BEHAVIOURISM

DEFINITION

- **B**ehaviorism, also known as behavioral psychology, is a theory of learning based on the idea that all behaviors are acquired through **conditioning**. (It focuses on how children learn their native language)
- Conditioning occurs through interaction with the environment.
- ▶ Behaviorists believe that our responses to environmental stimuli shape our actions.
- According to this school of thought, behavior can be studied in a systematic and observable manner regardless of internal mental states.
- According to this perspective, only observable behavior should be considered—cognitions, emotions, and moods are far too subjective.
- Strict behaviorists believed that any person can potentially be trained to perform any task, regardless of genetic background, personality traits, and internal thoughts (within the limits of their physical capabilities). It only requires the right conditioning.

A Brief History of Behaviorism

- Behaviorism was formally established with the 1913 publication of John B. Watson's classic paper, "Psychology as the Behaviorist Views It."
- It is best summed up by the following quote from Watson, who is often considered the "father" of behaviorism:

"Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in and I'll guarantee 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."

- Simply put, strict behaviorists believe that all behaviors are the result of experience.
- Any person, regardless of his or her background, can be trained to act in a particular manner given the right conditioning.
- From about 1920 through the mid-1950s, behaviorism grew to become the dominant school of thought in psychology. Some suggest that the popularity of behavioral psychology grew out of the desire to establish psychology as an objective and measurable science.

BEHAVIORAL THEORISTS

- J B WATSON- (the only person who experimented this theory in a human being-little Albert) Albert was 11 months old, he was put on a mattress on a table in the middle of a room. A white laboratory rat was placed near Albert and he was allowed to play with it. At this point, Watson and Rayner made a loud sound behind Albert's back by striking a suspended steel bar with a hammer each time the baby touched the rat. Albert responded to the noise by crying and showing fear. After several such pairings of the two stimuli, Albert was presented with only the rat. Upon seeing the rat, Albert got very distressed, crying and crawling away.
- ► IVAN PAVLOV-Experiment with Dogs
- **B F SKINNER** Experiment with Rat.
- **EDWARD THORNDIKE-** Cats(puzzle box), Trial and Error Method. He placed a cat in the puzzle box, which was encourage to escape to reach a scrap of fish placed outside. Thorndike would put a cat into the box and time how long it took to escape. The cats experimented with different ways to escape the puzzle box and reach the fish.

Eventually they would stumble upon the lever which opened the cage. When it had escaped it was put in again, and once more the time it took to escape was noted. In successive trials the cats would learn that pressing the lever would have favorable consequences and they would adopt this behavior, becoming increasingly quick at pressing the lever.

Edward Thorndike put forward a "Law of effect" which stated that any behavior that is followed by pleasant consequences is likely to be repeated, and any behavior followed by unpleasant consequences is likely to be stopped.

- ► EDWIN GUTHRIE Cats
- **EDWARD TOLMAN-** Rats(complex maze)
- CLARK HULL
- KENNETH SPENCE

Key Concepts

- There are several principles that distinguish behavioral psychology from other psychological approaches.
- Two Types of Conditioning: According to behavioral psychology, there are two major types of conditioning, classical conditioning and operant conditioning

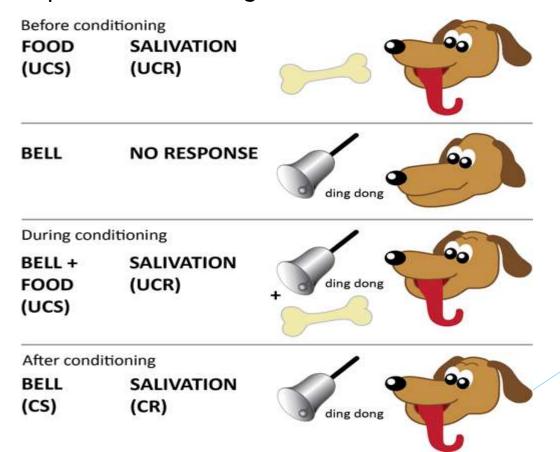
Classical Conditioning:

Classical conditioning is a technique frequently used in behavioral training in which a neutral stimulus(bell) is paired with a naturally occurring stimulus(food). Eventually, the neutral stimulus comes to evoke the same response as the naturally occurring stimulus, even without the naturally occurring stimulus presenting itself.

Throughout the course of three distinct phases, the associated stimulus becomes known as the **conditioned stimulus** and the learned behavior is known as the **conditioned response.**

Learning Through Association-

- The classical conditioning process works by developing an association between an environmental stimulus and a naturally occurring stimulus.
- In physiologist Ivan Pavlov's classic experiments, dogs associated the presentation of food (something that naturally and automatically triggers a salivation response) with the sound of a bell, at first, and then the sight of a lab assistant's white coat. Eventually, the lab coat alone elicited a salivation response from the dogs.



. This is exactly what behaviorism argues—that the things we experience and our environment are the drivers of how we act.

Conditioning Can Be Influenced-

- During the first part of the classical conditioning process, known as acquisition, a response is established and strengthened.
- Factors such as the prominence of the stimuli and the timing of presentation can play an important role in how quickly an association is formed.
- When an association disappears, this is known as extinction, causing the behavior to weaken gradually or vanish.
- Factors such as the strength of the original response can play a role in how quickly extinction occurs. The longer a response has been conditioned, for example, the longer it may take for it to become extinct.

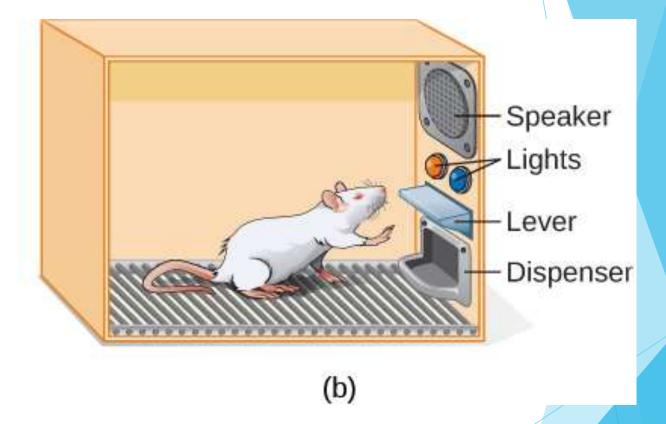
Operant Conditioning:

- Operant conditioning (sometimes referred to as instrumental conditioning) is a method of learning that occurs through reinforcements and punishments. Through operant conditioning, an association is made between a behavior and a consequence for that behavior.
- When a desirable result follows an action, the behavior becomes more likely to occur again in the future. Responses followed by adverse outcomes, on the other hand, become less likely to happen again in the future.
- E.g. When lab rats press a lever when a green light is on, they receive a food pellet as a reward. When they press the lever when a red light is on, they receive a mild electric shock. As a result, they learn to press the lever when the green light is on and avoid the red light.
- But operant conditioning is not just something that takes place in experimental settings while training lab animals. It also plays a powerful role in everyday learning. Reinforcement and punishment take place in natural settings all the time, as well as in more structured settings such as classrooms or therapy sessions.

Consequences Affect Learning-

- Behaviorist B.F. Skinner described operant conditioning as the process in which learning can occur through reinforcement(strengthening) and punishment.
- More specifically, by forming an association between a certain behavior and the consequences of that behavior, you learn.
- For example, if a parent rewards their child with praise every time they pick up their toys, the desired behavior is consistently reinforced. As a result, the child will become more likely to clean up messes.





Timing Plays a Role-

- Reinforcement schedules are important in operant conditioning. This process seems fairly straight forward—simply observe a behavior and then offer a reward or punishment.
- However, Skinner discovered that the timing of these rewards and punishments has an important influence on how quickly a new behavior is acquired and the strength of the corresponding response
- Continuous reinforcement involves rewarding every single instance of a behavior. It is often utilized at the beginning of the operant conditioning process. But as the behavior is learned, the schedule might switch to one of partial reinforcement.
- Partial reinforcement involves offering a reward after a number of responses or after a period of time has elapsed. Sometimes, partial reinforcement occurs on a consistent or fixed schedule. In other instances, a variable and an unpredictable number of responses or time must occur before the reinforcement is delivered.

Behaviorism learning theory

- In the classroom, the behavioral learning theory is key in understanding how to motivate and help students. Information is transferred from teachers to learners from a response to the right stimulus. Students are a passive participant in behavioral learning—teachers are giving them the information as an element of stimulus-response. Teachers use behaviorism to show students how they should react and respond to certain stimuli. This needs to be done in a repetitive way, to regularly remind students what behavior a teacher is looking for.
- Positive reinforcement is key in the behavioral learning theory. Without positive reinforcement, students will quickly abandon their responses because they don't appear to be working. For example, if students are supposed to get a sticker every time they get an A on a test, and then teachers stop giving that positive reinforcement, less students may get A's on their tests, because the behavior isn't connected to a reward for them.
- Repetition and positive reinforcement go hand-in-hand with the behavioral learning theory. Teachers often work to strike the right balance of repeating the situation and having the positive reinforcement come to show students why they should continue that behavior.
- Motivation plays an important role in behavioral learning. Positive and negative reinforcement can be motivators for students. For example, a student who receives praise for a good test score is much more likely to learn the answers effectively than a student who receives no praise for a good test score. The student who receives no praise is experiencing negative reinforcement—their brain tells them that though they got a good grade, it didn't really matter, so the material of the test becomes unimportant to them. Conversely students who receive positive reinforcement see a direct correlation to continuing excellence, completely based on that response to a positive stimulus.

Strengths and Weaknesses

One of the major benefits of behaviorism is that it allowed researchers to investigate observable behavior in a scientific and systematic manner. However, many thinkers believed it fell short by neglecting some important influences on behavior.

Strengths	Weaknesses
Focuses on observable, measurable behaviors	Does not account for biological influences
Useful for modifying behaviors in the real-world	Does not consider moods, thoughts, or feelings
Useful applications in therapy, education, parenting, child care	Does not explain all learning

Strengths

- One of the greatest strengths of behavioral psychology is the ability to clearly observe and measure behaviors. Behaviorism is based on observable behaviors, so it is sometimes easier to quantify and collect data when conducting research.
- ▶ Effective therapeutic techniques such as intensive behavioral intervention, behavior analysis, token economies, and discrete trial training are all rooted in behaviorism. These approaches are often very useful in changing maladaptive or harmful behaviors in both children and adults.

Weaknesses

- Many critics argue that behaviorism is a one-dimensional approach to understanding human behavior. Critics of behaviorism suggest that behavioral theories do not account for free will and internal influences such as moods, thoughts, and feelings.
- Noam Chomsky brings on the end to behaviorism by stating that language is too complex or novel to be learned through mimicry alone.
- Freud, for example, felt that behaviorism failed by not accounting for the unconscious mind's thoughts, feelings, and desires that influence people's actions.
- Other thinkers, such as Carl Rogers and the other humanistic psychologists, believed that behaviorism was too rigid and limited, failing to take into consideration personal agency.

- More recently, biological psychology has emphasized the power of the brain and genetics play in determining and influencing human actions. The cognitive approach to psychology focuses on mental processes such as thinking, decision-making, language, and problem-solving. In both cases, behaviorism neglects these processes and influences in favor of studying just observable behaviors.
- Also, behavioral psychology does not account for other types of learning that occur without the use of reinforcement and punishment. Moreover, people and animals can adapt their behavior when new information is introduced even if that behavior was established through reinforcement.