EN_19176127 Criticism of A Theory

Piaget's stages of development were revolutionary for developmental psychology and its improvement. His theory spurred on countless of new research, each aiming to either prove or disprove his claims, whilst integrating new technology or concepts in their research. Through this new data, some claims Piaget made has been proven to be not as true as the psychologist believed.

The main criticism of Piaget's work comes from his focus on physical capacities to measure cognitive abilities. This has limited his observations and hence, caused him to underestimate the cognitive abilities of children. Renée Baillargeon (1995) conducted a study with 3–4-month-old infants dubbed the "apple/carrot test". In his study, Baillargeon showed infants an apple before covering it with a screen repeatedly and after a while, replaced the apple with a carrot. He measured an increase in the looking time after the switch, showing that the infants had recognized the change in the object and thus, had had an expectation of seeing the apple. This demonstrated that even in ages as early as 3.5-month-old infants, object permanence exists. In another study, Elizabeth Spelke and her colleagues (Spelke 2016) challenged Piaget's statement of infants and young children having poor sense of physics by focusing on the innate ability to perceive movement. In their study, a rod moving back and forth behind a box was shown to 4- month-old infants. When the infant quit responding (habituated) to the moving rod, they would take away the box to reveal two scenarios. In one scenario, the rod behind the box would be just a singular long oner; in the other scenario, the rod behind the box would be two shorter ones. The infants spent a significantly longer time staring at the two smaller rods, indicating that they had expected to see one continuous rod. Through this study, Spelke et al. proved that infants understand basic concepts of physics such as the law of continuity when it's paired with movement. One more study, done by Jacques Mehler and Tom Bever (1967), found that when properly motivated, children can understand quantity in numbers, which was the opposite of what Piaget believed. They presented 3-year-old children with two rows of M&Ms of the same number. After the children answered yes to the initial question of "do these rows have the same number of M&Ms?", they would

modify the rows by adding two more candies to one row but condense it. Then, they would ask which row had more candies. Piaget would've expected the children to choose the longer row regardless of the less candy as he believed that children's concept of quantity was based on length. However, this study found that 80% of the children chose the visually shorter row. All the studies mentioned are one of the many that point out certain flaws or shortcomings of Piaget's stages of development.

However, there are studies that support Piaget's claims as well. Therefore, though the whole theory might not be true, there are still some parts of it that remain relevant to the modern world. While embracing Piaget's theory, modern psychology approaches his stages as trends rather than rigid levels, with the claim that all four stages are present throughout development with certain ones being more prominent at certain ages.