

Skinner's behavioral theory research paper examples

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Human behavior, specifically the internal behavior, is probably one of the most complex phenomena to explain. Various theories have been developed in an attempt to understand and explain human behavior, and Skinner's behavioral theory is one of them. Burrhus Frederic Skinner, a behavioral psychologist born and raised in Pennsylvania, is considered the father of radical behaviorism. In his quest to explain human behavior, he invented the famous, or rather infamous, Skinner box which he used for the experiments. With animals (such as rats or pigeons) as the specimen, Skinner directly transferred his findings to human beings, without the slightest consideration that humans are extremely different from these animals. This paper focuses on Skinner and his behavioral theory. It discusses the theory and looks at the experiment " Superstition in the Pigeon." The paper gives an in-depth analysis of the theory, highlighting the principles, assumptions, and the scope or applications. It also gives a criticism of the theory, and makes a conclusion that; despite the findings of Skinner, this is a theory just like any other theory, and the assertions herein are subject to further investigation.

Skinner is considered the father of radical behaviorism because of his belief that everything psychological is behavioral, whether external or internal, like the thoughts and feelings. According to him, every human behavior can be explained by the environmental impacts produced by that behavior (Skinner, 1948; 1984). Even though he believed that internal (private) behavior is not easily studied, he acknowledged the fact that every human being has his/her own subjective experience of the behaviors.

In basic terms, Skinner's theory of behavior states that: Human behavior, in

any given situation, is followed by a consequence. If the consequences are positive (such as praises, reward, or satisfaction), it is most likely that the behavior will be repeated in future similar situations. However, if the consequences are negative (such as embarrassments, punishments, injuries, and dissatisfaction), such a behavior is least likely to be repeated in future similar situations. The positive consequences are referred to as reinforcers, while the negative consequences are called punishers. The resulting effects of the relationships between the behavior and the environment are either reinforcement or punishment. Skinner's theory is summarized as follows:

A learned behavior can be made to disappear entirely. When the reinforcement is withdrawn, the reoccurrence of the behavior will gradually decrease until the behavior is suppressed. This is what Skinner refers to as extinction.

Explanation

Skinner's behavioral theory is based on the notion that in an overt behavior, learning is a function of change. Behavioral changes are results of individual responses to events (or stimuli) which take place in the environment (Aeschleman et al., 2003). Every response results into a consequence. When the Stimulus-Response pattern is rewarded (reinforced), the person is conditioned to respond (Skinner, 2005). The desired response is strengthened by a reinforcer. The response can also be weakened by a negative reinforcer or a punisher. Skinner argued that every human behavior is developed and maintained in the same way. However, the exact internal behaviors of human beings, and their consequences, cannot be easily

identified.

This theory is also referred to as radical behaviorism because of Skinner's argument that, when human behavior is interpreted to be as a result of intellectual capabilities or highly evolved consciousness, it is because the interpreters are unable to identify the reinforcers that created and maintained the behavior (Skinner, 1948). Skepticism and controversies surrounded Skinner's arguments, but he defended the views by performing experimental demonstrations. In these experiments, Skinner proved (or tried to prove) that lowly creatures like rats and pigeons could learn the behaviors that were sole preserve of human, such as superstition. Discussed hereunder is Skinner's " Superstition in the Pigeon" experiment that brings into clear focus the basis of his arguments.

" Superstition in the Pigeon" experiment

This is just one of Skinner's experimental demonstrations that supported his school of thought. Superstition is one of the most common things that control human behavior. Most people do things out of superstition. According to Skinner, this is because people presume or believe that there is a link between the superstitious behavior and the reinforcing consequence, which, in reality, is not true. The connection only exists because there was accidental reinforcement of the behavior. The reward is not contingent on any behavior, and he calls this " noncontingent" reinforcement (Skinner, 2005). People tend to believe that the behavior triggers the reward, which in real sense, is not true; no such relationships exist. So, Skinner went ahead and made the superstitious pigeon!

In his studies, Skinner used the conditioning chamber (or the Skinner box). Skinner box is an empty box or cage, with a tray or dish where food is dispensed. It allows the researcher to control the animal by dispensing the food as reinforcement. In Skinner's early research, the conditioning boxes had a lever which, when pressed, food would be dispensed. Rats were used in his early studies. When placed into the box, a rat would accidentally press the lever and receive the food. Through trial and error, the rat would learn to press the lever in order to receive the food.

In the conditioning box for pigeons, the lever was replaced with disks that could be pecked by the pigeons. In Skinner's study of superstitious behavior, food was made to drop into the tray, no matter what the pigeon was doing, at intervals of 15 sec (Skinner, 1948). This was meant to produce noncontingent reinforcement. The pigeon would receive reward in every 15 seconds regardless of what it did (Skinner, 2005). A total of eight pigeons were used. The birds were made to be hungry before the experiment so that they would be highly motivated by food. In other words, the power of reinforcement was increased. Every pigeon was put into the Skinner box everyday for some minutes and then left. When inside the box, the food was supplied automatically at the said interval. When in the box, the behaviors of the birds were recorded after several days of this conditioning.

Six of the eight birds developed various behaviors that had not been observed in them prior to the experiment. The behavior was superstitious; it was as if some action would produce the food. Skinner then slowly increased the time interval to 1 minute. It was observed that the movement of the pigeons was more energetic. It appeared that the birds were dancing

between the reinforcement intervals (Skinner, 1948). This newly developed behavior was then suppressed. The reinforcement was discontinued and the birds' behavior gradually decreased. The behavior eventually disappeared completely. Skinner then directly related these findings to human behavior.

Criticisms

Skinner's behavioral theory has been a subject of great controversy. His strict behavioral views cannot account for the many psychological processes which are fundamental to human beings. Other renowned psychologists like Carl Rogers, the founder of humanistic school of psychology, argued that humanistic psychology is able to investigate issues that are meaningless to the behaviorist, such as goals, purposes, choice, and perception of self and others. These are the personal constructs with which an individual's world is built. None of these aspects is open to Skinner's strict behaviorist theory, yet all of them are significant for human behavior (Rogers, 1964). Skinner, however, argues that all these aspects of human characteristics can be analyzed from a behavioral view point. The key is to have a proper interpretation of the behavior and the consequences that build up the behavior.

Winokur argues in the same line as Rogers. According to Winokur, Skinner's argument that behaviorism is psychology and psychology should be all about behavior, is old school and outdated (Winokur, 1971). Behavior is not restricted to any of the events taking place within the organism. It can be covert, overt, verbal or nonverbal. Skinner, however, tells that, behavior must consider the events taking place within the organism as part of the

behavior.

Skinner is criticized for failing to make efforts towards investigation of judgments, including remembering, perceiving, feeling, and thinking behavior, as performed by individuals and organisms of species. After identifying that a given behavior occurs, such as perception in a learning situation, a component analysis and description of the behavior is required. This lacks in Skinner's work (Winokur, 1971).

Winokur also argues that there are various inconsistencies in Skinner's work, and the understanding of Skinner's theory only depends on the knowledge of the reasoning that Skinner gives, and not cognitive science (Winokur, 1971). This argument is supported by Catania (2003). Some of the difficulties and inconsistencies include the interpretations of human phenomena, and the interpretation of the terms without the cautions (Catania, 2003). Catania gives an example of self-reinforcement concept which has both logical and empirical difficulties.

When explaining a rule governed behavior, Skinner argues that a behavior that is primarily effective is reinforced by producing the rules or the controlling circumstances. Rules are the discriminative stimuli. This assertion is not true according to Winokur (1971). Rules have existed regardless of anybody's knowledge or understanding of them and whether they are followed or not. Rules, just like meaning, have their own life.

Applications

Skinner's theory is not new in the practical world. Pets and other domesticated animals are trained according to the postulates of the theory.

When you repeatedly tell a dog to sit and then you reward it, say with food; the dog will sit when told to. The dog will sit even without immediate reward. Operant conditioning is a powerful form of learning that is effective across all animals including human beings. When you do not want an animal to behave in a certain way or to do a certain thing, you simply remove the reinforcement or introduce a punishment. When, say during dinner, a dog is given some food, it will develop a behavior of begging at the dinner table. A dog is not born to beg at the table, but does so because it has been conditioned to behave in that manner through reinforcement. If you want to stop the behavior (extinction), you must completely withdraw the reinforcement. However, if one of the family members secretly gives the dog some food during the extinction, the desired behavior will never occur and the dog will never stop begging.

Punishment is not just for the sake; it is meant to suppress undesired behavior. When a child is punished for doing something wrong or for behaving in an undesired manner, it is most likely that such an act, or behavior, will not be repeated. Same applies to adults. Prisons are there to suppress unwanted behaviors in the society.

Skinner's operant conditioning is largely applied in clinics, especially in behavior modification (Neuringer, 2002). It is also applied in teachings in schools, at home, and in church (or any religious gathering). The bible teaches that when one keeps God's commandments, there are rewards that include eternal life. However, the reward for disobeying God's commandments is punishment, which includes death. Eternal life is the reinforcement while death is the punishment.

Remarkable contributions have been made by Skinner's behavior analysis in the treatment of children with autism (Sundberg & Michael, 2001). The basic intervention programs consist of identifying the goals in terms of the exact behaviors to be altered; recording the target behaviors, identifying the effective forms of reinforcement, using extinction, intermittent reinforcing, and shaping; developing the operant stimulus control, prompting, and the fading of prompts; and, developing chaining, rules, generalization, modeling, imitation, and other behavioral procedures (Sundberg & Michael, 2001). Language learning is defective in children with autism. For any training program, the major goal is to develop language skills. The training consists of the applications of Skinner's behavioral theory in communicative behavior. Here, communication is the desired behavior. With intentional application of reinforcement, the child is taught to look at the instructor and react to verbal stimuli such as an instruction to stand up or touch a body part. The child is then taught to imitate the instructor's movements, both vocal and physical. The learning process continues till the child perfectly develops language skills (Sundberg & Michael, 2001).

Principles

Conclusion

Skinner's work as a behavioral psychologist was a milestone in understanding the behavior of organisms. Though sparking various reactions and criticisms, the applications of the theory are, by far, beyond doubt. Most of Skinner's observations are based on animals, and it may not be realistic to apply the findings directly to humans. One needs to have a proper and open-

minded interpretation of the behaviors, what constitutes them and their consequences in order to have a perfect analysis. It's worth acknowledging that this is a theory, just like any other theory, and further research is needed.

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