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# BEHAVIORISTIC THEORY IN THE SCOPE OF EDUCATION

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#### **ABSTRACT**

Learning is a process of changing behavior from an experience. Behavioristic learning theory is a learning theory that prioritizes changes in student behavior as a result of stimuli and responses. The characters in behavioristic theory are Ivan P. Pavlov, Edward Lee Thorndike, BF Skinner, and John Broadus Watson. The use of behavioristic theory in the learning process requires humans to be more likely to be responsive to the stimuli given and then produce good behavior. Therefore, there are general principles of behavioristic theory, namely learning is a change in behavior, learning is a stimulus and response, and reinforcement, which is anything that can strengthen the emergence of a response. In the application of learning,

Keywords: Behavioristic, Learning,

#### **PRELIMINARY**

Learning is a process of changing behavior from an experience. The assumption of some people success in learning if the person is able to write, memorize learning material, answer questions, and so on. However, the real essence of a person it can be said to learn if there has been a change in a person, be it in the form of cognitive, affective, or psychomotor. Learning in an Islamic perspective is an obligation to increase degrees, increase knowledge, and increase faith. The hope of this learning is to form human beings who believe, have character, and knowledge that is manifested in the form of daily behavior and activities. As the word of Allah SWT. in QS Al Mujadalah Verse 11:

ياأيهاالذين امنوا إذا قيل لكم تفسحوا في المجالس فافسحوايفسح الله لكم وإذاقيل انشزوا فانشزوا يرفع الله الذين أمنوا منكم والذين أوتوالعلم درجات والله بما تعملون خبير "O people who believe, if it is said to you, "Take a dip in an assembly", then you should be hungry. Allah will give you space. And when it says "Stand ye" then stand up, surely Allah will raise up those who believe among you and those who are given the knowledge of how many degrees. And Allah knows best

what you are doing "(Yoga Anjas Pratama, 2019: 44)

Learning (instruction) is an effort to create teaching and learning activities. According to Miarso, learning (instructional) is an effort to deliberately manage the environment so that a person can form himself positively under certain conditions. Based on some of these statements, it can be found that the essence of the learning process is all the efforts made by educators to create a learning process in students. Learning activities are said to be successful if active students experience the learning process themselves. This learning activity will be meaningful for students if it is carried out in a comfortable environment and provides a sense of security for students.

A teacher has a very important role so that learning can be said to be successful. (Aryani Yuningsih, 2011: 528) One of the factors that affect the ease of understanding of students in learning something is learning theory. Learning theory is a combination of interrelated principles and an explanation of a number of facts and findings related to learning events. (Novi Irwan Nahar, 2016: 64) The use of learning theory in accordance with the correct development steps and the choice

of subject matter as well as the use of good message design elements can make it easier for participants to learn to understand something being learned. Apart from that the learning atmosphere will feel more relaxed and fun. The relationship between learning theory, the design of learning messages, the principles of development and lesson materials will greatly determine the quality of students. (Deni Hardianto, 2012)

In general, learning theory is divided into three, namely behaviorism theory, humanism theory, and cognitive theory. The theory of behaviorism is an intermediary between the theory of humanism and cognitive theory, because this theory of behaviorism focuses on the attitudes and behavior of a person that occurs in the learning process between educators and students who are able to produce stimulus-responses and can observed, but cannot be directly related to mental constructions. . Psychology prioritizes behavioral attitudes in studying individuals, but not observing the inside of the body or observing through the criteria of other people's judgments about what they want to know. In behaviorism theory wants that psychology is useful as a scientific knowledge that can be researched thoroughly (objectively). (Siti Maghfirah and Maemonah, 2019: 90)

#### **DISCUSSION**

# A. Behavioristic Theory

#### 1. Understanding Behavioristic Theory

Behavioristic learning theory is a learning theory that understands human behavior using objective, mechanistic, and materialistic approaches. This theory can be observed from visible behavior. This theory prioritizes observation because observation is important to see whether there is a change in behavior (Nahar, 2016: 64).

Learning is a process that occurs between stimulus and response. Stimulus is whatever the teacher (educator) gives to students (learners), while the response is the response or reaction of students to the stimulus provided by the teacher. A person can be said to learn something if he has shown a change in behavior. The essence of this theory is to observe stimuli and responses, therefore what is given by the teacher (stimulus) and what is received by learners (responses) must be observable and measurable (Rusli, Kholik, 2013: 63).

Meanwhile, learning according to behavioristic psychology is an instrumental control that comes from the environment. Thus, whether someone learns or not depends on the conditions given by the environment (Pratama, 2019: 40). Everyone has different conditions. If the conditions are supportive for learning, then someone will easily accept the stimulus, and vice versa if someone is in a condition that is not supportive for learning, then that person is not easy to accept the stimulus.

# 2. Characters in Behavioristic Theory a. Ivan Petrovich Paylov (1849-1936)

Pavlov based his experiments on states that he could actually observe. Pavlov's experiments had a lot of influence on learning problems, especially on habit formation. Pavlov in his experiments using dogs as test animals. According to Pavlov, when a dog is hungry and sees food, then salivates, then this is a natural response or an unconditioned response, abbreviated as UCR.

When the dog listens to the bell and then moves its ears, this is also a natural response. The bell is here as an unconditioned stimulus or UCS and ear movements as the UCR. The issue Pavlov was concerned with was whether it could form in a dog a treatment or a response when the dog heard the bell and then salivated. This was later investigated by Pavlov. And it turns out that this behavior can be formed by providing a conditioned stimulus (CS) or before being repeatedly given a natural stimulus (UCS), until in the end a conditioned response (CR) is formed, namely the discharge of saliva even though the stimulus food that is not given.

Another problem is if a conditioned response has been formed, whether it can return to its original form. And the result is that by being given a stimulus (CS) repeatedly without food as reinforcement it is formed that the dog no longer salivates when he hears the sound of the bell. This means that the dog returns to the original form that was before the conditioned response occurred. This situation is known as experimental extinction (Walgito, 2004: 73-75).

#### b. Edward Lee Thorndike (1874-1949)

According to Thorndike, the basis of learning is trial and ermr or originally called learning by selecting and connecting. Thorndike conducted an experiment on a cat who was put in a box in which there are many mazes equipped with a button to open. The outside is placed the meat. The cat tried to run to find a way out, but failed. This continued until finally the cat accidentally pressed the button so that the box opened and the cat ate

the meat. And in the end when the cat is put back in the box, the cat easily presses the button to open it and grabs the food (Pratama, 2019: 41). From his experiments Thorndike proposed three kinds of laws which are often known as primary laws in terms of learning, namely: (1) the law of readiness; (2) the law of exercise; (3) Securities Law (the law of effect).

First, the law of readiness. Good learning must have the readiness of those concerned. If there is no readiness then the results will not be good. It can be argued that:

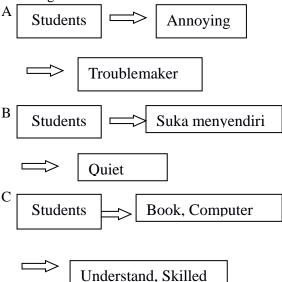
- 1) When the organism in carrying out an activity is preceded by readiness, then the result is that the organism can achieve satisfaction.
- 2) If the organism has readiness to carry out activities but the organism cannot do it, then the organism will experience disappointment or frustration.
- 3) If the organism is not readily available but is ordered to carry out the activity, it will create an unsatisfactory condition.

Second, the law of exercise. Regarding this law, Thorndike argues that there are two aspects, namely: (1) the law of use, and (2) the law of disuse. The law of use, is the relationship between stimulus and response that will be strong if it is often used or in the form of training. Meanwhile, the law of disuse is the relationship between stimulus and response to become weak if there is no training. This law means that if the child continuously repeats learning material, the knowledge will be stronger and can explain when asked, skilled in reading, and successful or not depending on how many students do the exercises well.

Third, the law of effect. Regarding this law, Thorndike argues that strengthening or weakening the relationship between stimulus and response depends on the outcome of the response in question. If the activity produces something satisfying, the relationship between stimulus and response will be strong, and vice versa, if the results are not satisfactory, the relationship between stimulus and response will weaken. Torndike stated that reward will strengthen the relationship between stimulus and response, while punishment does not necessarily result in a decrease in the relationship between stimulus and response. Therefore, reward and punishment do not show symmetrical effects (Walgito, 2004: 76-78).

In essence, student behavior is a response to

the past and present environment to be studied. From these assumptions, a teacher should create a learning environment to provide reinforcement to students. The learning environment in question is objects, infrastructure, people, situations that can all have an impact on these students. The following is an illustration of reinforcement in learning quoted from Muh Hisbul Arifin in the Application and Implications of Behavorism Theory in Learning: Strategic Analysis of Learning Innovation



**Picture 1**: Illustration of Reinforcement for Students

From the illustration above, it can be seen that in Figure A, students who like to disturb their friends and friends are willing to respond, so the environment will provide reinforcement so that this will form students who behave as troublemakers. And in Figure B, if the environment does not provide reinforcement to the student's behavior, the environment will form the student to be quiet. Whereas in Figure C, if students are faced with books, computers, and others, they will be able to form students who can understand the lesson, are skilled, and understand (Pratama, 2019: 42-43).

# c. Burrhus Frederick Skinner (1904 - 1990)

Skinner shares the following behaviors:

- 1) Natural behavior (innate behavior), which is also called respondent behavior, is behavior caused by a clear stimulus.
- 2) Operant behavior, namely behavior caused by an unknown stimulus, but solely caused by the organism itself. The operant's behavior is not recognized by external stimuli.

In connection with the respondent's behavior and operant behavior, there is also respondent conditioning and operant conditioning. In this state, Skinner is in operant conditioning. According to Skinner, there are two general principles related to operant conditioning, namely (1) response followed by reward - this works as a reinforcement stimulus - tends to be repeated, and (2) reward or reinforcement stimuli will increase the rate at which the response occurs. . In other words, it can be argued that reward is something that can increase the probability of a response. Rewards will be given to the next behavior to be formed, and so on. In the end, the reward is given if the behavior to be formed has been formed. This is called Skinner's shaping method.

#### **d.** John Broadus Watson (1878 - 1958)

According to Watson's view (behaviorist view), psychology is a branch of experimental natural science. The theoretical goal is to predict and control behavior. What is learned is observable behavior. Watson's most famous experiment is the experiment with a child named Albert, who is 11 months old. Watson wants to provide an overview of how emotional reactions become conditioned with neutral stimuli. Watson, who at that time and his wife conducted experiments on Albert using a white mouse and gong and the bat. In the beginning, Albert was not afraid of the white rat. Once upon a time, when Albert was about to hold the white mouse, the gong sounded loudly. With that loud voice, Albert was afraid. This situation was repeated several times until finally Albert was formed with a fear of white mice. On this basis, Watson argues that emotional reactions can be formed by conditioning (Walgito, 2004: 78-79).

The learning theory developed by Watson is Sarbon (stimulus and response bond theory). Sarbon is a theory that views learning as a process of reflex or conditional response through stimuli. According to Watson, humans are born with emotional reactions such as fear, love, anger. All these behaviors are formed by a relationship between stimuli and new responses through conditioning. The following is a picture of the learning and learning process according to John Broadus Watson:



**Figure 2:** Schematic of the Learning and Learning Process According to John B. Watson.

From this figure, the most important thing is input, namely stimulus, and output, namely response Stimulus is whatever the teacher gives to students, while the response is the reaction or response of students to the stimulus provided by the teacher. In sarbon theory, teachers are required to be able to design or condition the learning environment, both in the form of classes, infrastructure, and the conditions of students (Pratama, 2019: 43-44).

# **B.** Applications of Behavioristic Theory in Learning

### 1. Principles of Behavioristic Theory

Behavioristic theory tends to be responsive to stimuli in the learning process. In the academic field, there are general principles that must be known, including:

- a. This theory assumes that it can be said to learn if there is a change in behavior.
- b. This theory assumes that the essence of learning is the presence of a stimulus and response, because this is what can be observed. Meanwhile, what happens in between is considered insignificant because it cannot be observed.
- c. Reinforcement, that is, anything that can reinforce a response, is an important factor in learning. The response will get stronger if reinforcement (both positive and negative) is added.

One of the principles of behavioristic theory is the existence of a stimulus and response in learning, this is related to the behavior of students. A teacher must know the level of success in the learning process. Therefore it is necessary to pay attention to several things, including:

- a. Teachers should understand the appropriate stimulus given to students
- b. Teachers should understand the responses or responses that are likely to emerge from students.
- c. To find out whether the responses shown by these students are in accordance with

what is expected, the teacher must be able to:

- 1) Establishes that the response is observable
- 2) The response shown by students can also be measured (measurable)
- 3) The response shown by students should be stated explicitly or clearly its meaning (explicit)
- 4) So that the response is always in the memory / behavior of students, it is necessary to have a gift (reward) or something else that can foster student responses. (Muhammad Fadhil Alghi Fari Majid and Suyadi, 2020: 99)

### 2. Application of Behavioristic Theory

The application of behavioristic theory in learning depends on several components such as: learning objectives, subject matter, characteristics of students, media, learning facilities, environment, and reinforcement. To achieve learning objectives, it is necessary to know two things, namely:

a. Analyzing the Initial Ability and Characteristics of Students

The competence possessed by students is expected to be in accordance with predetermined competency standards and basic competencies. In addition, each student has different characteristics in capturing learning. (Muh. Hizbul Muflihin, 2009) Given this, a teacher needs to analyze the initial abilities and characteristics of students so that what is taught is in accordance with the conditions the students are facing. There are several benefits if this is done including:

- Obtain a complete and detailed picture of the students' initial abilities, which serves as a prerequisite for new material to be delivered
- 2) Obtain a clear picture of the various experiences students have. Based on this experience, the teacher can provide more relevant material and provide examples and illustrations that are familiar to students
- Can find out the socio-cultural background of students, including family background, social background, economic background, education, and others
- 4) Can know the level of growth and development of students, both physically and spiritually
- 5) Can find out the aspirations and needs of
- 6) Can know the level of language mastery of students

- Can know the level of mastery of knowledge that students have previously obtained
- 8) Can know the attitudes and values that animate the students' personal (Sokip, 2019: 182)
- b. Planning the learning material to be taught
  The learning process should ideally be in
  accordance with what is expected by students
  and also in accordance with the conditions of
  students, so that here the teacher will not overestimate and or under-estimate the students.

The application of behavioristic learning theory to learning can be done by providing reinforcement, motivation, stimulation, and exercises.

- 1) The reinforcement that is meant here is the re-discussion or review of lessons that have been previously learned. The strengthening that is done is considered capable of improving the memory of students against previous lessons.
- 2) The motivation in question is that before discussing the teacher's learning material, it first provides motivation related to the material to be delivered. For example, when in the science subject material on environmental pollution, the teacher first tells an inspiring story of someone who can use used goods to be useful and have a high enough selling value.
- 3) The stimulus in question is that in the learning process the teacher provides stimuli that can make students excited about learning. For example, the teacher gives rewards to students who excel.
- 4) Providing exercises means that after the learning material is finished, the teacher provides exercises related to the material being taught at that time. For example, the teacher provides a description exercise before ending the meeting.

Some of these applications are expected to change or improve the behavior of students in a better direction. According to Skinner, the relevance of stimulation and response occurs because of the interaction with environment that causes behavioral changes in students. Through the application behavioristic theory in learning is able to generate positive responses for students. (Muhammad Fadhil Alghi Fari Majid and Suyadi, 2020: 101)

### **CLOSING**

#### **CONCLUSION**

Behavioristic learning theory is a learning theory that understands human

behavior using objective, mechanistic, and materialistic approaches. This theory is based on changes in behavior that can be observed through testing and observable observations. This theory prioritizes observation because observation is important to see whether there is a change in behavior. several figures in behavioristic theory include: Ivan Petrovich Pavlov, Edward Lee Thorndike, Burrhus Frederick Skinner, and John Broadus Watson.

The application of behavioristic theory in learning activities depends on several components such as: learning objectives, subject matter, student characteristics, media, learning facilities, environment, reinforcement. The application of behavioristic learning theory to learning can be done by providing reinforcement, motivation, stimulation, and exercises. Through the application of behavioristic theory in learning is able to generate positive responses for students.

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