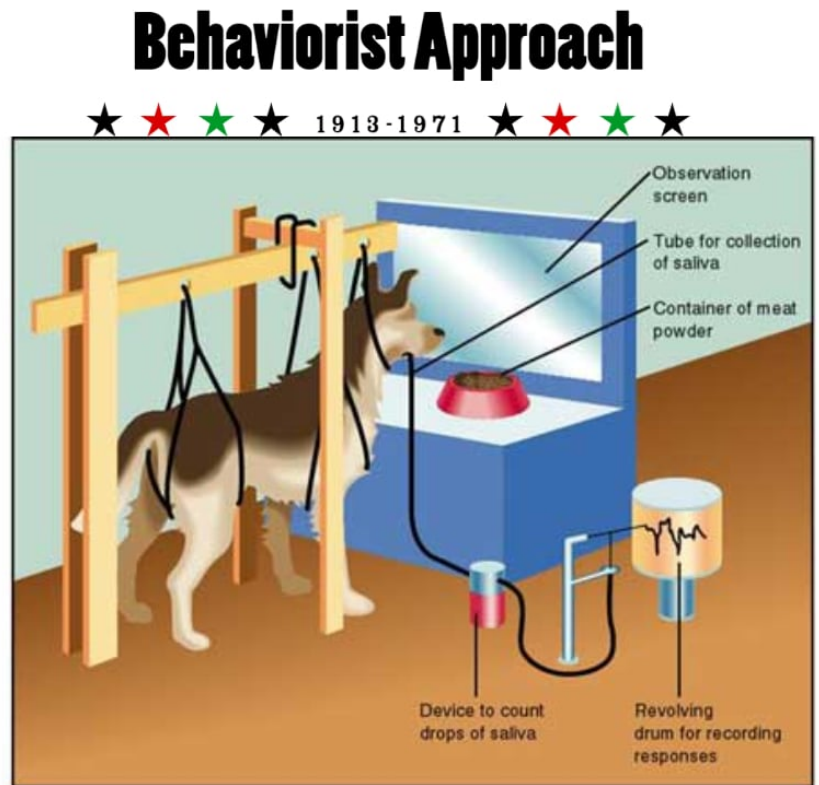
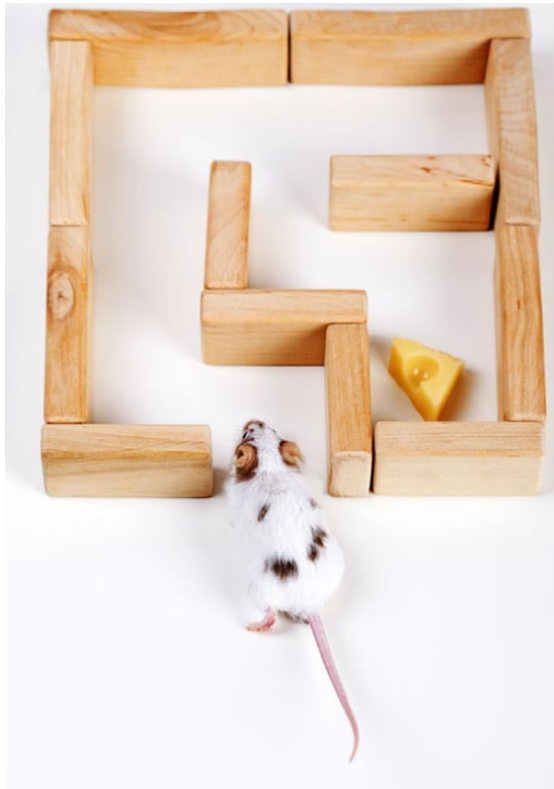


Behaviorism In Psychology



Behaviorism, also known as behavioral learning theory, is a theoretical perspective in psychology that emphasizes the role of learning and observable behaviors in understanding human and animal actions.

Behaviorism is a theory of learning that states all behaviors are learned through conditioned interaction with the environment. Thus, behavior is simply a response to environmental stimuli.

The behaviorist theory is only concerned with observable stimulus-response behaviors, as they can be studied in a systematic and observable manner.

Some of the key figures of the behaviorist approach include B.F. Skinner, known for his work on operant conditioning, and [John B. Watson](#), who established the psychological school of behaviorism.

Key Features

- Stimulus-Response
- Classical Conditioning
- Reinforcement & Punishment
- Objective Measurement
- Reductionism
- Nomothetic
- Law of Effect

Assumptions

Assumptions

- Behaviour should be studied scientifically using experiments.
- Behaviourism is primarily concerned with observable behavior
- The major influence on human behavior is learning from the environment (e.g., conditioning)
- There is little difference between the learning that takes place in humans and that in other animals. Therefore research can be carried out on animals as well as humans.
- Behaviour is the result of stimulus–response (i.e., all behavior, no matter how complex, can be reduced to a simple stimulus–response association).

Methodology / Studies

- Controlled Experiment
- Little Albert
- Thorndike
- Skinner box
- Pavlov's Dogs
- Bandura Bobo Doll Study

Strengths

- Objective measurement, which can be replicated and peer-reviewed
- Real-life applications (e.g., behavior therapies)
- Clear predictions that can be scientifically tested
- Increased our understanding of the causes of phobias and attachment

Weaknesses

- Ignores mediational processes
- Reductionist – ignores biology
- Deterministic (little free will)
- Experiments – low ecological validity
- Humanism – can't compare animals to humans
- Freud – people not born a blank slate

Principles of Behaviorism

The behaviorist movement began in 1913 when John B. Watson wrote an article entitled *Psychology as the behaviorist views it*, which set out several underlying assumptions regarding methodology and behavioral analysis:

All behavior is learned from the environment:

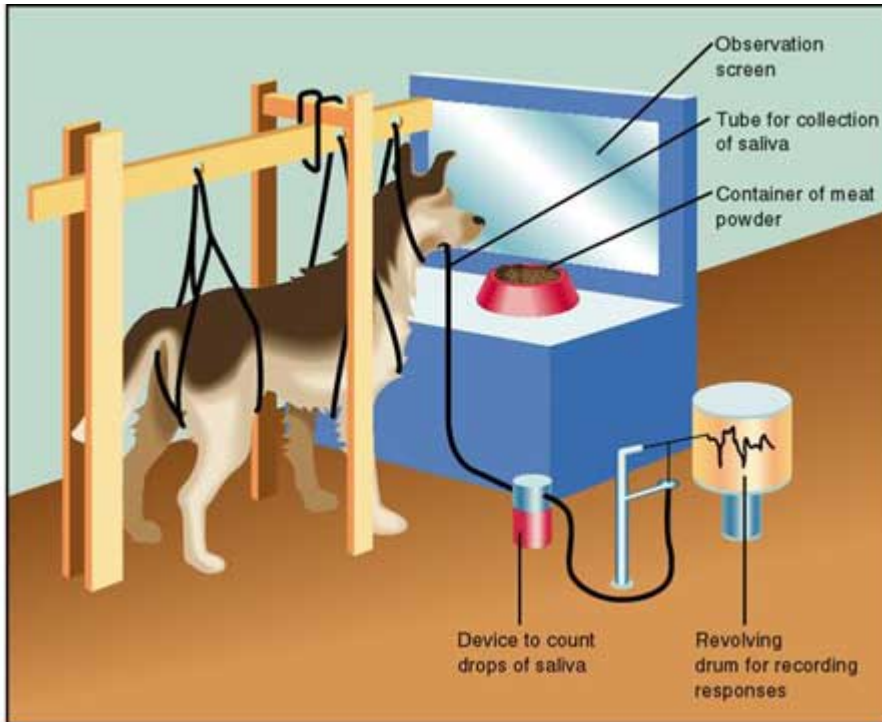
One assumption of the learning approach is that all behaviors are learned from the environment. They can be learned through classical conditioning, learning by association, or through operant conditioning, learning by consequences.

Behaviorism emphasizes the role of environmental factors in influencing behavior to the near exclusion of innate or inherited factors. This amounts essentially to a focus on learning. Therefore, when born, our mind is “tabula rasa” (a blank slate).

Classical conditioning refers to learning by association, and involves the conditioning of innate bodily reflexes with new stimuli.

Pavlov's Experiment

Ivan Pavlov showed that dogs could be classically conditioned to salivate at the sound of a bell if that sound was repeatedly presented while they were given food.



He first presented the dogs with the sound of a bell; they did not salivate so this was a neutral stimulus. Then he presented them with food, they salivated.

The food was an unconditioned stimulus and salivation was an unconditioned (innate) response.

Pavlov then repeatedly presented the dogs with the sound of the bell first and then the food (pairing) after a few repetitions, the dogs salivated when they heard the sound of the bell.

The bell had become the conditioned stimulus and salivation had become the conditioned response.

Examples of classical conditioning applied to real life include:

- **taste aversion** – using derivations of classical conditioning, it is possible to explain how people develop aversions to particular foods
- **learned emotions** – such as love for parents, were explained as paired associations with the stimulation they provide
- **advertising** – we readily associate attractive images with the products they are selling
- **phobias** – classical conditioning is seen as the mechanism by which – we acquire many of these irrational fears.

Skinner argued that learning is an active process and occurs through [operant conditioning](#). When humans and animals act on and in their environmental consequences, follow these behaviors.

If the consequences are pleasant, they repeat the behavior, but if the consequences are unpleasant, they do not.

Behavior is the result of stimulus-response:

Reductionism is the belief that human behavior can be explained by breaking it down into smaller component parts.

Reductionists say that the best way to understand why we behave as we do is to look closely at the very simplest parts that make up our systems, and use the simplest explanations to understand how they work.

Watson described the purpose of psychology as: "To predict, given the stimulus, what reaction will take place; or, given the reaction, state what the situation or stimulus is that has caused the reaction." (1930, p. 11).

All behavior, no matter how complex, can be reduced to a simple stimulus-response association).

Stimulus refers to any feature of the environment that affects behavior. For example, in Pavlov's experiment, food was a stimulus.

A response is the behavior elicited by the stimulus. For example, in Pavlov's experiment, the dog's salivation was a response.

Psychology should be seen as a science:

Theories need to be supported by empirical data obtained through careful and controlled observation and measurement of behavior. Watson (1913) stated:

"Psychology as a behaviorist views it is a purely objective experimental branch of natural science. Its theoretical goal is ... prediction and control." (p. 158).

The components of a theory should be as simple as possible. Behaviorists propose using operational definitions (defining variables in terms of observable, measurable events).

Behaviorism introduced scientific methods to psychology. Laboratory experiments were used with high control of extraneous variables.

These experiments were replicable, and the data obtained was objective (not influenced by an individual's judgment or opinion) and measurable. This gave psychology more credibility.

Behaviorism is primarily concerned with observable behavior, as opposed to internal events like thinking and emotion:

The starting point for many behaviorists is a rejection of the introspection (the attempts to “get inside people’s heads”) of the majority of mainstream psychology.

While modern behaviorists often accept the existence of cognitions and emotions, they prefer not to study them as only observable (i.e., external) behavior can be objectively and scientifically measured.

Although theorists of this perspective accept that people have “minds”, they argue that it is never possible to objectively observe people’s thoughts, motives, and meanings – let alone their unconscious yearnings and desires.

Therefore, internal events, such as thinking, should be explained through behavioral terms (or eliminated altogether).

There is little difference between the learning that takes place in humans and that in other animals:

There’s no fundamental (qualitative) distinction between human and animal behavior. Therefore, research can be carried out on animals and humans.

The underlying assumption is that to some degree the laws of behavior are the same for all species and that therefore knowledge gained by studying rats, dogs, cats and other animals can be generalized to humans.

Consequently, rats and pigeons became the primary data source for behaviorists, as their environments could be easily controlled.

Behaviorist Theory

Historically, the most significant distinction between versions of behaviorism is that between Watson’s original methodological behaviorism, and forms of behaviorism later inspired by his work, known collectively as neobehaviorism (e.g., radical behaviorism).

John B Watson: Methodological Behaviorism

Proposed by [John B. Watson](#), methodological behaviorism focuses solely on observable, measurable behaviors and rejects the study of internal mental processes.

Watson argued that thoughts, feelings, and desires cannot be directly observed and, therefore, should not be part of psychological study.

Watson proposed that behaviors can be studied in a systematic and observable manner with no consideration of internal mental states.

He argued that all behaviors in animals or humans are learned, and the environment shapes behavior.

Watson’s article “*Psychology as the behaviorist views it*” is often referred to as the “behaviorist manifesto,” in which Watson (1913, p. 158) outlines the principles of all behaviorists:

“Psychology as the behaviorist views it is a purely objective experimental branch of natural science. Its theoretical goal is the prediction and control of behavior. Introspection forms no essential part of its methods, nor is the scientific value of its data dependent upon the readiness with which they lend themselves to interpretation in terms of consciousness.”

In his efforts to get a unitary scheme of animal response, the behaviorist recognizes no dividing line between man and brute.

Man’s behavior, with all of its refinement and complexity, forms only a part of the behaviorist’s total scheme of investigation.

This behavioral perspective laid the groundwork for further behavioral studies like B.F’s. Skinner who introduced the concept of operant conditioning.

B.F Skinner: Radical Behaviorism

Radical behaviorism was founded by [B.F Skinner](#), who agreed with the assumption of methodological behaviorism that the goal of psychology should be to predict and control behavior.

Radical Behaviorism expands upon earlier forms of behaviorism by incorporating internal events such as thoughts, emotions, and feelings as part of the behavioral process.

Unlike methodological behaviorism, which asserts that only observable behaviors should be studied, radical behaviorism accepts that these internal events occur and influence behavior.

However, it maintains that they should be considered part of the environmental context and are subject to the same laws of learning and adaptation as overt behaviors.

Another important distinction between methodological and radical behaviorism concerns the extent to which environmental factors influence behavior. Watson’s (1913) methodological behaviorism asserts the mind is a tabula rasa (a blank slate) at birth.

Unlike methodological behaviorism, radical behaviorism recognizes the role of genes and biological components in behavior, accepting that organisms are born with innate behaviors.

Bandura: Social Learning

Behaviorism has undergone many transformations since John Watson developed it in the early part of the twentieth century.

Social learning theory is a more recent extension of behaviorism that emphasizes the role of plans and expectations in people’s behavior.

One more recent extension of this approach has been the development of social learning theory, which emphasizes the role of plans and expectations in people’s behavior.

Under [social learning theory](#), people were no longer seen as passive victims of the environment, but rather they were seen as self-reflecting and thoughtful.

The theory is often called a bridge between behaviorist and cognitive learning theories because it encompasses attention, memory, and motivation.

Applications

Mental health

Behaviorism theorized that abnormal behavior and mental illness stem from faulty learning processes rather than internal conflicts or unconscious forces, as psychoanalysis claimed.

Based on behaviorism, behavior therapy aims to replace maladaptive behaviors with more constructive ones through techniques like systematic desensitization, aversion therapy, and token economies.

[Systematic desensitization](#) helps phobia patients gradually confront feared objects.

The behaviorist approach has been used in treating phobias. The individual with the phobia is taught relaxation techniques and then makes a hierarchy of fear from the least frightening to the most frightening features of the phobic object.

He then is presented with the stimuli in that order and learns to associate (classical conditioning) the stimuli with a relaxation response. This is counter-conditioning.

[Aversion therapy](#) associates unpleasant stimuli with unwanted habits to discourage them. Token economies reinforce desired actions by providing tokens redeemable for rewards.

Education

The implications of classical conditioning in the classroom are less important than those of [operant conditioning](#), but there is still a need for teachers to try to make sure that students associate positive emotional experiences with learning.

If a student associates negative emotional experiences with school, then this can obviously have bad results, such as creating a school phobia.

For example, if a student is bullied at school, they may learn to associate the school with fear. It could also explain why some students show a particular dislike of certain subjects that continue throughout their academic career. This could happen if a teacher humiliates or punishes a student in class.

Addiction

Cue reactivity is the theory that people associate situations (e.g., meeting with friends)/ places (e.g., pub) with the rewarding effects of nicotine, and these cues can trigger a feeling of craving (Carter & Tiffany, 1999).

These factors become smoking-related cues. Prolonged use of nicotine creates an association between these factors and smoking based on classical conditioning.

Nicotine is the unconditioned stimulus (UCS), and the pleasure caused by the sudden increase in dopamine levels is the unconditioned response (UCR). Following this increase, the brain tries to lower the dopamine back to a normal level.

The stimuli that have become associated with nicotine were neutral stimuli (NS) before “learning” took place but they became conditioned stimuli (CS), with repeated pairings. They can produce the conditioned response (CR).

However, if the brain has not received nicotine, the levels of dopamine drop and the individual experiences withdrawal symptoms, therefore, is more likely to feel the need to smoke in the presence of the cues that have become associated with the use of nicotine.

Issues & Debates

Free will vs. Determinism

Behaviorism tends to overemphasize the role of the environment in shaping behavior, suggesting that behavior is primarily determined by external factors such as stimuli, reinforcement, and punishment.

Strong determinism of the behavioral approach as all behavior is learned from our environment through classical and operant conditioning. We are the total sum of our previous conditioning.

The social learning approach, while still emphasizing the role of the environment, recognizes an element of choice in whether we imitate a behavior or not, reflecting a softer form of determinism.

This environmental determinism can lead to underestimating the influence of genetic, biological, and individual factors on behavior.

Behaviorism may provide an incomplete or overly simplistic account of human behavior by neglecting the role of internal processes and individual differences.

Nature vs. Nurture

Behaviorism strongly supports the [nature vs. nurture debate](#), arguing that behavior is primarily learned from the environment.

The social learning theory, which builds upon behaviorist principles, is also on the nurture side, emphasizing the role of observational learning and the influence of role models in shaping behavior.

According to the behaviorist approach, apart from a few innate reflexes and the capacity for learning, all complex behavior is learned from the environment, minimizing the role of genetic or biological factors.

Holism vs. Reductionism

The behaviorist approach and social learning theory are [reductionist](#) in nature, as they seek to break down complex behaviors into smaller, more manageable parts for study.

Behaviorists believe that all behavior, regardless of its complexity, can be reduced to the fundamental processes of conditioning, such as classical and operant conditioning.

By focusing on the isolation and manipulation of specific variables, behaviorism aims to identify the basic principles and mechanisms that govern behavior, rather than considering behavior as an irreducible whole.

Idiographic vs. Nomothetic

The behaviorist approach is primarily nomothetic, as it seeks to identify universal laws and principles that govern behavior across all individuals.

It is a [nomothetic approach](#) as it views all behavior governed by the same laws of conditioning.

By focusing on these universal principles, behaviorism aims to develop a general theory of behavior that can be applied to all individuals, rather than focusing on the unique experiences and characteristics of each person.

However, it does account for individual differences and explains them in terms of differences in the history of conditioning.

Strengths

1. Scientific Methodology

Behaviorism emphasizes observable and measurable behaviors, leading to a more scientific and objective approach to studying psychology.

This approach allows for greater objectivity and replicability in psychological research, as behaviors can be quantified and studied systematically.

By emphasizing scientific methods, behaviorism has contributed to the development of psychology as a more rigorous and evidence-based discipline.

2. Empirical Support

Behaviorism has experimental support: Pavlov showed that classical conditioning leads to learning by association.

[Watson and Rayner](#) showed that phobias could be learned through classical conditioning in the “Little Albert” experiment.

3. Parsimony

Behaviorist explanations are often simpler and more straightforward than those of other approaches, as they focus on observable behaviors rather than internal mental processes.

According to the law of parsimony, the fewer assumptions a theory makes, the better and the more credible it is. Therefore, behaviorism looks for simple explanations of human behavior from a scientific standpoint.

4. Practical Applications

Behaviorist principles have been successfully applied in various real-world settings, such as clinical therapy, educational interventions, and organizational behavior management.

Techniques like behavior modification, contingency management, and reinforcement schedules have proven effective in modifying problematic behaviors and promoting desired outcomes.

The behaviorist approach has been used in the treatment of phobias, as well as [systematic desensitization](#).

The practical focus of behaviorism has led to the development of evidence-based interventions that can directly benefit individuals and society.

Weaknesses

1. Overreliance on Animal Studies

Many of the experiments carried out were done on animals; we are different cognitively and physiologically. Humans have different social norms and moral values that mediate the effects of the environment.

Therefore, people might behave differently from animals, so the laws and principles derived from these experiments might apply more to animals than humans.

2. Difficulty Explaining Spontaneous Behaviors

Behaviorism struggles to explain behaviors that seem to emerge without any apparent environmental triggers or reinforcement history.

Spontaneous behaviors, such as creative insights, sudden changes in preferences, or unprompted acts of kindness, are difficult to account for within a strict behaviorist framework.

The inability to fully explain these behaviors highlights the limitations of focusing solely on observable stimuli and responses, and suggests the need for a more comprehensive approach that considers internal mental processes and individual agency.

3. Neglect of Individual Differences

Behaviorism often assumes that the same learning principles and environmental contingencies apply to all individuals, regardless of their unique experiences, personalities, and cultural backgrounds.

This “one size fits all” approach may overlook important individual differences that shape behavior and influence responses to interventions.

By failing to account for the diversity of human experience and the role of individual factors in shaping behavior, behaviorism may provide an oversimplified or incomplete understanding of psychological phenomena.

Humanism rejects the [nomothetic approach](#) of behaviorism. It views humans as unique and believes humans cannot be compared with animals (who aren't susceptible to demand characteristics).

This is known as an idiographic approach.

4. Limited Explanations for Complex Behaviors

Behaviorist principles may struggle to fully explain more complex human behaviors, such as language acquisition, creativity, problem-solving, and abstract thinking.

These behaviors often involve higher-order cognitive processes and symbolic representation, which are difficult to reduce to simple stimulus-response associations or reinforcement contingencies.

The limited explanatory scope of behaviorism has led to the development of alternative approaches, such as cognitive psychology, that aim to provide more comprehensive accounts of complex mental processes.

5. Reductionist: Oversimplification of Behavior

Behaviorism focuses on externally observable behavior, ignoring essential factors like emotions, expectations, and higher-level motivation.

This oversimplified view of the world has led to the development of 'pop behaviorism, the view that rewards and punishments can change almost anything.

Therefore, behaviorism only provides a partial account of human behavior that can be objectively viewed. Essential factors like emotions, expectations, and higher-level motivation are not considered or explained. Accepting a behaviorist explanation could prevent further research from other perspectives that could uncover important factors.

For example, the [psychodynamic approach](#) (Freud) criticizes behaviorism as it does not consider the [unconscious mind's](#) influence on behavior and instead focuses on externally observable behavior. Freud also rejects the idea that people are born a blank slate (tabula rasa) and states that people are born with instincts (e.g., eros and Thanatos).

[Biological psychology](#) states that all behavior has a physical/organic cause. They emphasize the role of nature over nurture. For example, chromosomes and hormones (testosterone) influence our behavior, too, in addition to the environment.

Behaviorism might be seen as underestimating the importance of inborn tendencies. It is clear from research on biological preparedness that the ease with which something is learned is partly due to its links with an organism's potential survival.

[Cognitive psychology](#) states that mediational processes occur between stimulus and response, such as [memory](#), thinking, problem-solving, etc.

Humanistic psychology also assumes that humans have [free will](#) (personal agency) to make their own decisions in life and do not follow the deterministic laws of [science](#).

Despite these criticisms, behaviorism has made significant contributions to psychology. These include insights into learning, language development, and moral and gender development, which have all been explained in terms of conditioning.

6. Historical Dominance Questioned

Many textbooks depict behaviorism as dominating and defining psychology in the mid-20th century before declining in the late 1950s with the “cognitive revolution.”

However, the empirical basis for claims about behaviorism’s prominence and decline has been limited.

Wide-scope claims about behaviorism are often based on small, unrepresentative samples of historical data. This raises the question – to what extent was behaviorism actually dominant in American psychology?

To address this question, Braat et al. (2020) conducted a quantitative bibliometric analysis of 119,278 articles published in American psychology journals from 1920-1970.

They generated cocitation networks, mapping similarities between frequently cited authors, and co-occurrence networks of frequently used title terms, for each decade.

This allowed them to examine the structure and development of psychology fields without relying on predefined behavioral/non-behavioral categories.

Key findings:

- In no decade did behaviorist authors belong to the most prominent citation clusters. Even a combined “behaviorist” cluster accounted for max. 28% of highly cited authors.
- The main focus was measuring personality/mental abilities – those clusters were consistently larger than behaviorist ones.
- Between 1920 and 1930, Watson was a prominent author, but behaviorism was a small (19%) slice of psychology. Larger clusters were mental testing and Gestalt psychology.
- From the 1930s, behaviorism split into two clusters, possibly reflecting “classical” vs. “neobehaviorist” approaches. However, the combined behaviorist cluster was still smaller than mental testing and Gestalt clusters.
- The influence of behaviorism did not dramatically decline after 1950. The behaviorist cluster was stable at 28% during the 1940s-60s, and its citation count quadrupled.
- Contrary to narratives, Skinner was not highly cited in the 1950s-60s – he did not dominate behaviorism after WWII.
- Analyses challenge assumptions that behaviorism was the single dominant force in mid-20th-century psychology. The story was more diverse.

However, behaviorist vocabulary became more prominent over time in title term analyses. This suggests behaviorists were influential in shaping psychological research agendas, if not fully dominating the field.

Overall, quantitative analyses provide a richer perspective on the development of behaviorism and 20th-century psychology. Claims that behaviorism “rose and fell” as psychology’s single dominant school appear too simplistic.

Psychology was more multifaceted, with behaviorism as one of several influential but not controlling approaches. The narrative requires reappraisal.

Historical Timeline

- [Pavlov](#) (1897) published the results of an experiment on conditioning after originally studying digestion in dogs.
- Watson (1913) launches the behavioral school of psychology, publishing an article, *Psychology as the behaviorist views it*.
- Watson and Rayner (1920) conditioned an orphan called Albert B (aka [Little Albert](#)) to fear a white rat.
- [Thorndike](#) (1905) formalized the *Law of Effect*.
- Skinner (1938) wrote *The Behavior of Organisms* and introduced the concepts of operant conditioning and shaping.
- Clark Hull's (1943) *Principles of Behavior* was published.
- B.F. Skinner (1948) published *Walden Two*, describing a utopian society founded upon behaviorist principles.
- Journal of the *Experimental Analysis of Behavior* began in 1958.
- Chomsky (1959) published his criticism of Skinner's behaviorism, *Review of Verbal Behavior*.
- Bandura (1963) published a book called the *Social Learning Theory and Personality development* which combines both cognitive and behavioral frameworks.
- B.F. Skinner (1971) published his book, *Beyond Freedom and Dignity*, where he argues that free will is an illusion.
- 1980s-1990s – The development of behavior therapy and the increasing integration of cognitive and behavioral approaches in psychology.
- 2002 – *The Association for Behavioral and Cognitive Therapies* (ABCT) was formed through the merger of the *Association for Advancement of Behavior Therapy* (AABT) and the *American Association of Cognitive and Behavioral Therapies* (AACBT)

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FAQs

What is the theory of behaviorism?

One assumption of the learning approach is that all behaviors are learned from the environment. They can be learned through classical conditioning, learning by association, or through operant conditioning, learning by consequences.

What is behaviorism with an example?

An example of behaviorism is using systematic desensitization in the treatment of phobias. The individual with the phobia is taught relaxation techniques and then makes a hierarchy of fear from the least frightening to the most frightening features of the phobic object.

He then is presented with the stimuli in that order and learns to associate (classical conditioning) the stimuli with a relaxation response. This is counter-conditioning.

How behaviorism is used in the classroom?

In the conventional learning situation, behaviorist pedagogy applies largely to issues of class and student management, rather than to learning content.

It is very relevant to shaping skill performance. For example, unwanted behaviors, such as tardiness and dominating class discussions, can be extinguished by being ignored by the teacher (rather than being reinforced by having attention drawn to them).

Who founded behaviorism?

John B. Watson founded behaviorism. Watson proposed that psychology should abandon its focus on mental processes, which he believed were impossible to observe and measure objectively, and focus solely on observable behaviors.

His ideas, published in a famous article "*Psychology as the Behaviorist Views It*" in 1913, marked the formal start of behaviorism as a major school of psychological thought.

Is behavior analysis the same as behaviorism?

No, behavior analysis and behaviorism are not the same. Behaviorism is a broader philosophical approach to psychology emphasizing observable behaviors over internal events like thoughts and emotions.

Behavior analysis, specifically applied behavior analysis (ABA), is a scientific discipline and set of methods derived from behaviorist principles, used to understand and change specific behaviors, often employed in therapeutic contexts, such as with autism treatment.