

Revisiting Behaviourism Theory of Learning: an outline with Islamic Education

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Abstract

Research on the correction of the theory of learning behaviorism perspective of Islamic education aims to reveal and explain the weaknesses of the approach of learning behaviorism introduced and practiced by the figures of the psychological school of behaviorism such as; Edwart L. Thorndike (1874-1949), Ivan Pavlov (1849-1936) and B. F Skinner (1904-1990). It is primarily related to the concept of learning, the nature of learners, and the motivation of learning that many educational practices conventional western. It then provides a more precise and comprehensive vision related to learning, the nature of human or learner potential, and learning motivation in Islamic tradition. This research method uses a qualitative method with an analytical description approach. It aims to explain and describe the problems studied authentically, alternatively, thematically, and scientifically. It then analyzes the research object that gives birth to conclusions. The results of this study show that Islamic education found the weaknesses of behaviorist theory which equated human psychology with animals, equating cognitive and emotional human beings with animals. And the view is that learning motivation is only from outside the human self, so it always requires a stimulus and response in learning.

Keywords: Behaviorism, Islamic Education, Learning, Theory,

Abstrak

Penelitian tentang koreksi teori belajar behaviorisme perpektif pendidikan islam ini bertujuan untuk mengungkapkan dan menjelaskan kelemahan-kelemahan teori belajar behaviorisme yang diperkenalkan dan dipraktekkan oleh para tokoh aliran psikologi behaviorisme seperti; Edwart L. Thorndike (1874-1949), Ivan Pavlov (1849-1936) dan B. F Skinner (1904-1990), khususnya terkait dengan konsep belajar, hakikat peserta didik dan motivasi belajar yang banyak

dipraktekkan pendidikan barat konvensional, kemudian memberikan konsep yang lebih tepat dan komprehensif terkait belajar, hakikat potensi manusia atau peserta didik dan motivasi belajar dalam Al-Qur'an dan As-Sunnah. Metode penelitian ini menggunakan metode kualitatif dengan pendekatan deskripsi analisis yang bertujuan menjelaskan dan menggambarkan permasalahan yang diteliti secara autentik, literatif dan tematik, serta menganalisa secara ilmiah objek penelitian yang melahirkan kesimpulan. Sumber penelitian ini adalah pustaka (*Library Research*), dengan melacak dan mengkaji sebagian besar referensi utama teori behaviorisme seperti karya B.F. Skinner, *Science and Human Behavior*, karya Robert M. Gagne, *The Condition of Learning and Theori of Instruction* dan yang lainnya. Hasil dari penelitian ini menunjukkan bahwa pendidikan Islam menemukan kelemahan-kelemahan teori behaviorisme yang menyamakan psikologi manusia dengan hewan, menyamakan kognitif dan emosional manusia dengan hewan dan pandangan bahwa motivasi belajar hanya dari luar diri manusia, sehingga selalu membutuhkan stimulus dan respons dalam belajar.

Kata Kunci: *Belajar, Behaviorisme, Pendidikan Islam, Teori*

INTRODUCTION

Theory in science is the most fundamental foundation in a particular discipline study. Whatever its discussion and proof, science always departs from the theories behind it. The theory is the basis of research and its application to science that humans will use; theory contains the rules and principles of knowledge that explain the characteristics of science in detail. Hence it is confident that there is no science without theory and no scientific research without theory. Therefore, explaining the meaning and function of theory in science is essential.

The Psychological Theory of Behaviorism is a theory born from the correction of psychological theories that base and focus the object of discussion on the abstract human psyche and mind so that there is no actual scientific measurement and research like mathematics. Therefore the founder of this theory John B. Watson (1878-1958), in his book: «*Psychology as the Behaviorist Views It,*» explained that over the past 50 years, it has failed to become an exact science. The focus on consciousness and mental processes causes psychology to reach a dead end. Where the themes of psychology are challenging to deal with. Watson wants to make psychological science, which is still abstract

ideas and views and cannot be scientifically tested, into an exact science scientifically researched in both physical and chemical sciences.¹

Watson rejects consciousness as the object of psychology discussion since it cannot be studied definitively and scientifically. So this theory believes that the only scientific study and discussion of psychology is behavior. Watson's dissertation on the analysis of rat learning in mazes (winding alleys) and Watson's view of behavior have given birth to a historic revolution in modern psychological science. The psychological theory of behaviorism was born from the idea of learning behaviorism. It is phenomenal in the western world and influenced all the concepts of learning in the modern era, including in Islamic countries. For several decades, the world's education system and curriculum have adopted many behaviorism learning and learning theory known as learning SR or Stimulus and response. The psychologists of behaviorism became world figures in the modern concept of understanding. This theory is taught in the schools of almost all countries of the world.

Departing from the above phenomenon, the researcher researched this theory and made corrections to some of the mistakes of this theory that are very contrary to the principles of Islamic education, mainly concerned with this theoretical view of man, the soul, and the way man learns.

The corrections made by researchers in this study are concepts, ideas, and ideas about learning and learning. Researchers use a descriptive qualitative method that is deep into the theory and concept of learning behaviorism by examining the primary references of this school of psychology. It then makes descriptive comparisons by examining Islamic education theories derived from the Qur'an and As-Sunnah, as well as the views of Islamic education scholars.

The research uses qualitative methods that serve to explain and describe the theories of behaviorism of Edward L. Thorndike (1874-1949), Ivan Pavlov (1849-1936), and B. F Skinner (born: 1904-1990). It relates to the nature of human learning and the things that motivate it, then describe the theory and the concept of learning in Islamic education derived from the Qur'an and As-Sunnah. The approach used in this study is a descriptive analysis. It aims to explain and describe the problems studied authentically, alternatively, thematically,

¹ Margaret E. Gredler, 2011, *Learning and Instruction: Theory into Practice*, redirect language: Tri Wibowo (Jakarta: Kencana), 43

and scientifically. It analyzes the research object that gives birth to conclusions. The primary references to the theory of behaviorism researchers use are; B.F. Skinner, *Science, and Human Behavior*, by Robert M. Gagne, *The Condition of Learning and Theory of Instruction*" and others.

To explore and establish theories and concepts of Islamic education about learning, researchers use the library method (*Library Research*) by tracing and studying verses of the Qur'an and As-Sunnah and classical and contemporary literature by Islamic scholars and experts. Islamic education was previous to the present.

In determining and determining the values of Islamic education contained in the process of the descent of the Qur'an, researchers collect. Process data consist of References to Islamic education and references to classical and contemporary Qur'an ulumul above. Then analyze data in the form of concepts and values contained in the two types of relations with triangulation techniques of ideas, sources, and methods commonly used in qualitative research, to determine and establish valid and scientific research results and conclusions.

THE THEORY OF BEHAVIORISM AND ISLAMIC EDUCATION

Correction in the Great Dictionary of Indonesian is "the formation, repair, and examination of something".² From the understanding of this language, then meaning correction can be concluded by looking back at an idea, idea, and view, then fixing it by bringing something better. The meaning theory is a systematic interpretation of a field of knowledge. There are differences between experts in defining the theory of science. Is theory just a collection of concepts, arrangements, and understandings of science without being accompanied by indicators and ways of assessing its truth? Or is theory a collection of ideas and explanations about the nature of a phenomenon? Its hands accompany it, and how to evaluate and measure it? According to Kerlinger, the theory is a collection of related concepts and a group of definitions and problems that express a systematic view of several phenomena by limiting each variable to explain these phenomena and provide indicators. According to Calvin S. Hall & Gardner Lindzey (1978), a theory is an unproven hypothesis or speculation about a reality that

² Departemen Pendidikan Nasional, 2008 *The Great Dictionary of Indonesian*, (Jakarta: Pusat bahasa), 811

is not yet known. Suppose the theory has been proven to be accurate. In that case, it becomes a fact"³ Arab psychologist Jabir Abdul Hamid said that theory is a non-factual analysis and theoretical observation of a phenomenon"⁴.

When viewed from the two differences mentioned above, researchers believe that theory is the epistemological framework of science. It consists of an understanding collection, its nature, and a detailed explanation of a phenomenon. Its characteristics, indicators, and even how to measure these phenomena' truth. However, it has not been proven as a fact of reality which later became law.

Psychologists and western educational experts differ in defining or interpreting the word learning. Skinner (1904-1990) describes learning as "changes in behavior as a result of human experience."⁵. Gagne (1916-2002) says the nature of learning is "the process of association mental events" (Gagne, 1985). Kimble (1917-2006) says, "learning is a relatively permanent change in *behavioral potentiality* that occurs as a result of *reinforced practice*."⁶. Although these two definitions of learning are prevalent in education in the world, but they are not universally accepted⁷.

Ibn Qayim Al-Jauziyah (751 H) defined Islamic Education as "teaching activities, providing moral values and maintenance, given by parents and schools to the child. To gain his knowledge and perfection with a gradual pattern from certain behaviors to other behaviors, from a less good character to a better one and so on, to become a perfect person."⁸ Abdu Ar-Rahman An-Nahlawiy (1927-2014): "Islamic education is " An effort that has a goal, planning, gradual and systematic to nurture learners towards dynamic development from one phase to another according to the sharia of Allah."⁹

³ Calvin S. Hall & Gardner Lindzey, 1978, *Theories of Personality*, (New York: John Wiley & Sons), 1978, 25

⁴ Jabir Abdul Hamid Jabir, 1989, *Saikolojiah At-ta'allum wanadzariyah At-ta'lim*, (Kuwait: Daar Al-Kitab Al-Hadith), 100

⁵ B. F. Skinner, 1965, *Science and Human Behavior*, (New York: The Free Press), 20

⁶ Kimble G.A, 1961, *Hilgard and Marquis' Conditioning and Learning* (2Nd ed) (Englewood Cliffs, NJ: Prentice Hall), 45

⁷ B.R Hergenhahn and Matthew H. Olson, 2008, *Theories of Learning*, 7th Ed translate; Triwibowo, (Jakarta: Gold), 2

⁸ Khairan Muhammad Arif, 2005, *Al-Araa at-tarbawiyah inda Al-Imam Ibn Qayim Al-Jauziyah*, (Cairo: Arab League), 118

⁹ Abdurrahman An-Nahlawiy, 2007, *Ushul tarbiyah Islamiyah Waasaaliibiha fi Al-Baiti Walmadrasah walmujtama'* (Beirut: Daarul Fikri), 17

The psychology of behaviorism is a school of psychology that holds the view “that a behavior must be explained through observable experiences, not by mental processes; according to this theory, behavior is everything that we do and can see directly.” Watson (1878-1958) believed that the study of psychology was only on behavior, not conscious experience and other mental processes. Human behavior is studied as objectively as machine behavior. Consciousness, according to him, is not objective; therefore, scientifically, consciousness is invalid and cannot be viewed as necessary. Mental processes in the psychology of behaviorism are defined as thoughts, feelings, and motives that we experience yet cannot be seen by others. Although we can't see thoughts, feelings, and motives directly, they are all natural; mental processes include: thinking about how to make posters, the teacher's feelings for his students, and the motivation of children to control their behavior. According to behaviorists, these thoughts, feelings, and motives are not appropriate subjects for behavioral science because they cannot be observed directly. Therefore it is necessary to have behavioral analysis through a process of stimulus and response.¹⁰ Then *associative learning* that provides learning of two events is interrelated. For example, when students associate pleasant events with learning something at school, like the teacher smiling as the student asks a good question. Joyful emotions or sad emotions, according to behaviorists, are manifestations of the presence of tension or pull of specific muscles and nerves; this flow is often also referred to as the psychology of «S-R» (Stimulus-Response¹¹ s) because according to this school of psychology that behavior always begins with the presence of stimuli (stimulus) followed by a reaction (response) to that stimulus”¹².

So the psychology of Behaviorism is a view of psychology that believes that behavior is the only object of psychological discussion, not mental processes and consciousness, since behavior can be observed directly, measured, and objectively researched.

The psychological theories of Behaviorism have given birth to many modern learning ideas. And it is because the views and experiments of the psychology of behaviorism are very concerned

¹⁰ John W. Santrock, 2011, *Life Span Development 13th Ed* vol 1, (York: The McGraw-Hill Companies inc.), 266 and Winfred F. Hill, 1990, *Learning: A Survey of Psychological Interpretation*, (New York: Harper Collins Publisher), 44

¹¹ John W. Santrock, *Education Psychology 2nd Edition* thing 267

¹² Sarlito W. Sarwono, 2010, *Introduction Psychology Common*, (Jakarta: Rajawali Pres), 28

with the observation and discussion of human learning, learning conditions, and so on. So all the theories of education and modern learning are taken from the psychological theories about learning, becoming known as the theories of learning. These theories of learning follow the concepts and theories of psychology; therefore, each theory of knowledge is always called simultaneously with a particular psychological theory; for example, the theory of psychology learning is born and derived from the psychological theories of behaviorism. It can be called the theory of learning behaviorism, and theories of knowledge that are taken and derived from theories of Gestal psychology are called Gestal learning theory. The theory of psychological behaviorism has given birth and rise to several theories of learning under the study, research, and experimentation of behaviorism psychology figures. In conducting research and experiments on learning, behaviorists produce some theories about learning the following.

The theory of learning Connectionism was developed by Edward L. Thorndike (1874-1949). He was a leading psychologist of behaviorism in the United States. Thorndike was interested in discussions about education, learning, transfer, individual differences, and intelligence. Thorndike's influence was marked by the existence of the Thorndike Award, which is the highest expectation in the field of American educational psychology.¹³ In his book "*Educational Psychology*," Thorndike argues that the most fundamental type of learning is the formation of associations (connections) between sensory experiences (perception of stimulus or event through the pancandra) with neural responses whose impact takes the form of behavior. Thorndike also believes that learning often occurs through a series of failed experiments and *trial and error* to select and connect behaviors.»¹⁴

The theory of connectionism is that learning is a stimulus process given to students (in the form of things that interest students, whether it is praise, gifts, values, and so on). The student provides his response or acceptance of the stimulus or stimuli with various kinds of efforts that the student makes to achieve the stimulation until the learning objectives are achieved, which takes the form of behavior. The action (learning) created by students, called the response, can take place repeatedly (*trial and error*) until they have a specific behavior or are connected to certain behaviors. Therefore, according to this theory,

¹³ John W. Santrock, *Education Psychology 2Nd Edition* 101

¹⁴ John W. Santrock, *Education Psychology 2Nd Edition* 101

the more often students make a response to a stimulus, the stronger the response becomes connected to the inspiration. Thorndike studied this theory of connectionism through his experiments on a cat placed in a cage, and the elbow can open an exit hole by pushing a stick or pulling a chain. After performing a series of responses at random, the cat can finally come out by creating a response that can open the exit hole. After that, the cat is put back in the cage. From the results of dabbling, the cat ends up reaching its goal faster and making fewer mistakes before finally responding correctly.

Thorndike concluded that trial and error learning occurs gradually where successful responses are formed, while those that do not succeed are ignored. Such connections are mechanically through looping. According to Thorndike, perception is unnecessary since animals do not “understand” or “have knowledge.” Thorndike also realized that human learning is more complex because human beings are involved in other types of education, which require the consecration of ideas, analysis, and reasoning.”¹⁵ From this experiment, Thorndike established three laws of education namely:

First: The *Law of effects*. This law states that a state that resolves after the response will strengthen the connection between the stimuli and the proper behavior; the law is not equivalent to the reward influencing learning. The law of this effect is important because it identifies new mechanisms in learning. In later studies, Thorndike said that punishment is not an effective means of changing behavior because punishment does not teach students the correct behavior.

Second: The *Law of exercise*. This law states that the repetition or repetition of experiences will increase the chances of a correct response. But iterations do not add to learning unless pleasant circumstances follow a response. Thorndike’s hokum has undergone a revision that a simple iteration of a situation does not necessarily make a reply legitimate.

Third: *Law of readiness*. This law states that when a person is prepared to act, doing the anticipated action is rewarding, while not doing so is a punishment (*punishing*).¹⁶

Thorndike’s theory, later referred to as the theory of onexiionism above, is very appropriately practiced in learning, especially related to

¹⁵ John W. Santrock, *Education Psychology 2Nd Edition* 102

¹⁶ Margaret E. Gredler, *Learning and Instruction: Theori into Practice*, 56-57

the teaching principles for teachers and educators. This theory teaches that teachers must be able to connect between stimulus and student response in knowledge, thus giving birth to good student learning behavior. The implementation of this theory in education can be seen from the following principles: **First:** *The principles of teaching*, namely, the teacher must be able to form his habits. Others include the tradition of students. Students must be meticulous in developing habits because it is complicated to create student practices that have been corrected. If other things in the student's learning have been under the learning target, then form other habits in how the pattern is used. **Second:** *The principles of shaping students' skills*, namely, a craft, must first be introduced to the student, specifically before the skill can be used appropriately. The skills the teacher gives the student must correspond to his level of ability. The skills presented to the student must also be in harmony with the group and type of emotions, tastes, and instinctive tendencies based on the student's will alone. Skills will be optimal if they can support learning that will occur at the same time. Thorndike strongly recommends that knowledge and skills be taught in different fields of study. **Third:** *The principle of Mental Discipline*, namely: mental discipline, is the view that studying a particular field of analysis, such as mathematics, can improve general cognitive functioning better than exploring other areas of study. Specific fields of study may not improve students' mental abilities better than other fields. Thorndike's research also influenced educators to design curricula not based on mental discipline. Thorndike also encourages a curriculum where learning must be integrated between fields of study."¹⁷

Ivan Pavlov (1849-1936) introduced the theory of learning Classical Conditioning theory, a Russian behaviorist psychologist who won the 1904 Nobel prize for his work on digestion. At first, Pavlov observed dogs often slobbering underarm of a servant bringing them food or even just hearing the footsteps of the waiter. Pavlov saw that the waiter was not a natural stimulus to reflex motion salivates the dog; the waiter influences the dog because it is related to food. Classical Conditioning learning theory is a multi-step procedure that initially requires an *unconditioned* stimulus (UCS). It results in an unconditioned stimulus (UCS) that results in an unconditioned response. Conditioned (UCR) when these two incentives and unconditioned response are

¹⁷ Dale H. Schunk, 2012, *Learning Theories An Educational Perspective, Sixth edition*, (New York: Pearson Education Inc.), 106-107

given a conditioned stimulus (Conditioned Stimulus), it will produce a conditioned response (Conditioned Response). The administration of CS without UCS is done repeatedly without any strengthening will make the CR decrease in intensity and disappear.

Therefore according to Santrock, “classical conditioning is an associative type of learning in which a neutral stimulus is associated with a meaningful stimulus and gives rise to the ability to issue a similar response.”¹⁸ Pavlov based this theory on his experiments when giving meat powder to a hungry dog (UCS) that made the dog salivate (UCR). To condition the dog this, he had to be repeatedly given a stimulus that was originally neutral for a short time before being given UCS. In the initial experiments, the sound of the beating of the metronome (a kind of bell) did not make the dog salivate. But in the end, the dog salivates in response to the beating of the metronome before the meat powder is given to him.”¹⁹

From the above experiments, we can conclude Pavlov’s Classical conditioning theory that hungry animals not conducted (UCS) when given food will salivate in response to which unconditioned (UCR). So that if a neutral stimulus accompanies the feeding -e.g., the sound of something that is not food- (CS) without food then the dog does not drool. However, when given CS together with food, it will repeatedly produce a response to something neutral (CR) after being conditioned.

Pavlov gives some principles of classical conditioning theory in terms of treating stimulus and response:

First: *Spontaneous recovery*, i.e., occurs after an interval in which CS is not given, and the CR is considered to disappear. If CS is given and the CR returns, it is common to say that the CR spontaneously recovered from extinction. A recovered CR will not survive unless the CS is given back. The CS installation with UCS can ultimately return the CR to its original effect. The fact that the CS-CR pair can be repaired without difficulty suggests that extinction does not constitute an annulment of learning of such associations.

Second: *Generalization*: means that CR is generated by stimuli similar to CS. When the dog has been conditioned to salivate in response to a metronome that beats 70 times, it can wind as the metronome ticks faster or slower; the fewer elements the same between

¹⁸ John W. Santrock, *Education Psychology 2nd Edition* 268

¹⁹ Dale H. Schunk, *Learning Theories*, 109

the new stimulus and the CS; the fewer generalizations occur.²⁰

Third: Discrimination: is a complementary process that occurs when the dog learns to respond to CS only while not responding to other similar stimuli. To practice discrimination, experimenters can pair CS with UCS and present other similar stimuli without UCS.

Third: Biological Influence/Spesis: Pavlov also recognizes that not all types of neurological or sepsis experience or give the same to the stimulus.

In the theory of learning, classic conditional can be in the form of negative and positive experiences in the child's classroom. Among the things experienced by the child at school when they are getting pleasure is conditioned with their favorite songs or other things so that students will feel the comfort, warmth, and attention of the teacher due to the stimulus provided in class. Songs, gifts, and so on can be interpreted as a neutral stimulus that gives birth to the student's happy response to learning. Children who feel afraid of education or subjects in the classroom when they associate the class with reprimands. Hence criticisms and reprimands become CS for taste scared of students. Classical conditioning can also occur in the form of exam-facing anxiety. The child's failure in learning, such as low test scores, then being reprimanded, will result in stress; from this, the child will associate the exam. With anxiety, it becomes CS for concern. Classical conditioning can also help us understand some aspects of learning better. It helps explain how neutral stimuli become associated with unlearned responses. It helps to understand students' anxiety and fear of learning. Therefore sometimes, the anxiety and stress associated with the negativity experienced by students, according to this theory, can be eliminated by classical conditioning.²¹

B. F Skinner (1904-1990), a bachelor of Psychology from Harvard University, his famous book in psychology was *The Behaviour of Organisms*; this book was published after his book Hull Principles of Behaviour. B.F Skinner is among the researchers of onnectionism, although some experts say he is not a connectionist.²² Skinner argues that learning is of two types; these two types of education differ since each includes its behavior. Specific stimuli judge the respondent's conduct; when there is a stimulus, the response occurs automatically.

²⁰ Dale H. Schunk, *Learning Theories*, 109

²¹ John W. Santrock, *Education Psychology 2Nd Edition* 271

²² John W. Santrock, *Education Psychology 2Nd Edition* 99

Learning following the pattern above is referred to as classical conditioning. A new impulse, according to Skinner, is paired with a trigger that has produced a response and has been paired several times; then, even a new inspiration will make a response. The existence of *the old stimulus* (which is not conditioned) in his experiments is seen as a reinforcer since, without an extended stimulation, learning cannot occur. Thus the behavioral understanding of respondents in the skinner system is similar to the general type of learning assumed by Watson.

Skinner argues that most behaviors belong to other types. This type is called operant behavior. Suppose the respondent's behavior (student) arises due to a response to the stimulus. In that case, operant behavior is characterized by its operation toward the environment. It maintains the inevitable consequences of sustainability. Operant behavior, according to Skinner, takes place under control stimuli, but the nature of control is partial and conditional. Skinner explains that operant conditioning is "amplifying the operand" to make the response more possible, in another sense, "more frequently."

Thus says Skinner, in experiments on pigeons, food is a reinforcer; giving food when a response is a reinforcement. The conditioning process operates as a change in fecality when the head is raised to a certain height. When we wake up, we interact with the environment constantly, and many of the consequences of our actions are reinforcement. Skinner argues that operant reinforcement occurs more than building a behavioral work. Operant reinforcers, according to him, add to the efficiency of the behavior and maintain the behavior in an extended force after proficiency or efficiency stops the interest.²³

Operant splitting occurs when the reinforcement no longer appears; the response then becomes reduced and is called "operand splitting." If food is not given, then, in the end, the dove will stop raising its head. Generally, if we struggle with behaviors that no longer result, then we tend not to lean towards the same behavior anymore; if we lose the pen, then we're not going to reach for the pocket that previously kept that pen. The strength or weakness of behavior, according to Skinner, is due to a variety of different variables, which is why it is the task of behavioral science to identify.²⁴

Skinner perceives stimuli as reinforcements. He divides stimuli as reinforcement into two types of support, namely *positive reinforcers* and

²³ B. F. Skinner, 1965, *Science and Human Behavior*, (New York: The Free Press), 104-105

²⁴ B. F. Skinner, 1965, *Science and Human Behavior*, 110

negative *reinforcers*. According to him, negative reinforcement is in the form of avoidance stimuli, that is, in the form of all things that the individual changes; the loss of negative reinforcement, in his opinion, will increase the possibility of a previous response, which is the same with positive reinforcement. For example, a lintric sting is a negative reinforcer, but the loss of the sting will be physically reinforcing. Therefore, according to Skinner, a response can be corroborated by a positive booster or by eliminating an opposing advocate.

Negative reinforcement is related to punishment. Therefore, punishment is an attempt to hold a negative reinforcement. The effect of support is simple and direct and more difficult to predict; the reinforcer will improve the behavior. However, punishment does not necessarily reduce the behavior being punished. Skinner does not claim that punishment is of no value as a tool for changing behavior but that if we design a situation, this punishment can suppress unintended behavior without producing adverse side effects.²⁵

Skinner's theory seems to be focused on reinforcement, so Skinner has a *schedule of reinforcement*. This schedule refers to a specific pattern used to regulate how the amplifier will be given following the response. Another reinforcer, in Skinner's terms, is the interval booster. It is the attempt to reinforce the behavior in a specific interval; the next reinforcer in maintaining the action, according to Skinner, is the reinforcer ratio, a general schedule in education in which students are strengthened to complete a project or other schoolwork. The strengthening of the fixed percentage results in a very high response that makes the ratio not too high.²⁶

Learning in Islamic education *ta'lim (learning)* in Islamic education has been discussed in detail and comprehensively, thus giving birth to many opinions of Islamic scholars from time to time about the theory of learning. However, empirical research related to things that affect education and psychological matters related to learning outcomes has yet to be studied by the generation after the golden age of Islam. Therefore, this research is expected to be part of an effort to continue empirical research on learning theory in Islamic education. Since 14 centuries ago, the Qur'an has explained globally the concept of learning that humans will carry out, how they produce knowledge and experience through learning, the purpose of education,

²⁵ Winfred F. Hill, *Learning: A Survey of Psychological Interpretation*, 106-107

²⁶ B. F. Skinner, *Science and Human Behavior*, 162

the benefits of learning in human life, learning resources, and things that can motivate humans in learning.

In the Qur'an, the concept of learning can be seen from 2 (two) terms that the Qur'an often uses;

First: learn by the word (درس) *darasa*, which means to understand or learn; this word is found in several verses among the word of God;

أَمْ يَتَّخِذُ عَلَيْهِمْ مِيثَاقَ الْكِتَابِ أَنْ لَا يَقُولُوا عَلَى اللَّهِ إِلَّا الْحَقَّ وَدَرَسُوا مَا فِيهِ وَالِدَارِ
الْآخِرَةُ خَيْرٌ لِّلَّذِينَ يَتَّقُونَ أَفَلَا تَعْقِلُونَ

*"Whether the covenant of the torah has been taken from them, namely that they will not speak against God except the true, even though they have **learned** what is in it?.." (QS. Al-A'raf:169). Juga in the word of God: .. But (he said); Let you be rabbinical (affiliations to Allah), for you always teach the Bible and because you keep **learning it**" (QS. Ali Imran: 79).*

God calls reading scriptures as learning, saying God *"Do you have a book that you read (study it)"* (QS. Al-Qalam: 37), also in the verse: *"We do not give them books to **study**"* (QS. Saba':44) and the word of God: *".. that they may say thou hast learned **it**"* (QS. Al-An'am: 105).

Ar-Raghib Al-Ashfahani (D:507H/1109M) explains the language meaning of the word *darasa* in the above verses with several meanings, including *First:* meaning: left behind or attached to its influence. *Second,* it means continuous reading, which is called "*darasa.*" *Third,* meaningful; "shape and transform." Ibn Manzur (D:711H/1311 AD) says the word²⁷*darasa* quoting Ibn Abbas RA, means "to study or read." If you pay attention to the origin of the word²⁸*darasa* above, it can be ascertained that the meaning that corresponds to the word *darasa* in this modern era is «learning» (*Learning*).

Some of the verses above explain that learning to destroy the Qur'an is to study the content and teachings of the Qur'an (Al-Kitab). The Qurtubi says that the word *darasa* in Sura Ali Imran:69, according to the history of Ibn Amir, is *Tua'llimun* (Teaching), whose interpretation is «if the word *darasa* uses *tasydid* as read by Abu Amr, then the meaning is knowledge and learning (*tua'llimun*), if it is

²⁷ Ar-Raghib Al-Ashfahani, 2013, *Mu'jam Mufradat Al-Fazi Al-Qur'an*, (Beirut: Daar Al-Kitab Al-Ilmiyah, 2013), 188 and Ibrahim Anis at. all, 1972, *Al-Mu'jam Al-Washith*, vol 1, (Cairo: Al-Mujamma', 1972), 71

²⁸ Ibn Manzur, 2003, *Lisanul Arabic*, vol 3, (Cairo: Daar Al-Hadith), 336

not *interpreted* then it means Science only.» As for the word²⁹ *darasa* in Sura Al-A'raf: 169 above, according to the Qurtubi means "to read the book (Torah and gospels) because they are close to the books"³⁰.

Second: learning is known in the language of the Qur'an with the word (تَعَلَّمَ) *ta'allum*, which also means learning. Allah swt said:

وَعَلَّمَ آدَمَ الْأَسْمَاءَ كُلَّهَا ثُمَّ عَرَضَهُمْ عَلَى الْمَلَائِكَةِ فَقَالَ أَنْبِئُونِي بِأَسْمَاءِ هَؤُلَاءِ إِنْ كُنْتُمْ صَادِقِينَ

"And He taught Adam the names (of things) all, and then He showed the angels, saying, "Call unto me the names of all these benda, if ye are the righteous!"» (QS: Al-Baqarah: 31).

This word repeats itself 11 (eleven) times in the Qur'an (QS: Al-Baqarah: 32, 125, 151 and 282, Ali Imran: 48 and 164, Al-Hujarat: 16, Ar-Rahman: 2, An-Naml: 16 and Al-Jumu'ah: 2), with the same meaning. Ar-Raghib Al-Ashfahani interpreted the word *ta'allum* as "repeating or multiplying something to have the influence or awareness and attention of the soul to the image of something."³¹ At-Thabari said: Allama in Sura Al-Baqarah, Ar-Rahman, and others means "Allah makes man understand and know"³².

From the meaning of *<allama and yu>allimu* in the verses of the Qur'an interpreted by the scholars of the above interpretation, it can be concluded that *ta'lum* is a process of understanding and knowledge that is carried out repeatedly by man against something around him so that he can understand and change his attitude and behavior.

The principles of learning in Islamic education that can be seen from the verses of the Qur'an are;

First: Humans are learning beings

The Qur'an explains that man is a learning being; the instinct or *fitrah* of a man created by Allah is a learning *makhhluk*. Therefore, when God created man in heaven and before man inhabited the world, artificial a study by studying the names of heavenly beings. Allah swt said: "And He taught Adam the names (of things) in their entirety, then

²⁹ Muhammad ibn Muhamma Al-Anshari The Qurtubi, *Al-Jami' Liahkam The Qur'an*, vol 3, (Cairo: Daar Al-Iman), 43

³⁰ The Qurtubi, *Al-Jami' Liahkam Al-Qur'an* 525

³¹ Al-Ashfahani, 2013, *Mu'jam Mufradat Al-Fazi Al-Qur'an*, 384

³² Ibn Jarir At-Thabari, 2003, *Tafsir At-Thabari*, (Cairo: Maktabah At-Taufiqiyah), 235

brought them up to the Angels and said: "Call unto me the names of the things if you are righteous to the righteous!" (QS. Al-Baqarah: 31).

According to the above verse, man is an intelligent being. It has an excellent and robust learning ability beyond the Angels so that man can be nobler than angels because of his knowledge and characteristics as these learning beings.

Second: The Purpose of Learning is Change

The Qur'an explains that the learning carried out by man is for the change of himself, both his capabilities, behavior, and spirituality. Allah SWT will not change a person's condition unless man himself is willing to change his condition. God said: "*Verily, Allah did not change the state of the people so that they changed the situation that was in themselves*". (QS. Ar-Ra'du: 11) Therefore, the actual change is derived from man himself by learning a lot from the words of God, the environment, and the surrounding nature. According to the Qur'an, people who are willing to learn and study and observe well the content of the Qur'an, then they are people who are sensible and open in heart to truth and knowledge. Allah's word: "*Then do they not pay attention to the Quran or are their hearts locked?*". (QS. Muhammad: 24).

Third: The man at birth does not have any knowledge except to be equipped by God with reason and five senses to learn.

The Qur'an clarifies that man is empty, clean, and holy at birth. He does not even know anything, but Allah equips him with reason and the five senses as a tool for learning and obtaining knowledge. Man is destined to be able to learn the surrounding environment with learning tools that Allah has entrusted to him, in the form of reason, hearing, and sight, and others to absorb knowledge. God said: "*And God took you out of your mother's belly knowing nothing, and He gave you hearing, sight and heart, that you might be grateful*". (QS. An-Nahl: 78)

Fourth: Learning is an obligation

The Qur'an explains that learning is a human obligation because people with the capability and capacity of knowledge and skills differ from those without knowledge and good skills and behavior. God said:

Say: "*Is there the same people who know with people who don't know?*" Surely it is the sensible man who can receive the lesson". (QS. Adz-zumar: 9)

Fifth: Learning is glory

Learning is the glory of man. The treasure of man lies in his knowledge; the higher ability and the better inside of a person. The

better quality of his life, work, and social interactions give birth to the glory of life. God says: *“God will exalt those who have faith among you and those who are given knowledge to some degree”*. (QS. Al-Mujadilah: 11)

Sixth: The main sources of learning are revelation (Qur’an and As-Sunnah), nature and the environment

The Qur’an explains that man can learn through himself, Nature, and his environment. The Qur’an and the power and creation of Allah that exists in man can be a source of learning; how a man speaks, the uniqueness of the human body, and so on can be a source of knowledge. Similarly, Nature, plants, animals, and the universe are the sources of human understanding that can give birth to science when thought, reasoned, observed, and concluded. God says: *“Verily in the creation of the heavens and the earth, and the alternation of night and day there are signs for the sensible”*. (QS. Ali Imran: 190) also said of Allah: *“We will show them our signs (dominion) in all regions of the earth and on themselves, until it is clear to them that the Quran is true. Is it not enough for them that indeed your Lord be a witness of all things?”* (QS. Fushilat: 53).

As for the correction of the theory of learning behaviorism from the perspective of Islamic education, researchers can detail as follows:

First: The concept of the psychological school of behaviorism seeing the human being

Scientists of the psychological school of behaviorism tend to equate humans with animals, so they test and conduct experiments on the behavior of organisms starting with using animals and then practicing with man. Skinner used mice and pigeons in his experiments because he thought the process was more straightforward and the behavior of animals took longer to observe.”³³ Edward Lee Thirndike (1971-1949) conducted stimulus and response experiments using chickens, mice, dogs, cats, monkeys, fish and so on, then finally adult humans.”³⁴ Equating man with animals in Islamic education is unacceptable common sense because man is very different from animals; man has a reason, and heart, while animals have only instincts. God said: *“And truly, We have glorified the posterity of Adam, and We transported them on land and at sea, and We gave them sustenance from the good and We raised them above many creatures that We created with perfect excess”* (QS: Al-Isra: 70).

³³ Gredler, *Learning and Instruction: Theory into Practice*, 56

³⁴ Hergenhahn, *Theories of Learning*, 21

Conwy Lioyd Morgan, (1842-1936), a 19th-century psychologist has corrected experiments on this animal and said that “that we cannot assume that mental processes man is the same as the mental processes of animals”³⁵. In Islamic education, man is not only influenced by material things outside of himself or external motivations like animals, but is influenced by many things, such as common sense, faith or belief, human nature and its five senses.

Second: Behaviorism’s view of human emotional and (cognitive) knowledge is the same as that of animals.

The experts of behaviorism followed Darwin’s theory (1809-1882) which said that human beings and nonhumans are the same in almost all their aspects, anatomically, emotionally and cognitively,³⁶ Hergenhahn, *Theories of Learning*, 22 even the next psychologist George John Romanes (1849-1894) strongly supported the similarity of man to animals, since the existence of continuity of intelligence and emotional behavior of human animals is generally anecdotal, such as the anger, fear, and jealousy that is in the fish, the affection, sympathy, and pride are in the birds. The shame and reasoning are in the dog.”³⁷

Islamic education strongly rejects equating man with an animal because man has the heart as a place of all emotional forms, reason where knowledge, intelligence, and reasoning, and physical as a source of skill and skill. In contrast, animals have only physique and instinct. Allah said: “*And truly, we have created the hell of Jahannam many of the jinns and men. They have hearts, but they are not used to understand (God’s verses) and they have eyes (but) they are not used to see (signs of God’s dominion), and they have ears (but) they are not used to listen (God’s verses). They are like farm animals, even more perverted. They are the ones who are caught off guard*”. (QS: Al-A’raf: 179). This verse explains that when people do not use their intellect and heart, then they are the same as animals, this shows that animals do not have reason and heart which becomes a cognitive and emotional source.

Third: Behaviorism’s view of learning motivation

Behaviorism sees that the only motivation of the human being to learn is from outside himself. Therefore all supporters of learning behaviorism theory always rely on “Stimulus and Response, as well as

³⁵ Hergenhahn, *Theories of Learning*, 21

³⁶ Hergenhahn, *Theories of Learning*, 22

³⁷ Hergenhahn, *Theories of Learning*, 22

its reinforcement” in motivating human beings to learn. Motivation is “a process that encourages direction, and persistence of behavior.”³⁸

In Islamic education, man learns not only to be driven by something outside of himself, such as; food, the sound of bells, a sense of security, and so on, but man is a complex and perfect being, having motivation from within and outside. Even the internal cause of the human being is greater than the external motivation. A man of faith and piety in Allah, he will always work on the charity of the shaleh, including learning and teaching. Faith and holiness are internal motivations in the form of beliefs and beliefs, where these two things motivate humans to do good deeds or not to do evil deeds, including studying and don't want to learn. Allah said: “Whoever has faith in Allah, then Allah will instruct his heart to do good” (QS: At-Taghabun: 11). The Prophet said: “A believer will not commit adultery and steal when there is faith in him” (HR: Bukhari, Muslim, Abu Daud, An-Nasa'I and Ahmad). In Islamic education, faith in Allah, the afterlife, heaven, and the great reward of Allah are the main motivations of man to do anything, including learning. Hence the Qur'an repeatedly explains the relationship between faith and shaleh charity so that there are dozens of verses juxtaposing faith and shaleh charity.

Modern psychologists have criticized and invalidated behavioralism claims about motivation. The school of psychology of humanism argues that, like Maslow (1908-1970) argues that students can be motivated to learn because it is caused by their basic needs such as; physiology, security, love and a sense of belonging, self-esteem, and self-actualization, which became known as Maslow's Hierarchy.³⁹ Maslow's five needs above are all things that motivate man from within him.

Fourth: Correction of the theory of learning Connectionism Edward L. Thorndike

Koneksionism believes that learning is a stimulus process given to students (in the form of things that interest students, whether praise, gifts, grades, and so on). The student provides his response or acceptance of the stimulus or stimuli with various kinds of efforts that the student makes to achieve the stimulation until the learning objectives are fulfilled in the form of behavior.

³⁸ John W. Santrock, 2004, *Educational Psychology*, 2Nd, (Texas: McGraw. Hill Company, Inc.), 6

³⁹ Santrock, *Educational Psychology*, 7

In Islamic education, learning through stimulus by giving praise, gifts, and so on is not the only attempt of a teacher to attract student responses to learning because the human soul needs not only a stimulus in the form of material but also a non-material one. For example: love, tenderness, affection from teachers or parents, glad tidings about merit, heaven, blessings, and others. These stimuli turned out to be greater in generating learning responses from students.

The Qur'an states that people will hear a teaching, command, and invitation from a teacher if they are taught with an approach of love, love, do'a, and empathy. On the other hand, if they are treated with harshness, profanity, and egoism, they will shy away from the teacher. Says Allah: *"Then by the grace of Allah thou (Muhammad) acts meekly towards them. If you are harsh and rough-hearted, surely they will distance themselves from your surroundings. Therefore, forgive them, beg forgiveness for them, and have deliberations with them in the matter"* (QS: Ali Imran: 159). Ibn Katsir interpreted the verse "Hard and rough-hearted" with "Harsh and bad words and a hard and selfish heart." The concept of modern learning psychology explains that many children do not learn well in school because they have a negative relationship with their teacher, and the classroom situation becomes very unpleasant. Researchers have found that students who have a supportive and caring teacher will be more motivated to learn than those who think they have a teacher who is not supportive and not attentive."⁴⁰⁴¹

Fifth: Ivan Pavlov's Classical Conditioning Correction

Classical Conditioning Theory is a type of associative learning in which a neutral stimulus is associated with a meaningful inspiration and gives rise to the ability to issue a similar response. According to Pavlov (Unconditioned Stimulus = UCS) produces an unconditioned response (Unconditioned Response = UCR). When these two unconditioned stimuli and responses are conditioned with a conditioned stimulus (Conditioned Stimulus), it will produce a conditioned response (Conditioned Response).

In Islamic education, learning is not unintentional or unconditioned, but learning is an activity that is mandatory and has noble values on the side of Allah (HR: Baihaki). Therefore learning must have a clear purpose and intention. Like Pavlov's view, learning is not

⁴⁰ Ibn Katsir, 1994, *Tafsir Ibn Katsir*, (Beirut: Daar Al-Fikri), vol 1, thing 157

⁴¹ Santrock, *Educational Psychology*, 534

just a stimulus and spontaneous response from animals or humans. Still, learning is a noble human work that includes human reason, heart, and senses. So learning in humans is different in animals. According to Abuddin Nata, learning activities are intellectual and spiritual communication activities that are central to the human psychiatric structure.⁴²

In this theory, *reinforcement, conditioning*, and repetition of lessons are the primary keys, according to Pavlov, to inflame the spirit of human learning. Watson, the developer of Pavlov's theory, concluded that external factors always control human behavior. In Islam, human behavior, including learning behavior, is not always prevented by external factors but also human factors. Even factors in humans have a more significant influence on behavior. An internal factor that significantly influences behavior is the heart and reason. God said:⁴³ *"We have made their hearts closed (so that they do not) understand them, and their ears are blocked. And even if they see all signs (of the truth), they still don't want to have faith in it."* (QS: Al-An'am: 25). The Prophet said: *"Verily in man there is a lump of flesh, if he is good then all his body will be good and if he is bad then his body (his behavior) is bad, he is the heart"* (HR: Bukhari, Muslim, Tirmidzi and Ahmad).

Sixth: Correction of Skinner's Operant Conditioning Learning Theory

Conditioning Operant is a state or condition that can exert an effect on the person around him; according to this theory, a response that occurs without being preceded by a specific stimulus but rather by the result generated by the *reinforcer* and that response is usually held accidentally». This theory relies heavily on reinforcement in the form of learning environment design and things that provide enthusiasm outside of students. Islamic education recognizes two sources that can generate learning responses and interests, first sourced internally in the human heart and reason and second from outside the human self, in the form of the environment, nature, and other people.⁴⁴ This theory is mentioned in the Qur'an Surah An-nahl: 78: *"And Allah took you out of your mother's belly in a state of not knowing anything, and He gave you hearing, sight and conscience, that you might be grateful"*. From birth man is like tabula rasa or blank paper, then then he has knowledge and

⁴² Abuddin Nata, 2014, *Perspektif Islam tentang Strategi Pembelajaran*, (Jakarta: Kecana, cet. Ke 3), hal 72

⁴³ Abuddin Nata, *Perspektif Islam tentang Strategi Pembelajaran*, 91

⁴⁴ Wasti Sumantri, 2006, *Psikologi Pendidikan*, (Jakarta: Rineka Cipta), hal 126

learns through his five senses (eyes, ears and reason) by observing and thinking about the surrounding environment.

CONCLUSION

The theory of behaviorism is a school of psychology that takes the view “that a behavior must be explained through visual experiences, not by mental processes. according to this theory, behavior is everything we do and can see directly.” The psychological theories of Behaviorism have given birth to many modern learning theories because the views and experiments of the psychology of behaviorism are very focused on observing and discussing how humans learn, learning conditions, and so on.

The Psychological Theory of Behaviorism gave birth to many learning theories, including; the idea of learning konexoonism, which argues that the formation of associations (connections) between sensory experiences (perception of stimulus or events through five senses) with neural responses (responses) whose impact takes the form of behavior.

The theory studied chron conditioned classic argues that a multi-step procedure initially requires an unconditioned stimulus (*Unconditioned Stimulus* = UCS). It results in a response *unconditioned* Response (UCR). When these two stimuli and unconditioned responses are given a conditioned stimulus, it will produce a drilled response (Conditioned Response). The administration of CS without UCS that is done repeatedly without any strengthening will make the CR decrease in intensity and disappear.

Skinner’s Theory of Learning Operant Conditioning argues that specific stimuli judge the respondent’s action; the response occurs when there is a stimulus. Learning following the pattern above is referred to as classical conditioning. According to Skinner, new inspiration is paired with a trigger that has produced a response and been paired several times; then, even a new catalyst will make a response. The existence of *the old inspiration* (which is not conditioned) in his experiments is seen as a reinforcer. without an extended stimulus in learning cannot occur.

This theory of Positive and Negative reinforcers is Skinner’s view that divides stimuli as reinforcements into two types of support, namely *positive reinforcers* and harmful boosters (*negative reinforcers*). According to him, negative reinforcement is in the form of avoidance

stimulus; that is, in the form of all things changed by the individual, the loss of negative reinforcement. In his opinion, it will increase the possibility of a previous response, which is the same as favorable reinforcement.

Islamic education sees that a human is a learning being. The study aims to change the man into more faithful and good. Human at birth does not have any knowledge except equipped by Allah with reason and five senses to learn. Learning is an obligation to all human beings of faith, learn is glory, and source learning is the primary revelation (Qur'an and As-Sunnah), nature, and the environment. In Islamic education, Iman and takwa are internal motivations in the form of beliefs. These two things motivate humans to do good or not to do evil deeds, including studying and not wanting to learn.

Allah said: "Whoever has faith in Allah, then Allah will instruct his heart to do good" (QS: At-Taghabun: 11). The Prophet said: "A believer will not commit adultery and steal when there is faith in him" (HR: Bukhari, Muslim, Abu Daud, An-Nasa'I and Ahmad).

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