

Evolution of cognitive psychology assignment



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Running head: EVOLUTION OF COGNITIVE PSYCHOLOGY PAPER Evolution of

Cognitive Psychology PSYCH 560 Latrice T. Colbert Julie Bruno, Psy. D

September 6, 2010 Cognition is a term referring to the mental processes

involved in gaining knowledge and comprehension, including thinking,

knowing, remembering, judging and problem-solving. Not only is cognitive

psychology central to everything a person does in his or her everyday life, it

is also central to psychology's quest to understand how people think and act.

Cognitive psychology is a key player within the interdisciplinary field of study

termed " cognitive science. " Cognitive science is an interdisciplinary effort

to understand the mind. Cognitive science includes a number of disciplines,

five of them plus cognitive psychology lying at its core. Philosophy, the first

discipline to systematically examine the mind, helps to formulate and examine

the fundamental questions that define the field. Neuroscience attempts to

specify the relationship between mind and brain.

Artificial intelligence addresses issues of mind by modeling human thought

processes with computer hardware and software. The field of linguistics

investigates the structure of language and the specifics of language use and

what it says about the mind. Anthropology explores the mind through quite a

different lens, the lens of culture. According to Stout (2008) George Mandler,

a longtime researcher in the area of memory and cognition, has gathered

together his notes and selected bits from previous publications to assemble

a new book cast as a brief history of the emergence of cognitive psychology.

The challenges to introspective method from the perspective of imageless

thought gained an all of sorts amongst behaviorist. Because behaviorism

focused on the external nature, and therefore the 'not-conscious' nature, of connections amongst elements, they demonstrated that an individual could have structure without consciousness. Although behaviorism had struck a chord, too many it rang hollow in its failing to capture the richness and diversity of human behavior and creativity. One of the issues of behaviorism was the S-R (stimulus-response) approach, which was failure to account for data.

Another major influence on the emergence of cognitive psychology was the development of new technologies like calculators, computers, and communication systems. Robinson-Riegler & Robinson-Riegler (2008) stated, "These development revolutionized how humans viewed machines and their capabilities." This, in turn, revolutionized the way humans viewed themselves and their capabilities. According to the behaviorists, responding is absolutely essential for learning, it's the R (response) in the S-R association link.

Demonstrating that learning occurs in the absence of R would be difficult to explain. According to the behaviorist view, reinforcement is necessary for learning to occur. It is what holds the stimulus and response together and if there is no reinforcement, stimulus and response will not be bonded, and there will be no learning. John B. Watson's behaviorism in which thought processes are represented by objective processes such as muscular or glandular responses, began to seem more fruitful according to American Psychological Association (1999).

An alternative to introspection and Watsonian behaviorism was Gestalt psychology in which thought was seen as an organizational process by which

a problem was recognized or solved. Problem-solving became a major component in Gestalt psychology but Gestalt was not a part of psychology's mainstream. Renowned behaviorist B. F. Skinner termed language verbal behavior and applied an S-R analysis to the acquisition of language, arguing that even complex abilities like language could be captured in purely S-R terms.

On the other hand, linguist Noam Chomsky challenged Skinner's S-R view of language. He argued that the concept of stimulus control has no meaning in language. Robinson-Riegler & Robinson-Riegler (2008) stated Chomsky's critique of Skinner was so devastating that it was met by silence from the behaviorist for over a decade; they simply didn't have an answer for it. " The movement toward a new science of mind now had undeniable momentum. Conceptually behavior was failing as a satisfactory explanation of behavior. Behaviorism, the dominant explanatory paradigm, was failing.

Around the same time that behaviorism was faltering, emerging technologies such as communication systems and computers, provided useful models for describing the process of thinking and investigating its components. The development of computers made a dramatic impact on the newly developing science of the mind. It was made clear that computers could do some intellectual things as well as the human mind. According to Robinson-Riegler & Robinson-Riegler (2008) computers could think simple to the way humans think. Computers handle information in three basic stages: input, some type of processing, and output.

Humans can be thought of in the same way, taking in information through a sensory system, processing the information, and responding to it. Cognitive psychology started to establish itself in the mid-1950s within psychology.

Robinson-Riegler & Robinson-Riegler (2008) said the failure of the S-R approach, coupled with the promise and excitement generated by new theoretical approaches and new technologies, fueled what has become cognitive revolution. As cognitive psychology evolved, the information-processing model emerged which the computer is used as a model for human cognition.

On the other hand, the question remains does humans process information in the same form of a computer but there is a significant difference between the two. Computers processes information through CPUs and the human brain just does not work that way. Conclusion Cognition is a term referring to the mental processes involved in gaining knowledge and comprehension, including thinking, knowing, remembering, judging and problem-solving. Cognitive psychology is a key player within the interdisciplinary field of study termed “ cognitive science. According to the behaviorists, responding is absolutely essential for learning, it’s the R (response) in the S-R association link. Renowned behaviorist B. F. Skinner termed language verbal behavior and applied an S-R analysis to the acquisition of language, arguing that even complex abilities like language could be captured in purely S-R terms. On the other hand, linguist Noam Chomsky challenged Skinner’s S-R view of language. The development of computers made a dramatic impact on the newly developing science of the mind.

It was made clear that computers could do some intellectual things as well as the human mind. Reference American Psychological Association, Public Information and Media Relations, and Public Communications. (1999).

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