Behaviorism

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“Behaviorism is a theory of animal and human learning that only focuses on objectively observable behaviors and discounts mental activities. Behavior theorists define learning as nothing more than the acquisition of new behavior” (Phillips & Soltis, 1998). “Aristotle thought we reached form or essence through the study of particulars. Behaviorists believe that we can understand human behavior by a meticulous study of particular behavior” (Ozman & Craver, 1992, p. 208). A person’s obvious behavior is the only part of psychology that a proper behaviorist will consider. Opponents of behaviorism argue that no consideration is given to intellect, human will, feelings, motivation or emotion. This places humans as just another part of the animal kingdom. To this behaviorists say, “Is it not better to recognize ourselves for what we are, study the way we function, analyze our behavior, and in the end be in a better position to live effective lives than to be dominated by superstition and myth concerning the faculties, the predispositions and the spiritual character of our nature?” (Power, 1982, p. 169).

Behaviorism is closely related to the beliefs of materialism. “Materialism is the theory that reality can be explained by the laws of matter and motion” (Ozman & Craver, 1992, p. 208). Materialists state,

The mind is at birth a clean slate, and sense experience writes on it in a thousand ways, until sensation begets memory and memory begets ideas. All this seems to lead to the startling conclusion that since only material things can affect our senses, we know nothing but matter and must accept a materialistic philosophy. (Jacobsen, 2003, p. 123)

This is comparable to the behaviorist’s idea that views humans under conditions of their biological or physiological viewpoint. Although materialists and behaviorists equally
consider that people act in a given way based upon their physical structure, behaviorists put added importance on the effect of the surroundings upon one’s behavior.

Although behaviorism dates back as far as 300 B.C. and Aristotle, the true advancement of this philosophy began with Ivan Pavlov. He was a well-known experimental psychologist and physiologist in Russia. His initial research of the digestive system of dogs led him to his renowned study of human reflexes. His studies of human and animal reflex reaction led to many conditioning experiments (Ozman & Craver, 1992). Pavlov found that providing food to a dog would set off a response noticed by an elevated salivary flow. He controlled the situation by ringing a bell each time food was given to the dog. He discovered that he could make the saliva flow just by ringing the bell, although food was not supplied. The bell, being the secondary stimulus, was so directly connected with the food or primary stimulus that the bell brought about the salivary flow, or primary response. The reflex was triggered by a new stimulus. He called this a “conditioned reflex” (Rippa, 1996). He studied these reflexes for thirty years and was considered to be the father of conditioning theory. A learned behavior based on experience became known as “classical conditioning.”

Edward Lee Thorndike followed the ideas and research of Pavlov. He preformed a sequence of learning experiments with animals. Animals were placed in a puzzle box and then tracked to see their process of releasing themselves from the situation. Following a series of trial and error behavior, the animal would happen upon the solution that released food. After more tries the animal would happen upon the correct solution earlier (Pulliam & Patten, 1999). As stated from Thorndike’s “Law of Effect”

It has been most clearly demonstrated in the experimental analysis of operant conditioning. If a given bit of behavior has a consequence of a
special sort, it is more likely to occur again upon similar occasions. The behavior is said to be strengthened by its consequences, and consequences having this effect are called reinforcers. (Skinner, 1978, p.19)

The greater the satisfaction of discomfort, the greater the strengthening or weakening of the bond. Thorndike’s analysis of this behavior was that the behavior that produced the desired effect became dominate and therefore, occurred faster in the next experiments. He argued that more complicated behavior was influenced by anticipated results, not by a triggering stimulus as Pavlov had supposed.

More serious unanticipated effects of the good we do to others often arise because “goods” function as “reinforcers.” It has long been known that behavior is affected by certain kinds of consequences. That is why rewards and punishments are such well-established social measures…. By “effects” he also meant feelings, but they were more than compensation; they strengthened the connection between behavior and the situation in which it occurred. (Skinner, 1978, p. 35)

“Behaviorism came into being in the early twentieth century as a protest against the two schools of thought prevalent at that time: structuralism and functionalism” (Fink & Eyde p. 444). John Watson led a innovative group in psychology called “behaviorists” (Alberto & Troutman, 1995). “Watson advocated the complete abolition of any datum in psychology that did not result from direct observation. He considered such concepts as mind, instinct, thought, and emotion both useless and superfluous” (Alberto & Troutman, 1995, p. 33). “Watson believed that psychology should be confined to those activities that could be verified by an outside observer” (Pulliam & Patten, 1999, p. 169). He believed that one’s surroundings and background are much more imperative than genetics in the determination of human behavior. He also believes that humans inherit specific stimulus-response relations called “reflexes”, which make up the total behavioral collection (Rippa, 1988). Watson did agree with three inborn emotions including fear, anger and
love (Watson, 1998). Through his work and the work of others many of the theories about learning that were held by psychologists were discredited. “Nevertheless, behaviorism won the respect of scientists in other fields and its rigorous techniques helped to support objective educational research (Pulliam & Patten, 1999, p.170). Watson wrote several books supporting behaviorism.

Watson thought that one’s surroundings were the main stimulus that establishes behavior. He considered that if he could be in charge of a child’s surroundings, he could shape the child into any type of person he sought. In his research, similar to Pavlov’s experiment with a dog’s digestive system, Watson trained a child to fear a rat. When the child came in contact with the rat a loud noise was made and the child was startled. This led to the eventual fear of furry animals. Watson rationalized that if he could make a child fear a rat, then he could create any situation and response that he desired. He stated:

Give me a dozen healthy infants, well formed, to bring them up in any way I choose and I’ll guarantee you to take any one at random and train him to become any type of specialist I might select…doctor, lawyer, artist, merchant-chief, and yes, even beggar man and thief, regardless of his talents, penchants, tendencies, abilities, vocations and race of his ancestors. (Jacobson p.31)

This would be behaviorism at its fullest extent.

B. F. Skinner was another psychologist that was sometimes called the high priest of behaviorism. He was known for his studies of how rewards and punishments influence behavior (Fisher, 202). He thought that reinforcement follows behavior and not the other way around. Human behavior is developed by previous situations and reinforcements. Behavior expands in areas that are positively reinforced; therefore, we should be controlling, creating, or using unforeseen events that reinforce desired behaviors. Skinner thought that if we
want to change society or individuals, we must change behavior, and the way to change behavior is to change the contingencies (Ozman & Craver, 1992).

Skinner was inconsistent at times. “On one hand, he appeared to be a hard-nose scientist, dealing only with factual, observable behavior. On the other, he seemed to be a utopian dreamer” (Ozman & Craver, 1992, p. 217). He wrote a book titled *Walden Two* that described this perfect world and life situations. He also wrote other books such as *Beyond Freedom and Dignity*, that were nonfiction and which described his views and understandings.

Skinner used a device, which became known as the “Skinner Box.” This box was used to observe behavior in tested situations and for operant conditioning experiments. Through his experiments he concluded that behavior could be changed or fashioned by providing reinforcement based upon the response. Skinner took Pavlov’s work on classical conditioning and included unprompted behaviors, which he called “operants,” since they function in the setting. From this he fashioned the thought of “operant conditioning.” The process of an alteration in behavior occurring because of a consequence of an action is the suggestion of operant conditioning (Staddon, 2001). Operant behavior is engaging in an activity that is directed by its consequence. In our classrooms today we use this form of behaviorism to set rules and guidelines for the students. Consequences are noted for those who choose to misbehave or not conform to the rules. Teachers establish routines for their lessons and students learn to follow these schedules. This leads to students learning the lessons taught instead of being caught in daily confusion. “Skinner strongly championed behaviorism as an
educational method that is more practical and produces greater results than any other. It has grown in popularity and is used frequently, particularly in areas of special education and with disadvantaged children” (Ozman & Craver, 1992, p. 217). Behaviorism is found all through the education process.

The behaviorist or stimulus-response group of learning theories often promote the view of how we learn as a three-step process:
1. Establishing a bond or connection between a stimulus and a response
2. Promoting an attachment between the response (desire outcome) and the appropriate stimulus
3. Manipulating the learning environment to increase the probability of the response (desired outcome) (Jacobsen, 2003, p. 296)

Within the schools, educators began to rely heavily on teaching by specific behavior objectives and on using standardized methods of instruction. In other words, the tradition of behaviorism initiated in the early twentieth century by Edward Thorndike came to dominate the schools of the 1970s and 1980s. The tradition of behaviorism fit neatly into the accountability movement (Spring, 1986). Learning is the process by which we originally experience life through our senses, eventually establishing connections that result in memory, and finally connect memories that result in ideas (Jacobsen, 2003).

Under the teaching of behaviorism there must be a controlled classroom environment. “As with any theory or methodology, teachers must always concern themselves with the nature of the students in their classrooms; desired individual, societal, and knowledge goals or outcomes; and, the most appropriate way(s) to facilitate those outcomes” (Jacobsen, 2003, p. 297). “Since teachers must engage in the modification of behavior, it is important that they know what goals they wish to achieve and how to reach them with efficiency” (Pulliam & Patten, 1999, p.39). It is believed that behaviorist learning increases student attention, and the probability of generalizing
behavior while decreasing misbehavior through classroom control, and yet maintains desired behavior. The child or student is given the rules and expectations and then he/she is to obey or face the consequences. The student may be controlled by a look, grades and also physical punishment (Ozmon and Craver, 1995). “Although there often appears to be a focus on behaviorism in terms of classroom management, whenever possible, emphasis should be placed upon academic learning” (Jacobsen, 2003, p. 297).

The method of reinforcing behavior most widely used by behaviorists is positive and negative reinforcements. Skinner generally used positive reinforcements. Negative reinforcements, although sometimes effective, can have a bad or negative side effect. When a reward is discontinued then the desired action tends to discontinue. Skinner considered that the most successful practice is to withdraw the reward. This is not viewed as a punishment but instead just a matter of stopping the procedure (Ozmon and Craver, 1995).

“Behaviorists view the child as a highly conditioned organism even before entering school” (Pulliam and Patten, 1999, p. 39). Skinner thought that one of our responsibilities as adults, and particularly as teachers, is to make educational choices and then to use whatever processes we have, including conditioning, to reach these goals. “Skinner admitted that we do not really know the best way to rear children, to educate effective citizens, or to build the good society: but he did maintain that we can develop better ways than we now have” (Ozmon and Craver, 1995, p. 218).

Behaviorism experiments may have begun in laboratories with animals but it has moved to the human world and society. We are conditioned with manners and etiquette. Society is taught in school to follow the rules and these lessons carry on into everyday
life. As further understanding evolves, we have devised and managed not just remote behaviors but a whole culture of behaviors and manners. (Ozmon and Craver, 1995).

Behaviorism has clearly stated objectives, which allows the learner to focus on one goal. This idea of central concentration is one of the many strengths of behaviorism. Cueing responses to behavior allow the learner to react in a predictable way under certain conditions. In a stressful situation like combat or flying a plane, cued responses can be a very valuable tool. The learner knows what is expected of him/her by because specific objectives and outcomes have been established. Another strength or benefit is the fact that time is used more efficiently. Maybe the most important strength of behaviorism is the ease of application to real world examples. Measuring the outcome is much simpler.

“The criticism of behaviorism normally comes from those who say it is too narrow, mechanical, and not humanistic” (Pulliam & Patten, 1999, p.170). “Skinner was a strong advocate of education, although many critics argue that what he meant by education is not education but “training”” (Ozmon and Craver, 1995, p. 223). Skinner thought that much of what others call education is not good education because it is not reinforcing, it does not motivate the students to grow and continue learning and it does not deal with direct reinforcement. Others argue that the education systems are just turning out robots, or people who will only know how to work for others and not think for themselves. Skinner thought we must use the technology and world around us to advance. Skinner describes this world in his book *Walden Two* (Ozmon and Craver, 1995).

Other criticisms against behaviorism are the students learns through rote and there is limited transfer of knowledge. The retention is limited unless reinforced. Repetition, as
well as positive and negative reinforcers reinforce behavior or responses. However, it is very difficult for a single educator to appropriately and individually reinforce thirty or more learners at the same time. Another criticism is not developing problem solving skills. The learners may find themselves in a situation in which the stimulus to the correct response does not occur, therefore the learner cannot respond.

The writer had very little prior knowledge of behaviorism. The writer had heard of Pavlov and his experiments with digestion, stimulus and response, but that was about the extent of understanding. Through this research and presentation, the writer has come to not only understand behaviorism but see it in everyday life. Behaviorism is used in the writer’s classes daily and is a major part of the structure that exists in the classroom. The writer is very much a behaviorist in manners, obeying the law, and setting expectations and routine. Not only is behaviorism in education, it is also found in the everyday real world. The writer follows the laws, because of the consequences, follows etiquette because of previous reinforcements, and uses the structure probably because of the structure set forth in her upbringing. The writer truly can not image anyone without a behaviorism somewhere present in their life.
**Work Cited**


