

Child developmental psychology



Child Development Experimental Analysis The majority of things adults ask children to do are so obvious to the adults that it is hard for them to see what is really involved in carrying out particular tasks. Therefore, it is vital for adults to approach children with a desire to learn about how their minds work from the mistakes they make, ultimately learning more about themselves and children by trying to get at their perspective. During an informal experiment with Christopher Hope, a rambunctious 5 year old boy, I asked him to perform one of Jean Piaget's most famous tasks for the pre-operational stage of cognitive development, conserving liquid volume. In order to perform this task efficiently, I obtained two glasses, with different height and width dimensions. One glass was tall and skinny and the other was short and fat. I filled both glasses with chocolate milk, pouring more milk into the short fat glass. Then I gave the tall skinny glass to Christopher and placed the short fat glass in front of myself.

Before allowing him to drink, I asked him, " Who has more milk, you or me" He eyed the glasses and then confidently said, " I do," referring to his tall skinny glass of milk, whose height of milk was taller than that seen in my short fat glass. I urged him to take a second look at the glasses of milk by asking, " Are you sure" He furrowed his brow and eyed the glasses once again. " Well," he said, " maybe there's more in your glass, since it's wider." I continued with the lesson by placing another short fat glass on the table and asked Christopher to pour his tall skinny glass of milk into the empty glass to find out who really does have more chocolate milk. He slowly poured his glass of milk into the empty short fat glass. Once he was done pouring, he bent down so he was at eye level with the milk levels of the glasses. His eyes widened and he said, " Your glass had more than mine!"

Christopher showed classic signs of Piaget's pre-operational stage of cognitive development. During the experiment, Christopher focused on only one of the dimensions of the glass at a time. First, he noticed the height of the glasses and the milk levels in each glass and assumed that there was more milk in the tall skinny glass, even though there was far more in my short fat glass. Then, after further investigation of the glasses, his focus went to the width dimension of each glass. Since mine was wider, he said that perhaps my glass held more milk. Christopher was only able to focus on one dimension of the glass at a time to the exclusion of all other important information, clearly showing that he was still in the midst of the pre-operational stage. He was centering on one aspect of the problem. During this stage, there are limits on children's reasoning abilities. Christopher saw what the truth was in regards to which glass had held more milk, but could not attain the truth of this matter on his own. His initial judgments were due to external stimuli and the appearance of phenomena, which were deemed irrational.

Through this experimental task, Christopher was introduced to the concept of conservation, something that has not fully developed in him intellectually. He saw that despite changes in appearance, the quantity of something remains the same. Through further instruction and training to perform well on this or like tasks, such as scaffolding, Christopher would come to a greater cognitive understanding of conservation as he nears Piaget's concrete operations stage. It is the development of the child's ability to decenter that marks him as having moved from the pre-operational stage to the concrete operational stage.

Evaluating Christopher on other aspects of his personage besides Piaget's

stages of cognitive development, he showed signs of being in the midst of Erik Erikson's psychosocial stage four in which the ego will be motivated toward industry or inferiority. Christopher was confident and proud of saying his initial answering, believing that it was the right answer. Then, as I continued to probe and encourage him to rethink his answer, he did, instead of ignore the question or say self-defeating remarks. This shows that Christopher is maturing toward a sense of competency and belief in his skills, instead of doubting his ability to be successful in knowledge of something such as conservation. With further encouragement and support by parents and teachers, he will continue to believe in his competency and ability to succeed.