.

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In the Preoperational stage with regards to the language learning of children, Piaget often stands accused of neglect or partial interest (Beilin 1975 and Sinclair 1969). When it came to the language development the closest he came to adopting child language as the object of a developmental study was in his novel " Play, Dreams and Imitation in the Child". This was when he outlines an account of conceptual development and the role of language in this. In this statement he seems to approach the task with a certain reluctance, referring to the intervention of language with the words " Collective verbal signs coming to interfere with the symbols we have already analysed". Some of Piaget's treatment of language cannot be put into a proper perspective unless we recognise that he is not a developmental psychologist but a genetic epistemologist. He does not seem to be concerned to review all aspects of the development of a child.

There are also two other factors that regards' Piaget's lack of concern with language, first since he does not look at other factors that may embrace language development such as environment or through the nature/nurture argument, it does weaken his theory on the preoperational stage. Secondly the extent in which he uses language in his own experiments, he might misinterpret his findings by failing to take into account how linguistics component is affecting the outcome.

The other main entity on the preoperational stage is egocentrism in children. In many series of experiments Borke (1971) has shown that children as young as three can identify emotions such as anger and sadness in others and have the ability to understand another's visual perspective if the task is simplified. One of the other series done was by Mossler, Marvin and <https://assignbuster.com/piaget-underestimated-childrens-cognitive-abilities-in-his-theory/>

Greenberg (1976) designed a task in which the child knew something that their parents didn't due to immediate prior information. The two to three year olds had difficulty with the task however the four to seven year old performed well with no egocentric behaviours.

When it came to the Concrete operational stage the main criticism was the Mountain task. Borke (1975) did later series of studies with the mountain tasks. Borke used more employable stimulus materials that children were familiar with. This included a wide variety of things such as animals and miniature people. She also included a three dimensional model instead of selecting photographs like the standard Piagetian test. Whilst the test was upgraded and seemed more realistic to real life, the results were incredible. Many children under the age of seven performed very well. The three year old subjects gave forty two percent of correct answers and the four year old subjects gave sixty seven percent of correct answers. Some of the subjects scored as high as eighty eight percent. This unmistakably shows that Piaget underestimated children's cognitive abilities.

In the case of the Formal operational stage Ennis (1978) claimed that there were problems with Piaget's logical system test for young adolescence at the formal operational stage. Danner and Day (1977) gave subjects bending rods for the Piagetian task involving their ability to isolate variables in a formal operational sense. This was to find which several variables would determine whether the rod will bend. Suggestions were given for some subjects for the strategy, they were told that if there wanted to find out which one was bending, they had to make sure that everything was the same except the one thing they were testing. With this prompt added it made the formal <https://assignbuster.com/piaget-underestimated-childrens-cognitive-abilities-in-his-theory/>

operational procedure improved. Lowenthal (1977) has shown that in game like situations even children as young as nine can operate in a logical complex manner and display formal operational structures.

In conclusion Piaget did underestimate children's cognitive abilities. There are many empirical evidence to support that researchers like Beilin Ennis and more prove so. In addition to all this it is also very important to study the manner in which the child's cognitive ability changes when well trained. With this, it would make a better judgment on how the child can develop cognitive abilities and measure it. Piaget also tends to ignore the environmental aspects in which the child grew up in. An example would be that a child who may attend nursery/day-care early may have a bigger advantage in developing its cognitive skills compared to a child who didn't start interacting with many children till there started school. Plus the socio-economic facts of the child's parents or guardian.

Words 1315