

Implementation Of Behavioristic And Cognitive Theories

Ahmad Bagi

Universitas Negeri Yogyakarta *E-mail:* ahmadbaqi.2023@student.uny.ac.id

Info Articles

Article History Received: 2024-08-16

Revised: 2024-08-17 Published: 2024-09-30

Keywords:

Behavioristic, theory, cognitive

Abstract

This study explores the implementation of behavioristic and cognitive theories within the legal and policy framework. Behavioristic theory emphasizes observable behavior and how it is shaped by environmental stimuli, while cognitive theory focuses on internal mental processes, such as perception, thinking, and problem-solving. Both theories have significant implications for understanding human behavior, particularly in legal contexts such as criminal law, education policy, and behavior regulation. This research investigates how these psychological theories are applied in legal norms and public policies to shape behavior and decision-making. The research employs a juridical-normative approach, focusing on the legal framework and regulations that incorporate elements of behavioristic and cognitive theories. Through the analysis of laws, regulations, and policies, the study examines how these psychological principles are integrated into the creation of legal norms and the formulation of public policies. This method includes a detailed review of primary legal sources, such as statutes and policy documents, and secondary sources, including academic literature and theoretical studies. The results reveal that behavioristic theories are often applied in legal systems through punishment and reward mechanisms, aiming to modify individual behavior in criminal law and public policy. On the other hand, cognitive theories are implemented in areas that require decision-making, education, and rehabilitation, emphasizing the importance of mental processes in influencing legal outcomes. Both theories are used to achieve social control, compliance with laws, and improvement of individual decisionmaking processes. In conclusion, the study finds that the implementation of behavioristic and cognitive theories in law is instrumental in influencing human behavior and enhancing the effectiveness of legal systems. However, a balance between these approaches is essential to address both external behavior and internal cognitive processes in legal and policy frameworks.

I. INTRODUCTION

Learning theory is the basis for a learning process that guides the formation of conditions for learning (Margaretha, 2020). Learning theory can be defined as the integration of principles that guide in designing conditions for achieving educational goals. With the existence of learning theory will provide convenience for teachers in implementing learning models that will be implemented. Many learning theories have been found that basically emphasize the achievement of behavioral changes after the learning process.

Learning is not just memorizing and not remembering, but learning is a process that is marked by changes in students. Changes as a result of the learning process can be shown in various forms, such as changes in knowledge, attitudes and behavior, skills, abilities, abilities, reaction power and acceptance power. So learning is an active process, a process of reacting to all situations that exist in students. Learning is a process that is directed at a goal, a process of acting through situations that exist in students. Therefore, in learning it also needs to be supported by a learning theory (Nurhayani & Salistina, 2022).

With the development of the world of education, various theories about learning have also emerged. Through the history of education, teaching has changed. Many learning theories are used to achieve learning goals. These theories have different influences and implications in their application. Therefore, this paper will discuss behavioristic and cognitive learning theories.

II. RESEARCH METHODS

This research uses a normative juridical approach, which aims to analyze the application of behavioristic and cognitive theories in a legal or policy context. This approach focuses on the study

Volume I, Number 2, September 2024 (56-63)

of legal norms, regulations, and relevant policies, as well as how these psychological theories are applied in making legal or public policy decisions.

III. RESULTS AND DISCUSSION

A. Behaviorist Learning Theory

1. Definition of Behaviorist Learning Theory

Behaviorist learning theory explains that learning is a change in behavior that can be observed, measured and assessed concretely (Rahmah & Alv. 2023). Changes occur through reactive stimuli that cause behavioral relationships (responses) based on mechanistic laws. Stimulants are nothing but the child's learning environment, both internal and external, which are the cause of learning. While responses are the consequences or impacts, in the form of physical reactions to stimulants. Learning means strengthening bonds, associations, traits and behavioral tendencies of SR (stimulusResponse) (Hermansyah, 2020).

2. Definition of Behaviorist Learning Theory According to Experts

a. Edward Lee Thorndike (1874-1949): Connectionism Theory

Thorndike was an American educator and psychologist. He graduated with a BA from Wesleyan University in 1895, a MA from Harvard in 1896, and a doctorate from Columbia in 1898. According to Thorndike, learning is an event of forming associations between events called stimuli (S) with responses (R) (Shahbana & Satria, 2020). Stimulus is a change in the external environment that is a sign to activate organisms to act or do something while the response is any behavior that appears because of the stimulus. From the experiment of a hungry cat that was put in a cage (puzzle box) it is known that in order to achieve a relationship between stimulus and response, there needs to be the ability to choose the right response and through efforts or experiments (trials) and failures (errors) first. The most basic form of learning is "trial and error learning or selecting and connecting learning" and takes place according to certain laws. Therefore, the learning theory put forward by Thorndike is often called connectionist learning theory or association theory. Thorndike's views that made a significant contribution to the world of education, he was named as one of the pioneers in educational psychology.

Thorndike's famous experiment with a cat that had been starved and placed in a closed cage and the door could be opened automatically if the knob located in the cage was touched. The experiment resulted in the theory of "trial and error" or "selecting and connecting", namely that learning occurs by trying and making mistakes. In carrying out this trial and error, the cat tends to abandon actions that do not have results. Each response causes a new stimulus, then this new stimulus will cause another response, and so on. In the experiment, if food was placed outside the cage, the cat tried to reach it by jumping here and there. The cat accidentally touched the knob, then the cage door opened, and the cat immediately ran to the food place. This experiment was repeated several times, and after about 10 to 12 times, the cat was only able to intentionally touch the knob if food was placed outside. From this experiment, Thorndike discovered the following laws of learning:

- 1) Law of Readiness (Law of Readiness), namely the more ready an organism is to acquire a change in behavior, implementation of the behavior will create individual satisfaction SO that association tends to be strengthened (Tauhid, 2020). The first principle of connectionist theory is that learning is an activity that forms associations (connection) between the impression of the five senses and the tendency to act. For example, if a child feels happy or interested in sewing activities, then he will tend to do it. If this is done, he feels satisfied and learning to sew will produce satisfactory achievements. The first problem of lawlaw of readinessis if tendencies act and people do it, then he will feel satisfied. As a result, he will not do another action. The third problem is if there is no tendency to act even though he does it, then dissatisfaction arises. As a result, he will do another action to reduce or eliminate his dissatisfaction.
- 2) Law of Exercise (Law of Exercise), namely often the behavior more repeated/trained (used), the stronger the association will be (Shahbana & Satria, 2020). Principlelaw of exerciseis the connection between conditions (which are stimuli) with actions will become stronger due to practice, but will weaken if the connection between the two is not continued or stopped. The principle shows that the main principle in learning is repetition. The more often it is repeated, the more the subject matter will be mastered.

- 3) Law of effect (Law of Effect), namely the stimulus-response relationship tends to be strengthened if the result is pleasant and tends to be weakened if the result is unsatisfactory (Hermansvah, 2020). This law refers to the strengthening or weakening of the connection as a result of an action. An action accompanied by a pleasant result tends to be maintained and will be repeated next time. Conversely, an action followed by an unpleasant result tends to be stopped and will not be repeated. The connection between the impression of the five senses and the tendency to act can be strengthened or weakened, depending on the "fruit" of the results of the action that has been done. For example, if a child does homework, he gets a sweet face from his teacher. However, if the opposite is true, he will be punished. The tendency to do homework will shape his attitude. Thorndike believes that the principle of the animal learning process is basically the same as that which applies to humans, although the relationship between the situation and actions in animals is not mediated by understanding. Animals make direct responses from what is observed and happens mechanically (Survobroto, 1984). Furthermore, Thorndike added additional laws as follows:
 - a) Law of Variable Reactions (Multiple Response). This law states that in individuals, a trial and error process begins, which shows a variety of responses before obtaining the right response to solve the problem at hand (Idris, 2020).
 - b) Law of Attitude (Set/ Attitude). This law explains that a person's learning behavior is not only determined by the relationship between stimulus and response, but is also determined by the conditions within the individual, whether cognitive, emotional, social or psychomotor (Hermansyah, 2020).
 - c) Law of One-Sided Activity (Prepotency of Element). This law states that individuals in the learning process respond to certain stimuli only according to their perception of the overall situation (selective response) (Hermansyah, 2020).
 - d) LawResponse by Analogy. This law states that individuals respond to situations that have never been experienced because

- individuals can actually connect situations that have never been experienced with old situations that have been experienced so that there is a transfer or shift of elements that have been known to new situations. The more similar elements, the easier the transfer will be (Tauhid, 2020).
- e) Law of transfer of Association (Associative Shifting) This law states that the process of transition from a known situation to an unknown situation is done gradually by adding new elements little by little and removing old elements little by little (Tauhid, 2020).

b. Ivan Petrovich Pavlov (1849-1936)

Ivan Petrovich Pavlov was born on September 14, 1849 in Ryazan, Russia, the village where his father, Peter Dmitrievich Pavlov, was a priest. He was educated at a church school and then at the Theological Seminary. Pavlov graduated with a bachelor's degree in medicine with a degree in physiology. In 1884 he became director of the department of physiology at the Institute of Experimental Medicine and began research on the physiology of digestion. Ivan Pavlov won the Nobel Prize in Physiology or Medicine in 1904. His work conditioning greatly influenced behaviorist psychology in America. His works are Work of Digestive Glands (1902) and Conditioned Reflexes (1927).

Classic conditioning (Classical conditioning or requirements) is a process discovered by Pavlov through his experiments on dogs, where original and neutral stimuli are paired with conditional stimuli repeatedly to produce the desired reaction (Rahayu et al., 2023). The experiments conducted by Pavlov and other experts seem to be greatly influenced by the behaviorist view, where a person's mental symptoms are seen from their behavior. This is in accordance with Bakker's opinion that the most central thing in human life is not only thoughts, roles or speech, but also their behavior. Thoughts about new tasks or plans will get the right meaning if they do something (Bakker, 1985). Starting from his assumption that by using certain stimuli, human behavior can change according to what is desired.

Then Pavlov conducted an experiment using animals (dogs) because he considered animals to have similarities with humans. However, with all their advantages, humans are essentially different from animals. He conducted an experiment by performing neck surgery on a dog. So that its salivary glands were visible from the outside. When shown food, the dog's saliva would come

out. Before the food was shown, what was shown was a red light first, then the food. Naturally, saliva would come out too. If such an action is repeated, then at some point by only showing a red light without food, saliva will also come out.

Food is a natural stimulus, while red is an artificial stimulus. It turns out that if such an act is done repeatedly, This artificial stimulus will create conditions for the emergence of saliva in the dog. This event is called a Conditional Reflex or Conditioned Response (Rahayu et al., 2023).

Pavlov argued that other glands can also be trained. Pavlov's student Bectrev used these principles on humans, which turned out to be found many conditioned reflexes that arise unconsciously in humans. From experiments after conditioning or habituation it can be seen that meat which is a natural stimulus can be replaced by the sound of a bell as a conditioned stimulus. When the bell was rung, the dog's saliva came out as a conditioned response. Can this situation be applied to humans? It turns out that in everyday life there are the same situations as in dogs. For example, the sound of a song from a Walls ice cream seller who goes from house to house. At first the sound might be strange, but after the ice cream seller often passes by, the tone of the song can produce saliva, especially on a hot day (Rahayu et al., 2023).

Imagine, if there was no song, how tired the seller would be shouting to sell his wares. Another example is the sound of the bell in class to mark the time or the queue button at the bank. Unconsciously, there is a process of marking something, namely distinguishing the sounds of food vendors (rujak, ice, fried rice, siomay) who often pass by the house, the bell to enter class, break or after school and queue at the bank without having to stand for long. From this example, it can be seen that by applying Pavlov's strategy, individuals can be controlled by replacing natural stimuli with appropriate stimuli to obtain the desired response repetition, while the individual is not aware that he is controlled by stimuli originating from outside himself.

c. Burrhus Frederic Skinner (1904-1990)

Like the modern psychology group, Skinner took a behaviorist approach to explaining behavior. In 1938, Skinner published his book entitled The Behavior of Organism. In the development of learning psychology, he put forward the theory operant conditioning (Bustamam, 2024). The book inspired an annual conference that began in 1946 on the subject of "The Experimental Analysis of Behavior". The

results of the conference were published in a journal entitled Journal of the Experimental Behaviorssponsored by the American Psychological Association (Sahakian, 1970) BF Skinner, an American, is known as a behaviorist figure with a direct instruction model approach and believes that behavior is controlled through the processoperant conditioning. Where one can control the behavior of an organism through the provision of judicious reinforcement in a relatively large environment. In some respects, its implementation is much more flexible than classical conditioning.

The teacher's teaching style is carried out with several introductions from the teacher in one direction and controlled by the teacher through repetition and practice (Shahbana & Satria, 2020). Classroom Management according to Skinner is an effort to modify behavior, including through the reinforcement process, namely giving rewards to desired behavior and not giving any rewards to inappropriate behavior. Operant Conditioning is a process of operant behavior (positive or negative reinforcement) that can cause the behavior to be repeated or disappear according to desire. Skinner made the following experiment:

In Skinner's laboratory, he put the starved rats in a box called a "skinner box", which was equipped with various equipment, namely buttons, food dispensers, food containers, adjustable lights, and electric floors. Because of the urge to be hungry, the rats tried to get out to find food. While the rats were moving here and there to get out of the box, they accidentally pressed the button, food came out. Food was given gradually according to the increase in behavior shown by the rats, this process is calledshaping. Based on his various experiments on mice and pigeons, Skinner said that the most important element in learning is reinforcement. What he means is that knowledge formed through stimulus-response bonds will become stronger if given reinforcement. Skinner divided this into reinforcement two, namely positive reinforcement and negative reinforcement. Forms of positive reinforcement include gifts, behavior, or awards. Forms of negative reinforcement include delaying or not giving awards, giving additional tasks or showing unhappy behavior (Shahbana & Satria, 2020).

3. Implementation of Behaviorist Learning Theory in Learning and Teaching

As a consequence of this theory, teachers who use the behaviorist paradigm will prepare learning materials in a ready-made form, so that

the learning objectives that students must master are conveyed in full by the teacher. Teachers do not give many lectures, but short instructions followed by examples either done by themselves or through simulations. Learning materials are arranged hierarchically from simple to complex. Learning objectives are divided into small parts marked by the achievement of a certain skill. Learning is oriented towards measurable and observable results. Mistakes must be corrected immediately. Repetition and practice are used so that desired behavior can become a habit. The expected result of applying this behaviorist theory is the formation of desired behavior. Desired behavior gets positive reinforcement and inappropriate behavior gets negative rewards. Evaluation or assessment is based on visible behavior.

Criticism of behaviorism is that student learning is teacher-centered, mechanistic, and oriented towards observable measurable results. This criticism is very baseless because the use of behaviorist theory has certain requirements according to the characteristics it displays. Not every subject can use this method, so the teacher's insight and sensitivity to the learning situation and conditions are very important to apply behaviorist conditions. This behaviorist method is very suitable for acquiring abilities that require practice and habituation that contain elements such as: Speed, spontaneity, flexibility, reflexes, endurance and so on, for example foreign language conversation, typing, dancing, using computers, swimming, sports and so on.

This theory is also suitable for training children who still need the dominance of adult roles, like to repeat and must be accustomed to, like to imitate and enjoy direct forms of appreciation such as being given candy or praise. The wrong application of behaviorist theory in a learning situation also results in a learning process that is very unpleasant for students, namely the teacher as the center, being authoritarian, communication is one-way, the teacher trains and determines what students should learn. Students are seen as passive, need external motivation, and are greatly influenced by the reinforcement given by the teacher. Students only listen to the teacher's explanation in an orderly manner and memorize what is heard and is seen as an effective way of learning. The use of punishment which is highly avoided by behaviorist figures is actually considered the most effective method for disciplining students.

B. Cognitivistic Learning Theory

1. Definition of Cognitivist Learning Theory

This theory emphasizes the learning process rather than the learning outcomes themselves (Assyakurrohim et al., 2023). Learning involves a very complex thinking process. It focuses on the process of how a science assimilates with the science that has previously been mastered by students. Knowledge is built within a student through a continuous process of interaction with the environment. This process flows, connects and is comprehensive.

2. Definition of Cognitive Learning Theory According to Experts

a. Jerome Bruner

Based on Drs. Wasty Soemanto (1997:127) and Drs. Bambang Warsita (2008:71) where Jarome Bruner proposed a theory which he calledfree discovery learning. This theory is based on cognitive theory, which states that learning is a change in perception and understanding (Hendriani et al., 2020). This means that this theory explains that the learning process will run well and creatively if the teacher gives students the opportunity to find a rule including concepts, theories, ideas, definitions and so on through examples that illustrate or represent the rules that are the source.

The advantages of learning to find:

- 1) Arouse students' curiosity so that they can be motivated to find the answer.
- 2) Developing independent problem-solving skills and requiring students to analyze and manipulate information. According to Burner, there are three stages of a person's cognitive development that are determined by how they see the environment, including: the first stage is enactive, namely students carry out activities in an effort to understand the environment; the second stage, iconic, namely students see the world through images and verbal visualization; the third stage, symbolic, namely students have abstract ideas where communication is assisted by a symbolic system.

Learning steps in designing learning according to Bruner include:

- a) Determine learning objectives
- b) Identifying students
- c) Selecting learning materials
- d) Determine the topic inductively
- e) Develop learning materials for students to study
- f) Arrange learning topics from simple to complex.

g) Carrying out assessments of students' learning processes and outcomes.

b. Piaget

According to Piaget in the book "Learning Technology" by Drs. Bambang Warsita (2008:69) who explains that cognitive development is a genetic process, namely a process based on biological mechanisms, namely the development of the nervous system (Aisya, 2023). In the book "Educational Psychology" by Wasty Soemanto (1997:123) who states that Piaget's learning theory is calledCognitive Developmentwho views the thinking process as a gradual activity rather than a concrete intellectual function.

Learning consists of three stages, namely: assimilation, accommodation and equilibration. Piaget also stated that the learning process must be adjusted to the stage of cognitive development that students go through. The learning process experienced by a child is different from one stage to another, which in general the higher a person's cognitive level, the more organized and abstract their way of thinking. Therefore, teachers should understand the stages of cognitive development of their students and provide content, methods, and learning media that are appropriate to their stages.

The learning steps in designing learning according to Piaget include:

- 1) Determine learning objectives
- 2) Selecting learning materials
- 3) Determine topics that can be studied by students
- 4) Determine and design learning activities according to the topic
- 5) Develop learning methods
- 6) Conduct assessments of student processes and outcomes

c. Robert M. Gagne

Like other figures in learning psychology, Gagne argued that learning is influenced by growth and environment, but the greatest influence is the individual's environment. The individual's environment includes the home environment, geographic, school, and various social environments. These various environments will determine what a person will learn and will then determine what he will become. For Gagne, learning cannot be defined easily because learning is complex. In the statement, it is stated that learning outcomes will result in changes in a person in the form of changes in ability, changes in attitude, changes in interest or values in a person. These changes are permanent even

though they are only temporary (Shahbana & Satria, 2020).

According to Gagne, there are three elements of learning, namely the individual who learns, stimulus situation, and respondents who carry out actions as a result of stimulation. Furthermore, Gagne also put forward the systematics of eight types of learning, namely:

- Sign learning type(Signal learning)
 Learning in this way can be said to be the
 same as what Pavlov proposed. All
 answers/responses are according to
 signs/signals.
- 2) Stimulus-reaction type of learning(Stimulus-response learning) This type is almost similar to type one, but in this type, the response also arises because of encouragement that comes from within and there is reinforcement so that someone wants to do something repeatedly.
- 3) Sequential learning type(Chaining Learning)
 At this stage a series of stimulus-response relationships occur, meaning that a response will in turn become a new stimulus and will then give rise to a new response.
- 4) Verbal association learning type(Verbal association learning)
 This type is related to the use of language, where the learning outcome is giving a verbal reaction to a stimulus/stimulant.
- 5) Differentiating learning types(Discrimination learning)
 The result of this type of learning is the ability to differentiate between objects found in the physical environment.
- 6) Concept learning type(Concept Learning)
 Learning in this type is primarily intended
 to gain an understanding or
 comprehension of something
 fundamental.
- 7) Type of learning rules(RuleLearning)
 This type of learning produces a rule that consists of a combination of several concepts.
- 8) Problem-solving learning typeproblem solving
 This type of learning produces a principle that can be used to solve a problem.

d. David Ausubel

The expository method is the same as the lecture method in terms of the activity being centered on the teacher as the provider of

Volume I, Number 2, September 2024 (56-63)

information (lesson material). However, in the expository method, the teacher's dominance is greatly reduced, because he does not talk continuously. He speaks at the beginning of the lesson, explains the material and examples of questions, and only at the times when necessary. Students do not only listen and take notes. But also make practice questions and ask questions if they do not understand. When compared to the dominance of the teacher in teaching and learning activities, the lecture method is more centered on the teacher than the expository method. In the expository method, students learn more actively than in the lecture method. Students do the practice questions themselves, maybe also ask each other and work on them together with their friends, or are told to make them on the board (Tauhid, 2020).

Several research results (in the United States) state that the expository method is the most effective and efficient way of teaching. Likewise, some teaching-learning theorists believe that a good expository method is the most effective and efficient way of teaching in instilling meaningful learning.

Ausubel differentiates learning into:

- Learn by accepting(reception learning), And
- 2) Learning through discovery (discovery learning)

If the material presented to students is complete to the final form in the form of a formula or number pattern, then the student's learning method is said to be receptive learning. For example, the area of a triangle is given completely to the formula. In learning by discovery, the final form in the form of a formula, pattern, or rule must be discovered by the students themselves. The discovery process can be done alone or with guidance.

Learning is also divided into:

- 1) Learn by memorizing (rote learning), And
- 2) Learn with understanding (meaningful learning)

Learning by receiving and learning through discovery can both be learning by rote or learning by understanding. If a child learns the complete Pythagorean theorem up to its formula by receiving, then the formula is always associated with the relationship between the size of the right side and the hypotenuse of a right triangle, then learning by receiving becomes learning by understanding. Also, if a student obtains the Pythagorean theorem through discovery and then the formula is always associated with the

relationship between the size of the right side and the hypotenuse of a right triangle, then learning by discovery becomes learning by understanding. If two students learn; one learns by receiving and the other learns by discovery, but then they only memorize the final form as a rule for dividing with fractions, then their learning ends up being just learning by rote (Tauhid, 2020).

3. Implementation of Cognitive Learning Theory in Learning and Teaching

There are a number of ways to use cognitive learning models in the classroom. First we will look at teaching strategies in general, especially those involving lesson plans, and then second we will focus on helping students remember new information. Learning strategies are very important in achieving teaching success, in this case there are several factors that underlie teaching strategies, namely; focusing attention, many factors affect student attention. At the beginning of the lesson, teachers can make eye contact or do something that surprises students in order to attract students' attention. Identifying what is important, difficult, and impossible, learning can be enhanced if teachers help students feel how important new information is.

One strategy for doing this is to make the learning objectives as clear as possible, helping students recall previously learned information, helping students understand and integrate information. Perhaps the single best method for helping students understanding the lesson and combining existing information with new information is to make each lesson as meaningful as possible. The next strategy is a strategy to help students remember new information. Lindsy and Norman provide three general rules for improving memory, First, memorizing requires effort.second; The material that must be memorized or remembered should be related to other things. Third; Material can be divided into groups or small parts and then put back together in a meaningful pattern (Shahbana & Satria, 2020).

IV. CONCLUSION AND SUGGESTIONS

A. Conclusion

Behaviorist learning theory views learning as a process of behavioral change as a result of the interaction between stimulus and response with an emphasis on the results of the learning process. Learning according to cognitive learning theory is always based on cognition, namely the act of recognizing or thinking about the situation in which the behavior occurs with an emphasis on

learning outcomes. These theories have different influences and implications in their application in learning.

B. Suggestion

It is expected that educators and education personnel, especially teachers and learning designers, will understand and apply learning theories in teaching and learning activities adjusted to the environmental conditions of students or learners.

REFERENCE LISTAN

- Aisya, S. (2023). Penerapan Model Example Non Example pada Materi Pecahan untuk Meningkatkan Hasil Belajar Siswa Kelas V MIN 3 Banda Aceh. Universitas Islam Negeri Ar-Raniry.
- Assyakurrohim, D., Putra, A. M., Suryana, E., & Abdurrahmansyah, A. (2023). Implikasi Teori Belajar Kognitivistik Jerome S Bruner dalam Pembelajaran PAI. *JIIP-Jurnal Ilmiah Ilmu Pendidikan*, 6(9), 7299–7306.
- Bustamam, M. (2024). Tinjauan Metode Skinner Dalam Pembentukan Perilaku Anak Usia Dini Di TK Raudhatul Ula Aceh Timur. *Jurnal Seumubeuet*, *3*(1), 11–20.
- Hendriani, A., Rohayati, E., & Herlambang, Y. T. (2020). *Pendidikan dan Keterampilan Berpikir Abad ke-21*. Ksatria Siliwangi.
- Hermansyah, H. (2020). Analisis teori behavioristik (Edward Thordinke) dan

- implementasinya dalam pembelajaran SD/MI. *Modeling: Jurnal Program Studi PGMI*, 7(1), 15–25.
- Idris, S. (2020). PRINSIP PENILAIAN OBJECTIVE DAN ACCOUNTABLE DALAM PEMBELAJARAN MAHASISWA MANAJEMEN PENDIDIKAN ISLAM (Konsep dan Peta Penerapan Dalam Desain Instruksional). AnNahdhah: Jurnal Pendidikan, Komunikasi Dan Keagamaan, 3(1), 119–128.
- Margaretha, L. (2020). Teori-teori belajar untuk kecerdasan bahasa anak usia dini. *Early Childhood Research and Practice*, 1(01), 8–15.
- Nurhayani, N., & Salistina, D. (2022). *Teori belajar dan Pembelajaran*.
- Rahayu, G., Marsidin, S., Karneli, Y., & Nofrizal, N. (2023). APLIKASI PEMIKIRAN IVAN PVLOV DALAM LAYANAN KONSELING INDIVIDUAL. *Jurnal Al-Taujih: Bingkai Bimbingan Dan Konseling Islami*, 9(1), 66–70.
- Rahmah, N. W., & Aly, H. N. (2023). Penerapan Teori Behaviorisme dalam Pembelajaran. *Journal of Education and Instruction (JOEAI)*, 6(1), 89–100.
- Shahbana, E. B., & Satria, R. (2020). Implementasi Teori Belajar Behavioristik Dalam Pembelajaran. *Jurnal Serunai Administrasi Pendidikan*, 9(1), 24–33.
- Tauhid, R. (2020). Dasar-Dasar Teori Pembelajaran. *JURNAL PENDAS (Pendidikan Sekolah Dasar)*, 2(2), 32–38.