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## Radical Behaviorism

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### Synonyms

[Behaviorism](#); [Operant psychology](#); [Skinnerian behaviorism](#); [Theoretical behavior analysis](#)

### Definition

Radical behaviorism is the philosophy of science that serves as the conceptual foundation of modern behaviorism, including the experimental analysis of behavior, applied behavior analysis, and some areas of behavioral psychology.

### Introduction

Considered as the philosophy undergirding the science of human behavior, radical behaviorism traces its roots to the work of B.F. Skinner (1904–1990) over the mid to late twentieth century. The foundation of this philosophical tradition maintains that questions concerning the complexity of the human experience can be better

understood through the study of behavior. The primary assertion of radical behaviorism posits that the causes of behavior can be uncovered using the same methodologies and rigor as other natural sciences, such as biology and chemistry. Through this lens, predictions regarding human behavior can be empirically tested using experimental designs which yield valid and reliable data like any other field of science.

Radical behaviorism stands as the antithesis to mentalist and cognitivist traditions of the likes of Freud and Piaget. Mentalistic approaches assume the existence of a hypothetical psychic dimension that is qualitatively distinct from behavior (Moore 2003). From this perspective, behavior is often viewed as a symptom or direct result of these inner dispositions or states of being. Skinner held that the study of behavior should be “treated as a subject matter in its own right, free from internal explanations, mental or physiological” (Skinner 1989, p. 122). In other words, principles of behavior, namely contingencies of reinforcement, should replace hypothetical constructs aimed at explaining behavior. Skinner viewed Darwinian evolution and natural selection as the major driver of the selection and adaptation of human behavior.

Oftentimes, behaviorists are lumped under one general category, though this statement offers a gross and inaccurate generalization. For example, Skinner never rejected the study of events labeled “thinking,” “emotions,” and the like. Rather, he termed such things as behaviors within the skin or

private events. According to Skinner (1974), “A small part of the universe is contained within the skin of each of us. There is no reason why it should have any special physical status... and eventually we should have a complete account of it from anatomy and physiology” (p. 24). In contrast, John B. Watson (1913) argued that such variables fall outside the realm of science. Methodological behaviorism requires agreement of two or more observers to verify phenomena. The methodological behaviorist may acknowledge the existence of thoughts and feelings but considers them beyond the realm of science (Moore 1989). Radical behaviorism, however, acknowledges thoughts as behaviors that should be studied in a similar manner as overt behavior. Using these distinctions, Watson would be more accurately labeled a methodological behaviorist, while Skinner clearly falls into the radical behaviorism camp. Radical behaviorism was a reaction to the limitations of methodological behaviorism.

Skinner viewed private events as behavior occurring within the skin, rather than some separate, invisible world or states of being (Cooper et al. 2007). The radical behaviorist denies that thoughts *cause* behavior because thoughts *are* behavior and thus available for analysis and modification. Private events can be defined as behaviors (and also stimulus events related to other behaviors) because these phenomena are products of a complexity of environmental influences and learned responses maintained by consequences encountered over many exposures, just as with observable, public behaviors. The temporary inaccessibility of these behaviors in the form of auditory or visual stimuli by another individual does not transform these phenomena into non-physical forms nor change the causal mechanisms responsible for these private behaviors: “I contend, however, that my toothache is just as physical as my typewriter, though not public...” (Skinner 1984, p. 552).

In essence, the distinction between public and private events falls into a matter of reliability rather than validity. As previously stated, events within the organism share the same designations and properties as overt behaviors. The skin does not serve as a dividing line between such

characteristics (Skinner 1974). The principles that govern public behavior influence private behavior in the same manner. For example, consider the phenomenon typically labeled as “worrying.” A behaviorist would not deny that the individual is actually worrying but would rather define “private verbal behavior” as verbal statements in which the speaker and listener are the same person. Others may refer to this as private or self-speech. As a stimulus event related to other behaviors, the behaviorist could also determine the *function* of this private verbal behavior, namely its function as either a reinforcer or an aversive stimulus. If the private verbal behavior tends to function as an aversive stimulus relative to other behaviors, this may evoke any number of behaviors in order to escape the aversive stimulation.

Radical behaviorism arose to address not only the longstanding limitations in traditional accounts of behavior involving mental realms and abstract processes but also the limitations of strict neurological accounts of these mental processes as related to behavior. Models and explanations related to studying the underlying neural mechanisms of the brain can only potentially explain *how* behavior, cognition, and any other phenomenon occur with regards to physics and biology but cannot offer causal explanations for *why* these processes occur nor can they offer explanations as to the environmental factors that influence them. Despite the tangible data that can result from neurological explorations, the conclusion that these biochemical processes control and cause behavior still makes the same assumption as cognitivist or mentalist explanations that behavior is simply a manifestation of internal processes. Rather than viewing physiological as causes and behaviors as outcomes, radical behaviorists view these variables on equal footing, namely by defining them as behavior or stimulus events. This allows consideration of how these variables interact and influence each other, rather than distorting a holistic view of behavior by prioritizing physiological variables as superior to other stimulus events (Moore 1999).

The primary point of contention between radical behaviorism and neurological and cognitivist

explanations of behavior is that these perspectives offer little information in terms of the control and prediction of behavior, aspects that are paramount to an objective study of any scientific phenomenon (Skinner 1953). For instance, if an individual reads a detailed biological description of the nervous system related to the voluntary movement of the legs, this individual could not offer a satisfactory explanation as to why one individual runs in the presence of a dog barking, and another individual continues his stroll. More importantly, the clinician will find a neurophysiological approach of limited value when attempting to change the behavior of a client, given that the clinician cannot directly manipulate the central nervous system. This example highlights another philosophical and logical conflict between radical behaviorism and other accounts of behavior. Radical behaviorism asserts that exposure to environmental variables throughout an organism's life control and maintain behavior rather than the internal mental processes in which an organism engages when exposed to these environmental variables.

With the barking dog, the initial fight or flight response one experiences most certainly involves several innate physiological and neurological events, along with Pavlovian Respondent Conditioning. This may explain why one would run away in a panic at their first encounter with the dog, but the catalyst to this event occurred in the physical realm. The barking dog (a stimulus event) *elicited* physiological *behaviors* which then elicited overt behaviors. When the individual completely avoids the street where the dog lives in the future, however, a pure neurophysiological explanation fails to fully capture the variables controlling the behavior. Rather, radical behaviorists would argue that stimuli in the physical world, such as the street sign, trees, houses, fences, and other items on the road exude control over this now *evoked* avoidance. We might also say to ourselves, "this is the street where that angry dog lives," but this behavior alone does not control our avoidance of the entire street. Radical behaviorists would argue that these stimuli and other forms of behavior work in tandem to *select* avoidance behavior as an outcome that benefits the organism. Natural selection and evolution reside as

central concepts to the philosophy of radical behaviorism (see Catania 2013, for a more detailed discussion).

The philosophical and conceptual foundation of radical behaviorism offer many distinct facets from other traditional approaches to studying mental processes and behavior. Its defining characteristic lies in the comprehensive nature of the perspective; that is, it accounts for *all* behavior, including the previous discussion of public and private behaviors. Further, behavior as the interaction between the organism and environment (including behaviors within the skin) is an account defined by *functional* factors, not a manifestation of invisible processes (Moore 2009). Just as oxygen maintains a flame, contingencies of reinforcement maintain behavior. These contingencies are discoverable with a thorough and rigorous behavioral approach. With this philosophical tradition, Skinner (1974) contended that radical behaviorism, through the incorporation of a natural science approach, could account for all aspects of human behavior and rectify the imbalance created by the mentalist view on one side and methodological behaviorism on the other side.

## Conclusion

Radical behaviorism has exuded a tremendous impact across a myriad of disciplines, including teaching, pharmacology, traffic safety, and organizational management, to name a few, as well as the emergence of an entirely new discipline called Applied Behavior Analysis (Cooper et al. 2007). Countless numbers of empirically-validated treatments trace their theoretical roots to radical behaviorism. For example, a number of beneficial approaches to clinical problems traditionally dominated by mentalism have arisen, most notably Rational Frame Theory and Acceptance and Commitment therapy, based on the work of Steven Hayes (see Hayes 2004; Fletcher and Hayes 2006 for full review).

Still at issue, however, involves reliable measurement of private events. When behaviors occur in the external world, they become community property in that the events can be directly

observed, including verification and reliability of measurement. Except for cases involving physiological events, self-report offers the only way to access many of the behaviors and stimulus events occurring within the skin of the individual. Traditionally, such self-report measures are flawed with numerous sources of error, such as lying, omissions, and other issues (Miller 2007). Skinner always believed that as the science evolves and the quality and sensitivity of precise measurement improves, the science of human behavior would ultimately continue to improve its ability to describe, predict, and control behavior (see Skinner 1953, 1974). Rather than serving as a historical artifact, radical behaviorism and the science of human behavior are truly just emerging as a preeminent approach to human behavior.

## Cross-References

- ▶ [B.F. Skinner](#)
- ▶ [Behavioral Perspectives on Personality](#)
- ▶ [Extinction](#)
- ▶ [Operant Conditioning](#)
- ▶ [Punishment](#)
- ▶ [Reinforcement](#)
- ▶ [Reinforcement Value](#)

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