17.2: B.F. Skinner and the Behavioral Analysis of Personality Development

Many psychology students find it difficult to apply the strict principles of radical behaviorism to personality development. And yet, psychologists generally consider our discipline to be objective and scientific. Thus, it would seem essential that we acknowledge those psychologists who apply a strict scientific approach to the study of behavior. Skinner represents the extreme conditions under which some psychologists control the study of behavior, and his contributions to understanding the basic underlying principles of reward and punishment, and their consequences, rank him among the most influential psychologists of all time.

A Brief Biography of B. F. Skinner

Burrhus Frederic Skinner was born on March 20, 1904 in Susquehanna, Pennsylvania. He lived there for 18 years, and graduated from the same high school as his mother and father. By his own account he had a happy childhood, though it was somewhat chaotic in the rough and tumble coal town that was Susquehanna. Skinner roamed the hillsides, invented and built all sorts of gadgets, and developed a love for the wide variety of experiences that life has to offer a child living in a “warm and stable” home. He constantly satisfied his curiosity and imagination:

I was always building things. I built roller-skate scooters, steerable wagons, sleds, and rafts…I made seesaws, merry-go-rounds, and slides. I made slingshots, bows and arrows, blow guns and water pistols…and from a discarded water boiler a steam cannon with which I could shoot plugs of potato and carrot over the houses of our neighbors. (Skinner, 1970).

Skinner’s father, a lawyer, bought many books and maintained a large library in their home. Skinner enjoyed school and, under the guidance of an influential teacher named Mary Graves, eventually chose to major in English Literature in college and then to pursue a career in writing. While still at home, Skinner played the piano and the saxophone, and
during high school he played in a jazz band. He also became quite interested in spirituality, particularly under the conflicting views of Miss Graves and his grandmother Skinner. Miss Graves was a devout Christian, who had taught Skinner’s Sunday school class, but held fairly liberal views on the Bible. Grandmother Skinner took a more fire-and-brimstone approach, showing Skinner the burning coals in the stove to make sure he understand the dangers of Hell! Ultimately Skinner came to his own perspective, and from that point forward he no longer believed in God (Bjork, 1997; Skinner, 1970, 1976).

Skinner attended Hamilton College, where he majored in English and minored in Romance languages. He felt that he never quite fit in at college, largely because he was no good at sports and because Hamilton College required students to attend daily chapel. By his senior year, he and his friends became involved in some serious pranks, ultimately being threatened with not being allowed to graduate. He did graduate, however, and began a brief attempt at a career as an author. A professor with whom Skinner had taken a summer course introduced him to the renowned poet Robert Frost. Frost offered to review some of Skinner’s stories, and he sent a favorable reply that greatly encouraged Skinner (the letter is reprinted in Skinner, 1976). However, Skinner had only one success as an author. His father had always hoped Skinner would practice law with him, and together they published a private book on legal decisions in the ongoing battles between the coal companies and the unions. Skinner then spent 6 months living a bohemian lifestyle in New York’s Greenwich Village, followed by some time in Paris, France. Ultimately, however, he gave up his career as an author because he simply “had nothing important to say” (Bjork, 1997; Skinner, 1970, 1976).

As a child, Skinner had always been interested in the behavior of animals and kept many wild pets. In high school he was very interested in philosophy, and in college a professor had introduced him to comparative psychology and Pavlov’s work on classical conditioning. He began reading Pavlov and Watson while living in Greenwich Village, and eventually went to Harvard University to study psychology. At Harvard Skinner developed the rigorous work schedule that was to become one of his personal hallmarks. After leaving Harvard he taught at the University of Minnesota, where, during World War II, he conducted research on using pigeons as the guidance system for missiles. He then moved on for a brief period as the chairman of the psychology department at Indiana University. In 1948 he was asked to return to Harvard, where he worked for the remainder of his career (Bjork, 1997; Skinner, 1970).

Throughout the rest of his career, Skinner attempted to apply aspects of his radical behaviorism to a variety of issues, including child care, education, and the very nature of society itself. His influence has been substantial, particularly with regard for his emphasis on psychology as a science. However, his views on scientific methodology and other fields of psychology have been controversial. For example:

…I suppose it was only my extraordinary luck which kept me from becoming a Gestalt or (so help me) a cognitive psychologist. (pg. 8; Skinner, 1970)

The Freudian mental apparatus doesn’t make much sense to me…I don’t believe that he devised a useful conceptual system… (pp. 5-7; Evans, 1968)

Dreaming...is almost always weak behavior and hence determined by trivia. (pg. 193; Epstein, 1980)

New, deep, real, growth, harmony, understanding potential, unfoldment - an opiate soothing syrup for humanistic psychologists, hashish for the searchers for identity. (an informal review of a new journal for transpersonal psychology; pg. 291; Epstein, 1980)
I’m not at all impressed by the model builders, the information theory analysts, the systems analysts, and so on. They still haven’t shown me that they can do anything important. (pg. 82; Evans, 1968)

In general, scientific methodology is not an accurate reflection of what the scientist really does…it doesn’t reflect the actual behavior of the scientist. Fortunately for science, scientific method and statistics weren’t formulated until the middle of the nineteenth century. (pg. 89; Evans, 1968)

In Skinner’s defense, however, he often felt that his position was misunderstood. One of the most important approaches to the study of behavior that he emphasized was to focus on individuals, not on average measures of behavior that show “none of the characteristic individuality of the organism you’re studying” (pg. 92; Evans, 1968). Despite harsh criticism, Skinner did not take attacks on his scientific perspectives personally. As he described it, he simply reported the facts that arose from his research, and chose not to debate those who disagreed. One exception, however, was Carl Rogers. On several occasions he debated Rogers, whom he described as a friend, about the dignity of man and the control of men (Bjork, 1997; Evans, 1968). He also sent a letter to E. L. Thorndike, who described the Law of Effect after studying cats escaping from puzzle-boxes well before Skinner was born (published in 1898; see Bower & Hilgard, 1981), apologizing for perhaps having failed to give Thorndike proper recognition for establishing the basic concepts that led to the study of operant conditioning. Thorndike replied that he was more honored to have been of service to new scientists than if he were to have received credit for founding a new “school” of psychology (Skinner, 1970).

In 1970, American Psychologist listed Skinner second only to Freud in his influence on twentieth-century psychology, and in 1989 Skinner seemed to express some pride in being cited more often than Freud (Bjork, 1997). Near the end of 1989, however, Skinner was diagnosed with leukemia. He continued to work as best he could, and expressed no anxiety about his approaching death. In August, 1990 he spoke for 20 minutes to a standing-room only audience at the annual meeting of the American Psychological Association. Eight days later he died (Bjork, 1997).

Placing B. F. Skinner in Context: Radical Behaviorism

B. F. Skinner shares at least one thing in common with Sigmund Freud: he provided a target for the behavioral and cognitive theorists who followed him. Freud, of course, was a target for everyone in psychiatry and psychology, including Skinner. Although some might say that Skinner established the experimental analysis of behavior, as far as personality is concerned, Freud also thought that he was being very scientific in his studies of human behavior and the human mind. In order to absolutely define his understanding of behavioral principles, Skinner rejected anything he could not observe. Although this allowed him to claim a level of precision never before possible in the study of behavior, it disallowed the study of the mind, consciousness, thinking, emotion, the very things that most people consider to be the domain of psychology! It also disallowed doing many types of research on humans, and so Skinner, his students, and his colleagues focused much of their effort on studying rats and pigeons.

Like Freud before him, Skinner faced his critics and defended his theories. He certainly had solid scientific data to support his position, but when he went so far as to propose that he could solve the problems of society (in his novel Walden Two), perhaps he was asking for criticism. Nonetheless, in psychology today, behavioral and cognitive approaches to understanding mental illness and conducting psychotherapy are popular and effective. Although behavioral and cognitive theorists incorporate the very things Skinner rejected (emotions, thought, etc.), they have built upon the unquestioned behavioral principles studied first by Skinner. In addition, the application of many of Skinner’s
theories, such as reinforcement and punishment, has had a major influence on child rearing and education, or at least in our understanding of those processes.

Although Skinner was not the first behaviorist, that honor goes primarily to John B. Watson (since Pavlov was first and foremost a physiologist), his name is typically the first that comes to mind when recognizing behaviorism as one of three great forces in psychology (the others being psychodynamic and humanistic psychology). Thus, Skinner stands with Freud and with Rogers and Maslow as a giant in the history of psychology.