

Cognitive psychology research paper

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Cognitive Psychology

Cognitive psychology is a sub discipline in the diverse psychology discipline, and is concerned with the study of how human beings think, perceive, recognize, remember, speak and make solutions to any problem (Sternberg, & Mio, 2008). It also attempts to focus on mental processes including the way human beings integrate, store, manipulate and apply information. In this way, cognitive psychology attempts to explore the process of thinking as well as knowledge acquisition in a conceptual format (Sternberg, & Mio, 2008). This discipline arose out of discontent with earlier methods of psychology, such as behaviorism and psychoanalysis. Within its development timeline, cognitive psychology has undergone several tests, and several theories have been developed in an attempt to explain the concepts.

It is possible to argue that there are several milestones achieved within the process by which cognitive psychology has developed from the initial postulate to the modern day cognitive psychology sub discipline.

Cognitive psychology developed out of behaviorism psychology, when the earlier pioneers questioned behaviorism as a school of thought (Sternberg, & Mio, 2008). They doubted the notion held by behavioral psychologists that human beings behave with response to the external or internal stimulus and not what is in the brain (Balota & Marsh, 2004). There are many individuals who have contributed to the process of development of cognism in psychology, and the several milestones that have been achieved so far can be attributed to each person who in one way or the other made some significant impact on this field (Sternberg, & Mio, 2008). However, there

some names of individuals which cannot go unmentioned due to their efforts in the development of the field. Individuals like Wilhelm Wundt, Max Wertheimer, Wolfgang Kohler, Kurt Koffka and Jean Piaget made the most significant contributions to the development of the field, and can be termed as being the pioneers of this complex field in psychology. The development of modern fields of cognitive psychology is marked by four major milestones: (1) the shortcomings of the behaviorism psychology, (2) the capacity to account for the shortfalls using abstract constructs, (3) the possibilities of linking the abstract constructs with perceived mechanisms through what is known as artificial intelligence and neurobiology, and finally, (4) the realization that the human methods of representing ideas in the brain and the cognition process could be likened to the interior operation of a computer (Balota & Marsh, 2004).

The behaviorism psychology of the early 20th century failed in many ways to account for the wide range of many observable behaviors, and most of which had been documented at the time (Nevid, 2006). For instance, the behaviorism theory of stimulus and response, failed in many ways to explain the critical-period learning restrictions in humans or the fixed-action patterns. Moreover, although the theory was informative and practical, it failed to explain the generative characteristic of language development in human beings (Nevid, 2006). The theory was also based on the abstract constructs, which by then were no longer recognized as being scientifically reproducible verifications (Balota & Marsh, 2004). The reality was, by 20th century, that behaviorism theory of psychology was misleading to an extent, and that the abstract constructs could not be demonstrated through the

observed behavior, rather they were merely speculative. The emergent cognitive psychology was based on two major assumptions; there exist verifiable cognitive representations and processes which do act on the representations and that these representation and processes can be discovered indirectly (Balota & Marsh, 2004).

Despite the differences between the cognitive psychology and its precursor, the behaviorism psychology, there are several relationships between them. The weaknesses in behaviorism psychology can be explained in cognism psychology, and in this case, it is convenient to say that behaviorism is the precursor of cognism psychology (Nevid, 2006).

Despite its apparent strength in explaining human behavior and mental functioning, cognitive psychology has several shortcomings. For example, one cannot observe the internal functioning of the human brain system, despite the notion that the computer works in the same way as the brain (Balota & Marsh, 2004). Even though the neurologist and neurobiologists attempt to use scientific methods and techniques in demonstrating how the human brain function, and that the technology has aided much in this field, it is still not possible to observe the processes involved in the functioning of the brain, especially where multiple internal and external stimulus are experienced (Balota & Marsh, 2004).

Behaviorism psychology, therefore, becomes of importance because the human behavior can be observed and explained using the stimulus response principle. Human behavior can be observed and measured (Balota & Marsh, 2004). For example, the classical conditioning theory of behaviorism

psychology holds that human is an agency which can respond to patterns and cycles of environmental and internal stimuli, and that all human behavior are due to a certain stimuli, or stimuli working at the same time.

Despite the fact that human behavior cannot fully be explained in terms of behaviorism owing to the aforementioned shortcomings of the theory, it is important to link the theory with cognitive psychology in an attempt to elaborate the theory of internal functioning of the human brain (Enquist & Ghirlanda, 2005). For example, if human beings function in a similar pattern as the computer executes its functions, then it is possible that all these functions result from a certain stimulus, whether internal to the body or external (Enquist & Ghirlanda, 2005). For instance, every function that a computer executes is as a result of a stimulus either internal or external. Computers cannot process ideas which had not been initiated by a person (user) or another machine, rather execute commands which have been fed by a user or another program running external to it (Enquist & Ghirlanda, 2005). Therefore, its functioning can be measured in terms of the commands which stimulate the function. In a similar manner, the human brain usually acts from a certain stimulus, whether generated by the body system or environmental.

References

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