# Developmental psychology research paper sample

Technology, Development



## Introduction

With interest in the field of child development emerging in the early twentieth century, many theories have been formed in an effort to understand the physical, educational, social, emotional, and cognitive growth that children undergo from birth into early adulthood (Cherry, 2013). In particular, developmental theories are organized systems of " principles and explanations of certain aspects of child development" (Swim, 2008). In this regard, this paper discuses three of the major developmental theories, namely the behavioral theory, the cognitive theory, and the sociocultural theory.

### **Summaries of three Major Developmental Theories**

**Behavioral Theory** 

The behavioral theory focuses on the behavior of people, which can be observed ( Crandell, Crandell & Zanden, 2008). In particular, behavior consists of what people actually say and do. With this theory, behavior is broken down into units called responses and the environment is likewise broken down into units called stimuli. Moreover, this theory is concerned with determining how people learn to behave in specific ways, which makes this theory also known as the learning theory. More specifically, it emphasizes two types of learning, namely the classical or respondent conditioning and the operant or instrumental conditioning. Ivan Pavlov, a Russian physiologist, was the proponent of the Classical Conditioning theory. According to him, classical conditioning is " a process of stimulus substitution in which a new, previously neutral stimulus is

substituted for the stimulus that naturally elicits a response" (Crandell et al., 2008, pp. 42-48). It requires the existence of a reflex, which can be activated by a new stimulus. However, in the event that there is no pre-existing stimulus that can be linked to a new stimulus, an alternative that can be used in teaching a specific behavior is the use of rewards. An example would be when teaching a dog how to roll. The trainer would give the dog some biscuits as a reward for successfully rolling. In time, with the reward (stimulus) following the act of rolling (response), the particular behavior (rolling) is reinforced, which then promotes learning. In this case, the process called operant conditioning occurs. In particular, operant conditioning is a type of learning where a behavior's consequences influence the strength of that behavior. More specifically, operants are behaviors that can be controlled by changing the effects that result from such behaviors. In other words, these behaviors are responses to the environment. Unlike classical conditioning where the stimulus elicits the response, the stimulus in operant conditioning reinforces the response.

The Operant Conditioning theory was later enhanced by B. F. Skinner, an American psychologist, whose research focused on the roles of rewards and punishment in operant conditioning. According to Skinner (Crandell et al., 2008), reinforcement is the process where one event strengthens the probability of the occurrence of another event. He asserted that life is based on the reinforcement of consequences or payoffs.

John Watson was also a proponent of the Behavioral theory (Crandell et al., 2008). He claimed that people do not undergo distinct changes but that they undergo a continuous process of behavioral changes in response to external

stimuli or environmental influences. This theory proposes that the environmental contexts that surround the events are important where the absence or presence of certain stimuli has an impact (Crandell et al., 2008). It further asserts that people learn when their expectations are violated by the events that occur. For example, when a person learns that doing something results in unpleasant consequences then they learn not to do it anymore.

When used in mental health treatment, the principles of the behavioral theory can be used in modifying behavior. In particular, the theory asserts that both the pathological behavior and the normal behavior are acquired through the learning process (Crandell et al., 2008). In this regard, the elimination of unwanted behavior can be accomplished by not reinforcing it. In addition, behavior can be modified with the use of rewards and punishments. An example is the use of the behavior modification model – based on Skinner's behavioral theory – in the treatment of Jamaican children with emotional and behavioral disorders (Anderson, 2012). Similarly, the behavioral theory can also be used in the treatment of children with autism (Sundberg & Michael, 2001).

## **Cognitive Theory**

The cognitive theory focuses on the processes that determine how people try to represent, organize, treat, and transform information in order to form their behavior (Crandell et al., 200). In particular, the process of cognition involves phenomena such as thinking, reasoning, problem solving, recall, retention, imagery, perception, and sensation.

The main proponent of this theory was Jean Piaget, a Swiss developmental

psychologist, who was particularly interested in the changes that occur in children's mode of thought. According to Piaget, children's thoughts are distinct from those of adults in that what may seem illogical to adults would seem perfectly logical from a child's perspective as a child functions from a different mental framework from that of an adult (Crandell et al., 2008). However, as children grow up, their thought formations also change. Piaget asserts that children continuously interact with their environment and that they modify, transform, and act on the world where they live. In turn, they are changed and shaped by the consequences of such interactions. In other words, children's modes of thought are modified by their experiences in the same manner that their experiences are modified by their modes of thought. With children continuously interacting with their environment, these interactions lead to new organizations of knowledge and new perceptions of the world.

For Piaget, development is synonymous to adaptation in that children modify their behaviors to meet the demands of their environment (Crandell et al., 2008). Children form schemas or cognitive structures that enable them to cope with their environment. Piaget asserts that instead of using the information pieces that they acquire, children use the mental frameworks or schemas they've developed in interpreting information from the environment (Crandell et al., 2008).

Moreover, Piaget suggests that adaptation involves the processes of assimilation and accommodation where assimilation pertains to the receipt and interpretation of information so that it conforms to the currently held model of the world while accommodation pertains to the modification of

one's schema in order to make it better match the world of reality. In other words, while assimilation fits experiences into existing world conceptions, accommodation changes conceptions in order to better understand the world. On the other hand, equilibrium is achieved when there's a balance between the assimilation and accomodation processes, that is, when a child's assimilation of new experiences conforms to the models they've developed through accommodation. However, since children continuously interact with their environment, the cognitive development process is characterized by alternating states of equilibrium and disequilibrium. Moreover, Piaget's theory is well-known for its cognitive stages in development. These stages consist of the sensorimotor stage; the preoperational stage; the stage of concrete operations; and the stage of formal operations. Piaget indicates that "biological growth combines with children's interaction with their environment to take them through a series of separated, age-related stages" (Crandell et al., 2008, p. 49). This implies that children must go through each of the stages in their development. An example of the application of Piaget's cognitive theory in the treatment of children with mental issues is the use of play therapy, which can be used specifically for the treatment of conditions such as pre-operative anxiety, hyperactivity disorder, problem classroom behaviors, self efficacy, fear, anxiety, aggressive behavior, cultural issues, and post-traumatic disorder (Kool & Lawyer, 2010). The effectiveness of this type of therapy lies in the fact that the language of play is a language that young children can understand. As asserted by Piaget (Kool & Lawyer, 2010), most children in their first ten years are incapable of meaningful expressions and of

comprehending complex feelings, motives and issues due to their inability to think abstractly but that in the pre-operational stage they begin assimilative play and are able to form symbols. As their cognition develops further, play becomes more complex.

Another proponent of the cognitive theory was Albert Bandura who proposed the Social Cognitive Learning theory (Crandell et al., 2008). This theory asserts that learning occurs through the imitation of the behavior of socially competent models, that is, people learn through their observations of others even when they have not had the opportunity to make the responses themselves. This theory focuses on the manners by which children and adults mentally operate with regards to their social experiences and how these mental operations influence their behavior. He asserts that reinforcement is not necessary to elicit behavior and that children can learn by imitating the behavior of others (Mossler, 2011). For Bandura, the four steps in social cognitive learning include attention, retention, reproduction, and motivation (Mossler, 2011).

One application of the cognitive-social learning theory is the child-parent psychotherapy. This type of therapy combines social-learning and cognitivebehavioral theories to restore a child's mental health and developmental progression, as well as the child-parent relationship, which were damaged by the occurrence of family violence (The National Child Traumatic Stress Network, 2012). This type of intervention focuses on child-parent interactions where the goal is for the improvement of the child-parent relationship and the normalization of trauma-related response where both the parent and the

child construct a trauma narrative in order to bring the child back to a normal development path.

#### **Sociocultural Theory**

The sociocultural theory was proposed by Lev Vygotsky. According to this theory, gaining an understanding of the mind requires an understanding of how psychological processes shape the functions of the mind (Crandell et al., 2008). In particular, this theory posits that the development of people occurs during their early formative years and is dependent on when and where they grow up. It also asserts that development takes place when changes occur in the person's activities or in their social situation. Moreover, it indicates that people observe an activity and internalize its basic form. It also indicates that this internalization is enabled by signs and symbols, such as language. Finally, it suggests that people's assimilation of a particular culture's values occurs through their interaction with other people in that culture. It should also be noted that the sociocultural theory goes by the assumption that a person's development is determined by the activity of groups. As a child interacts with another person, the child assimilates the activity's social aspects, takes the information, and internalizes it. As a result, social values turn into personal values. In addition, this theory shows how language facilitates cognitive functions and how these functions are rooted in the child's interpersonal relationships where a child is able to mentally incorporate their observations of others. For Vygotsky, " development is always a social process" where interactions between children and adults play an important role (Crandell et al., 2008, p. 54).

An example of the application of the sociocultural theory in the treatment of

mental problems in children is the Integrated Play Groups (IPG) model, which is used for promoting imagination, play, communication, and socialization in children with autism (Siri & Lyons, 2010). This model involves bringing together children with autism (novice players) who engage in play experiences with expert players or those who are more capable peer play partners. They are guided by a play guide or a qualified adult facilitator.

## **Comparison and Contrast of the Three Developmental Theories**

One similarity among the behavioral, cognitive, and sociocultural theories is the claim that behavior or learning is influenced by the environment. In the behavioral theory, behavior is influenced by an external stimulus and the consequence of such behavior leads to learning. In the cognitive theory, Piaget's cognitive development theory indicates that learning results from the continuous interactions that children have with the environment while Bandura's social cognitive theory indicates that learning occurs from one's observations of what other people do. Similarly, Vygotsky's sociocultural theory posits that learning occurs from their observations of what people around them do.

Another similarity would be the use of reinforcement in both the behavioral theory and the social-cognitive theory. In the behavioral theory, reinforcement is necessary to elicit a response while in the social-cognitive theory, reinforcement is necessary to motivate the person to repeat the behavior.

A third similarity is the implication that behavior can be learned. According to the behavioral theory, behavior can be learned through the use of reinforcements and punishments. According to Piaget's cognitive development theory, behavior can be learned through the formation of schemata while both Bandura's social-cognitive theory and Vygotsky's sociocultural theory indicate that behavior can be learned through the imitation of others. Lastly, all of these theories claim that behavior is rooted in a person's early childhood years but that learning continues into adulthood as people's environment changes.

With regards to their differences, one difference is in their focus. The behavioral theory focuses on the visible behavior while the cognitive theory focuses on mental representations and the sociocultural theory focuses on social interactions.

In addition, the behavioral theory asserts that learning occurs through the association between an event and a stimulus while the cognitive theory asserts that learning occurs through the association between one's experiences with their established schemata. On the other hand, with the sociocultural theory, learning occurs through the internalization of an activity's social aspects through the use of language.

A third difference is that the cognitive theory indicates that individuals are capable of enacting changes on their own, even without an external influence. On the contrary, the behavioral and sociocultural theories indicate that external influences are necessary for change to occur. Lastly, the cognitive theory indicates a discontinuity in the sequences of change while the behavior and sociocultural theories indicate continuity in these sequences (Crandell et al, 2008).

## Conclusion

This paper discussed the behavioral theory, the cognitive theory, and the socioculutral theory in relation to child development. In particular, this paper discussed the behavioral theories according to Pavlov, Watson, and Skinner; the cognitive development theory by Piaget; the social cognitive theory by Bandura; and the sociocultural theory by Vygotsky. These theories were summarized and compared and contrasted. In conclusion, it can be said that these developmental theories provide an understanding of specific aspects of child development but that none of them can completely explain child development by themselves.

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