

Learning Theories: Behaviorism

- Overview
- Implications for the Classroom
- Teaching Strategies using this Learning Theory
- Technology Tools that support this Learning Theory

Overview

Behaviorism is a learning theory with a focus on purely objectively observable behaviors. It discounts any independent activities of the mind. Within the realm of behaviorism, learning is seen as as nothing more than the acquisition of new behavior based on environmental conditions. B.F. Skinner is considered the father of Radical Behaviorism, and, in his own words, he defined it as, "the philosophy of a science of behavior treated as a subject matter in its own right apart from internal explanations, mental or physiological" (1989, p. 122). Below are the basic principles of Skinner's Radical Behaviorism (adapted from Moore, 2011):

- 1) Behavior is a subject matter in its own right that involves the person interacting with the surrounding environment or particular circumstance.
- 2) Definitions can be both functional (what is the item) and relational (how does the item relate to the behavioral response).
- 3) Public behavior is different from private behavior.
- 4) Mentalism is flawed since it believes that the causes of a variety of different behaviors come from some undefined inner dimension.
- 5) The three sources of environmental causes that can influence behavior are phylogeny, ontogeny, and culture.
- 6) Language and verbalization are the result of operant behavioral processes, not nonverbal representational processes.
- 7) Pragmatism increases our understanding natural events by explaining what promotes certain behaviors in response to actions.

The most substantial criticism to Skinnerian Behaviorism lies in the fact that it completely denies mentalism, consciousness, and free will in respect to how humans learn. Skinner (1950) stated that, "when we attribute behavior to a neural or mental event, real or conceptual, we are likely to forget that we still have the task of accounting for the neural or mental event. According to Williams (1999), the behavior of the student is the only dimension that teachers can look to for evidence of learning, and altering environmental factors in the classroom is the main strategy for promoting student learning. The development of reliable assessment is therefore paramount to the educator. Staddon and Bueno (1991) expressed their frustration with this bottom-up view of learning. They argue that the conceptual nervous system can provide a top-down model that would provide a much better understanding of how and why complex human behaviors occur. It is difficult for some to believe that all of our actions, behaviors, and

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thoughts are conditioned from previous external experiences.

REINFORCEMENT

Implications for the Classroom

Since this theory only relies on observable behavior, it is relatively simple to implement in the classroom. There are positive and negative reinforcement techniques that can be very effective not only for learning in the classroom, but for teaching to students with disorders including autism, anxiety, or antisocial behavior. Any time a teacher uses a reward or punishment system in their educational approach, they are applying a behaviorist learning theory. It is important to note the definition of negative reinforcement. A common misconception exists that negative reinforcement implies punishment; however, under Behaviorist theory, negative reinforcement is the removal of a negative stimulus in order to increase a desired behavior. A matrix of the basic definitions and examples of rewards and punishments can be seen below:

PUNISHMENT

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POSITIVE	Giving something good in order to increase a behavior i.e. giving a good grade on a paper that a student has worked hard on	Giving something bad in order to decrease a behavior • i.e. issuing pop quizzes to decrease bad student studying/reading habits
NEGATIVE	Taking away something bad in order to increase a behavior • i.e. taking away set deadlines for assignments in order to increase student independence	Taking away something good in order to decrease a behavior • i.e. disallowing students from working in groups on assignments in order to reduce plagiarism and cheating.

Classroom Examples to Increase a Behavior (positive and negative reinforcement)

- 1) Smile at a student after a correct response.
- 2) Offer a desirable award to the group that best completes a project.
- 3) Make attendance record a part of the student grade.
- 4) Drop the lowest quiz score at the end of the semester if all assignments were completed on time
- 5) Make the final exam optional if a particular cutoff score is achieved on the test average.

Classroom Examples to Decrease a Behavior (positive and negative punishment)

- 1) Give late assignments a grade of "0."
- 2) Personally, call out students when they are being disruptive to class.
- 3) Have students below a test cutoff score write an additional paper for the class.
- 4) Take away a student's phone if they are using it to be disruptive in class.

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5) If the student grade average is below a certain cutoff point, make the final exam cumulative.

Teaching Strategies that support this Learning Theory

- Gamification
- Game-based Learning
- Competency-based instruction / Badging

Technology Tools that support this Learning Theory

- 1. Anti-plagiarism tools to can be used to decrease plagiarism and reinforce autonomous thinking.
- 2. Polleverywhere can be used as a way to reward students with participation points.

On the Web

- Understanding Behaviorism
- What is Behaviorism?
- Behaviorist Learning Theory

In the Library

Moore, J. (2011). Behaviorism. The Psychological Record, 61(3), 449-463.

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Williams, R. L. (1999). The behavioral perspective in contemporary education. The Teacher Educator, 35(2), 44–60. doi:10.1080/08878739909555225

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