# OPERANT CONDITIONING IMPACT ON EDUCATION

Kelly-Ann Riddell

Liberty University

September 27, 2020

# **Author Note**

(Name): Kelly-Ann Riddell

I have no known conflict of interest to disclose.

Correspondence concerning this article should be address to (Name)

## Abstract

Skinner is one of the philosophers who have contributed to the current nature of education. The world has faced different eras and the progressive era that took place between 1890s and 1920s. The education was used to help the society to control such changes. (McLeod, 2018). B. F Skinner developed a behavioural theory used in different dimensions of human way of viewing different aspects. This project aims to assess how different events in Skinner's life helped develop different aspects of the field of education.

Keywords: Skinner, the influence of behaviorism in education.

# Skinner's behavioural psychology and influence on education

According to different behaviourists, behaviourism is a theory of learning that uses the idea that all behaviours are acquired through conditioning. The learner acquires information by interacting with the environment. Through the interaction, environmental stimuli are created that shapes the actions of the learner. The Progressive-era led to several changes in the world in terms of social and political reforms. (Heward & Cooper, 1992)

The movement meant to address different problems that were caused by immigration, political corruption and industrialization. While trying to make changes on this aspect, the education sector had to adjust so that to equip society members with skills of ensuring that

they effectively perform all the needed tasks. Years later, training of individuals on diverse fields has improved the state of education in society. Most of the problems can be solved through the solutions that have been created by different scholars. It is correct to view education as a process that began at a certain point as time went by, the trained scholars developed more concepts that improved the amount of known information.

One of the most famous theories developed by skinner is operant conditioning. The theory points out that a behaviour that contains pleasant consequences is likely to be repeated over time while the one that has unpleasant consequences is likely to be avoided. Relating this to the current state of education, when learners achieve the learning process's objectives, there is a high likelihood that they will keep on repeating the actions. (Skinner, 1989). If they fail to achieve the objectives, there is a likelihood that they will avoid the strategy so that to search on the one that helps in achieving the objectives.

## **Background and cultural context**

Burrhus Frederic Skinner was born in 1904 in the town of Susquehanna, Pennsylvania. His father was a lawyer and at first, Skinner showed interest in building gadgets and contraptions. During his student life, he wanted to become a professional writer he tried after graduating in 1926 but did not succeed as he lacked content. He changed his career approach two years later when he decided to join Harvard University to study psychology. While still standing, he developed the operant conditioning whereby he developed The Skinner Box which was published in the year 1938 after he completed his studies. (B. F. Skinner Biography, 2020)

Considering his background information, He came from a well-of family which meant that he needed to come up with his career path. That is why he began with his first course but later learned that he had the ability to develop professional writings. To achieve this, he went back to the university where he was able to achieve his dream.

# **Philosophy of education**

Skinner believed that there are different types of learners in a class whereby some are attentive on what is being taught while others are absent-minded. If the educator shares important content that the learner is supposed to benefit from for the rest of their lives, they simply observe the student's behaviour while the learning is in progress or afterward by asking them questions.

Through such a process, Skinner pointed out that a learning process is all about changing of behaviour. That is why his main idea revolved around observing one's behaviour so that to determine whether learning as taken place or not. (Spielberger & DeNike, 1966). A good example is when a mathematics teacher teaches a learner how to add numbers but every time the learner keeps giving wrong answers. At some point, the learner starts to give right answers which shows that learning as started taking place.

He pointed out that learning takes place in two ways. A learner might learn to avoid negative consequences or they might learn so that to receive a token. Example, if the learner is awarded a piece of biscuit each time he gets the answer right, he will strive to earn more biscuits through getting more answers right. On the other hand, if he is pushed every time he fails to get the right answer, he will strive to get it right so that to avoid the unpleasant consequence.

Then it comes to developing the educational curriculum that should be used, the educators are to ensure that the objectives of the learning process are achieved through assessing the behavioural change of the learner. The process should also include the two learning processes so that to ensure that the learners retain what has been taught. Skinner's perspective is based on a pragmatic learning process whereby the educator should target on attaining practical results of the learning process instead of theoretical results.

#### Theory to practice

Skinner's learning process can be put into practice through a process whereby the learner is exposed in two types of intensives. One positive and the other negative whereby there are consequences for each result that the learner will portray. His epistemological belief was that any of the two conditions must influence the learning process. He founded the experimental analysis of behaviour which is a school that details with experimental research.

He encouraged different educators to use the experimental analysis of behaviour to assess whether the set objectives of a learning process have been meant. Through his strategies, he developed a learning assessment strategy that is employed by many educators to assess whether the learning objectives have been met. It also contributed to uniformity in the educational sector whereby the assessment technique is used to determine whether a learning process's objectives were meant. (Pelaez & Monlux, 2017).

# Perspective on Diversity

The current society is faced by different aspects that have contributed to changes every now and then. For example, on the changing technology, if one fails to equip themselves with updated ways of handling technological equipment, they will suffer the consequence of remaining lugging behind. This applies to the education sector which has adopted the technological equipment when it comes to educating students. At the same time, if the institution applies the equipment for educating the students, learning objectives will be achieved easily, which will improve the institution's education process. This is a clear indicator that Skinner's thoughts are still important on the current society.

## **Critical Analysis**

In 1959, Chomsky critiqued the idea after pointing out that the world has faced two eras: before the World War and after the World War. He pointed out that people's behaviours have evolved due to the events that they were exposed to after the war which means that the theory might not always be applicable. (Sosa & Ramírez, 2019). Another critique pointed out that other factors are involved when it comes to achieving a behavioural change such as the learner's cognitive ability. This means that all learners have different learning abilities therefore, the educator should not expect that all learners shall portray similar learning outcomes.

## **Implications and conclusions**

Skinner has a way of viewing learning processes in a practical manner whereby he points out that the most important aspect of learning is not the theories captured by the learner but the results of the learning process. His operant conditioning theory focuses on the extrinsic motivation process whereby different factors push learners to achieve the results of a learning process.

These diverse factors are incorporated in the current education sector when it comes to assessing the outcome of the learning processes. Considering different structures that are being used by different educational levels, educators use the theory to ensure that learners achieve the intended objectives. A good example is in the higher levels of learning, students who store high grades are awarded with scholarships. Others keep on working hard so that to receive such awards. At the same time, those who fail to meet the objectives receive poor grades which affects their employable qualifications. There are several other ways that this theory can be employed in making significant improvements in the education sector.

# References:

- Skinner, B. F. (1989). The origins of cognitive thought. *American Psychologist, 44(1), 13–18*. <u>https://doi.org/10.1037/0003-066X.44.1.13</u>
- Heward, W.L., & Cooper, J.O. Radical behaviorism: A productive and needed philosophy for education. *Journal of Behavior Education 2, 345–365 (1992)*. https://doi.org/10.1007/BF00952354
- Spielberger, C. D., & DeNike, L. D. (1966). Descriptive behaviorism versus cognitive theory in verbal operant conditioning. *Psychological Review*, 73(4), 306.
- Pelaez, M., & Monlux, K. (2017). Operant conditioning methodologies to investigate infant learning. *European Journal of Behavior Analysis*, 18(2), 212-241.
- Sosa, R., & Ramírez, M. N. (2019). Conditioned inhibition: Historical critiques and controversies in the light of recent advances. *Journal of Experimental Psychology: Animal Learning and Cognition*, 45(1), 17.
- McLeod, S. (2018). Skinner- Operant Conditioning. Simply Psychology. Retrieved From: https://www.simplypsychology.org/operant-conditioning.html
- B. F. Skinner Biography (2020, Jul, 1) Retrieved from:

https://www.biography.com/scientist/bf-

skinner#:~:text=Burrhus%20Frederic%20Skinner%20was%20born,Skinner%20and%

 $20 his\% 20 younger\% 20 brother. \\ & text = As\% 20a\% 20 student\% 20 at\% 20 Hamilton, \\ develop in the standard standard$ 

ped%20a%20passion%20for%20writing.