

History of Psychology

Chapters 9, 10, and 11

Why is the story of Hans the Wonder horse important?

Clever Hans was there to prove the fact that properly trained animals could show their intelligence. Whoever saw Clever Hans would be surprised that a horse could add and subtract, use fractions and decimals, read, spell, recognize different objects and remember the information. After a long investigation of the phenomenon, the committee concluded that the horse was not receiving any intentional signals from the owner. That conclusion was further investigated by Oskar Pfungst who conducted a series of tests that showed that the animal was unintentionally conditioned by the owner. Clever Hans was able to read the slight body movements of the person who was asking him a question and act on it. Observers saw the intelligent horse that was giving the right answers. Thus, Pfungst proved that it wasn't the example of an animal's intelligence but a result of very extensive training.

How did animal psychology influence the development of Behaviorism?

Animal psychology grew out of evolutionary theory and led to attempts to demonstrate the existence of mind in lower organisms and the similarities between animal and human minds. Animal psychology was an objective science that implied objective methods of studying the subject matter. The focus on consciousness was gradually replaced by the concentration on the concept of behavior, as the sufficient object of psychological study.

Why was the work of Ivan Pavlov (1849-1936) so important to the development of psychology?

Ivan Pavlov's work had a profound and long-lasting influence on the science of the mind and behavior. His research helped to complete the shift of the study of learning from the earlier focus on subjective ideas to objective and quantifiable physiological events. Pavlov worked on three major problems which included functioning of the nerves of the heart, primary digestive glands and the study of conditioned reflexes.

What did John Watson (1878-1958) believe should be the subject matter of behaviorism?

John Watson believed that elements of behavior should be the subject of behaviorism. He focused on the external behavior of people and their reactions to given situations, rather than their internal, mental states. He described behavioral acts objectively in terms of stimuli and responses. Watson believed that regardless of the complexity of the behavioral acts they all could be reduced to lower-level motor or glandular responses.

What were Watson's beliefs about thought processes?

Watson believed that thinking like any other aspects of human functioning was a type of sensorimotor behavior. According to Watson, thought process involved implicit speech reactions or movements. He reduced thinking to subvocal talking that was based on the same muscular habits as vocal speech.

Thinking was considered as silent talking that involved the muscle movements (such as frowns, shrugs and actual tongue and larynx movements during thought).

What were the elements of Tolman's purposive behaviorism?

Tolman believed in the purposiveness of behavior. He considered all actions goal-directed. Tolman dealt with the objective responses of the organism in terms of changes in response behavior as a function of learning. Instead of most behaviorists' stimulus-response proposition Tolman considered that there were intervening variables in between. Thus, what is going on with the organism affects the behavioral response to a stimulus situation. Tolman listed 5 independent variables as causes of behavior: environmental stimuli, physiological drives, heredity, previous training, and age. According to Tolman, behavior is a function of these variables.

How was Skinner's (1904-1990) behaviorism similar to Watson's behaviorism?

Skinner was influenced by J. Watson's behaviorism that rejected introspection and any psychological explanations based on mental states, beliefs, desires, or memories. Skinner's goal of psychology was to predict and control behavior. For both Skinner and Watson psychic or mental concepts had no value for the science of psychology. They dismissed the idea of "mind" as superstitious that couldn't be empirically investigated. Like Watson, Skinner focused on the practical value of his research and its' real-world applications; psychology was considered the science that dealt with the objective study of behavior.

How did Skinner's behaviorism differ from Pavlovian conditioning?

In Pavlovian conditioning a stimulus was paired with the response under conditions of reinforcement. Skinner's term "respondent behavior" refers to the behavioral response that is elicited by a specific observable stimulus. In Pavlov's research the dog had no choice but to respond to the stimulus and couldn't act on its' own. According to Skinner this respondent behavior doesn't operate on the organism environment. Skinner defined another type of behavior, operant behavior, that occurs without an observable external stimulus (food for the dog in Pavlov's experiment) and operates on the organism environment. Skinner believed that operant behavior represents a typical learning situation. Unlike Pavlov's dogs, the rats in Skinner's experiment were allowed to explore their environment and eventually find the way to get food. The role of reinforcement was demonstrated by the experiment where the rats were given food only sparingly. Skinner's research showed that the shorter the time intervals between reinforcements were the faster the animals responded, but if the interval between reinforcements lengthened the rate declined.

What did Bandura's (1925-) social cognitive theory focus on?

Bandura focused on observing the behavior of humans in interaction. He emphasized the importance of rewards and reinforcements in acquiring and modifying behavior. Social cognitive theory studies

behavior as it is formed in social environments. The theory emphasizes the role of observation, modeling, self-efficacy, and social influence in human behavior and accounts for the interaction of environmental and cognitive elements that affect how people learn. Bandura argued that it's impossible to study human behavior without taking into consideration social interactions. In addition, he pointed out the influence of beliefs, expectations and instructions. According to Bandura human behavioral responses are not automatically triggered by external stimuli but initiated by the person. When the behavior is altered by an external stimulus. It happens because the person is consciously aware of the response and decides to act in a certain way the next time the situation arises. Bandura argued that cognitive processes are interposed between stimulus and response.

What does it mean to have high self-efficacy and what does it mean to have low self-efficacy? How does that affect how we interact with others and live our lives?

Bandura described efficacy as the sense of self-esteem or self-worth and the feeling of adequacy, efficiency, and competence in dealing with problems. To have high self-efficacy means being able to cope with the different events in life. Those who have high self-efficacy are not scared of obstacles, they look for challenges and are able to maintain high level of confidence in their ability to succeed. They are in full control of their lives. People with high self-efficacy are usually less stressed, tend to have better grades, get better jobs and are not scared to consider multiple career possibilities. High self-efficacy leads to better health, higher pain tolerance, and faster recoveries from illnesses. People high in self-efficacy also tend to have better social skills.

To have a low self-efficacy means to not feel confident about one's powers. People with low self-efficacy often feel helpless or even hopeless. They believe that they don't have a chance to affect life situations. When they face problems, they give up especially when they already attempted to solve the problem but didn't succeed. Low self-efficacy often means believing in fate. People low in self-efficacy tend to be less social. They are more likely to deal with stress and anxiety.