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By Dr. Maroua Rogti

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BEHAVIORISM AS EXTERNAL STIMULI IMPROVING STUDENT EXTRINSIC MOTIVATION THROUGH BEHAVIORAL RESPONSES IN ALGERIAN COLLEGE EDUCATION

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Keywords: *behavioral responses, EFL learners, extinction, higher education, motivation.*

I. INTRODUCTION

A permanent change in the individual's behavior can happen due to experience, environment, and surroundings; this is literally how learning occurs. Learning is generally a change which happens to the behavior of an individual as a result of experiencing or acquiring knowledge. In the late 19th century, theorists around the world came with conventional theories which tempted to signify a broader prospect of the flow of the learning process in classroom. In fact, Greek philosophers made assumptions about the human behavior and mental processes. As Aristotle believed that individuals have rational souls and Plato claimed that the human brain is the seat of mental processes.

However, the Greek philosophy Rene Descartes claimed that the human soul and body are separate entities, the body is a physical entity with scientifically

measurable behavior and the mind is a spiritual entity which cannot be measured. Locke and Hobbes reacted as the body and mind are the same and all individual experiences are physical processes which occur inside the brain. These Ancient Greek philosophers were the early founders of thought who managed to uncover the nature of learning and how knowledge is acquired by an individual. They tempted to theorize the fact that any attempt of maintaining the learning process cannot be afforded without considering the element of soul.

At the beginning of the 19th century, psychology as the study of human behavior appeared as a science with Wilhelm Wundt who founded the first laboratory of psychology in 1879. He assumed that understanding the human mind is associated with the study of conscious thought. As the human consciousness is related to the human's thoughts, feelings, and emotions when reacting to a particular stimulus, the parts of consciousness are related to each other and can interact with each other in a physical environment. A gap has been bridged between the ancient thought and modern theories of learning. This claim has been adopted to develop the school of Structuralism which studies the structure of the conscious mind through introspection method. Structuralism claimed that mental processes must be observed, in terms of observed facts. As an early school of thought, Structuralism emphasized the diversity of change that an individual go through to the objective sensations and subjective feelings.

This school of psychology has been criticized by Functionalism school which studies the function of the mind and how the mental elements can change according to the environment and life situation, and how can an individual adapt with the learning environment. Later, Behaviorism is another school which was founded by Watson, Pavlov, and Skinner who argued that human behavior is affected by a particular stimulus and experiences. This theory of learning had a great influence on education which contributes to helping learners to respond to a particular stimulus so that their behavior changes and learning occurs. According to behaviorists, learning occurs when the learner receives a particular stimulus which can lead them to change their behavior. This can go through adapting to a stimulus, then responding to it, and then adopting a

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change of behavior for achieving coaching practice in learning and improve academic achievement as well.

This study aims at providing a comprehensive investigation of the relationship between behaviorism theory and students' extrinsic motivation. The main research question addressed is about the extent to which is behaviorism an adequate predictor of learner extrinsic motivation and achievement. The problem of the research can be explored through the fact that EFL learners can generally be self-guided and independent through making independent choices, setting goals and objectives, as well choosing their own right learning strategies to accomplish tasks. Nowadays, learners do not need and external factor or external stimuli to monitor their own progress. According to behaviorist theory of learning, changes in behavior are caused by external stimuli as the teacher's role is to help learners construct knowledge and reflect on and use a variety of learning strategies.

For the sake of efficiency in handling the matter at hand, the researcher needs to set a reasonable guess after identifying the problem of the study in order to elicit information and data which may resolve the problem of the research. As, behaviors can be increased by teachers who tempt to apply a variety of behaviorist principles to achieve efficiency in learning, extrinsic motivation which is a type of motivation aiming at developing behaviors only to get rewards. It is the opposite of intrinsic motivation which encourages learner autonomy and allows students to make responsible and independent choices; although extrinsic motivation doesn't encourage self-directed learning, it contributes a lot to changing behavior by being repeated as a result of rewards.

II. REVIEW OF LITERATURE

a) *Behaviorism between Philosophy and Theory*

It has been argued that education is the major key element in constructing the individual's ability to adapt to their surroundings. Basically, education has been influenced by significant theoretical facets which have gone along with the learning process which is the ideal basis of education. Ultimately, theories of learning have been developed since the ancient Greek thoughts and education about the acquisition of knowledge to the modern theories which psychology as a science of observable behavior developed through rigorous experimentation. Psychology is a science which aims at controlling the behavior of the organisms of individual; it is referred to as the science of behavior and experience (Kumari, Sundari & Rao, 2006).

Educational psychology is the applied branch of psychology which studies human behavior in educational settings. The development of learning strategies, teaching and learning situations, are developed by psychological principles and laws which

are applied in the area of education and which are responsible for studying the individual's learning, through behavioral and cognitive aspects. According to Peel 'educational psychology helps the teacher to understand the development of his pupils, the range and limits of their capacities, the process by which they learn and their social relationships' (Manichander, 2015).

Educational psychology is the study of how individuals learn and used concepts and research tools to promote teaching, learning, and development of the learner (Berliner, 2006) As (Lefrancois, 1994) views it as the study of human behavior in an educational setting. It associates psychological concepts such as behavior, mind, memory, thought, human growth and development, learned behaviors, individual differences, intelligence, and principles of learning. In the area of educational psychology, there are some theories which explain the development and growth of individuals, how learning occurs, and how memory is maintained. These theories are derived from research which is the cornerstone of educational psychology. Educational psychology deals with human behavior and development in educational settings. This can be signified through allowing learners to learn independently by being self-directed learners. For that, teachers usually need to be aware of how learners develop and receive learning through changing behavior through educational psychology. Banks & Thompson (1995).

Learning is the major issue in the educational process which begins from the child's birth and continues throughout his life time. This process of learning occurs through direct or indirect experiences; it is not directly observable and can be seen in the actions and reactions of the individual as it depends on practice and experience. Learning is viewed as "an enduring change in behavior, or in the capacity to behave in a given fashion, which results from practice or other forms of experience" (Barry & King, 1998 p.19) Most theories of learning are based on research, which have different perspectives on learning. There is no best or bad theory that someone follows and psychologists have found out a suitable way of using it and differentiate between the aspects of the individual's personality; as they are not aware enough about developing these theories and their role in maintaining human behavior and mental processes.

Learning is a continuous process which has continuity and is carried in various steps. This continuity can help educators find ways to direct learning into productive straits without strangling creativity. Theories of learning can help learners achieve their desired goals and can be categorized as behavioral (classic and operant conditioning), cognitive (cognitive and social learning), and cognitive and eclectic (amalgamation of behavioral and cognitive theories). These learning

theories are typically opposed and reacting to each other. The behaviorists and the cognitivists are applied according to their explanation and view of the human behavior through varied perspectives.

It has been emphasized that Psychology is a science of behavior and it is not concerned with the science of the mind. It emphasizes that the mind does not contribute to acquire knowledge in a particular environment from which a stimuli of behavior comes. Leahey (2000) the organisms of human behavior are studied in particular environments, and the relation between behavior and environment then will be created. Behavior is mostly used for actions which can be observed from external surroundings. Behaviorist learning approach mostly focuses on how behaviors are acquired; and the Behaviorist approach claims that learning can develop by means of establishing a relation between a stimulus and behavior, and that any behavior can be changed through reinforcement. (Bacanli)

Behaviorism as a theory of learning is majorly concerned with observable and measurable aspects of behavior. Changes in human behavior are emphasized by behaviorist learning theories behavior that and they typically result from the association of stimulus and response made by the learner. The individual's behavior is directed by stimuli when the individual chooses one response as a result of an experience and psychological forces at the moment of learning. This response is rewarded and signifies behavior sometimes cannot be learned, and can be replaced by new behaviors. This response of learned behaviors must be rewarded so that learning can take place (Parkay & Hass, 2000).

Behaviorism is a theory of learning which emphasizes human behavior as a result of the interaction between stimulus and response. As it can be defined by (Reber, 1985) as 'an approach to psychology which argues that the only appropriate subject matter for scientific psychological investigation is observable, measurable behavior' (p.86) Behaviorism is majorly related with observable and measurable aspects of

human behavior. As Parkay & Hass (2000) claims that changes in behavior are emphasized by behaviorist learning theories which occurs after the association of a stimulus and response made by the learner. This can occur by selecting a response because behavior is directed by particular stimuli and is often called response in the science of behavior. It is something an organism performs at particular time and space. It is viewed by (Lazzeri, 2014) as 'behavior is said in at least four ways: as the occurrence of an organism's action or reaction; as a class or pattern; as group behavior; and as a change or movement of an object' (p.78)

The behaviorists believed that the behaviors which are learned are measurable and are much used in health settings. The behavior must first be observed then measured and it can be modified during the treatment of a particular illness. They yet claimed that behavior must be changed as a result of a reason. This reason can be signified through a stimulus, and a response is the behavior that occurs as a reaction to this stimulus. According to John Watson, a behaviorist who believed that human behavior occurs as a result of stimuli which gathered certain responses. His basic claim was that findings about the individual's development are associated with observation of plainly seen behavior instead of contemplation about subconscious motives or cognitive processes (Shaffer, 2000).

Watson's perspective about learning emphasized the studies of Ivan Pavlov who is known for his classical conditioning theory of learning. This theory indicates that learning occurs when a neutral stimulus is associated with a stimulus which naturally causes behavior to occur. On the other hand, Skinner is another behaviorist who believed that behavior occurs through rewards and punishment. He argued that human behavior is predictable and that behavior is repeated. As Watson who is also a major originator of the behaviorist theory of learning. He believed that behavior resulted from particular stimuli to produce particular responses.

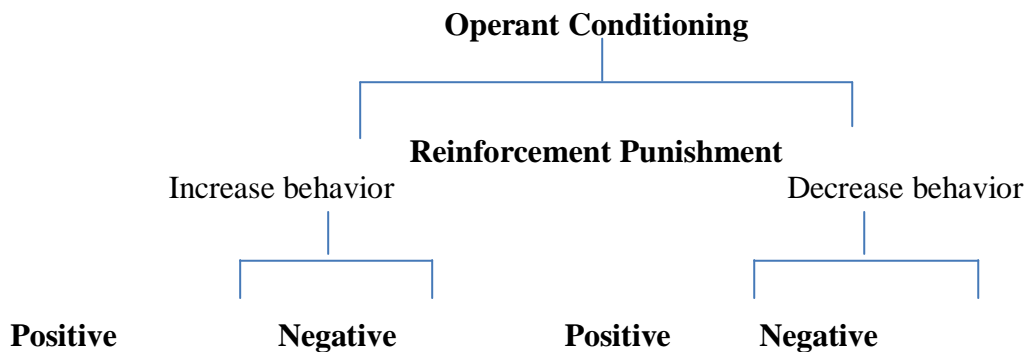


Figure 1: The Process of Operant Conditioning (as cited in Skinner, 1938, p.266)

Watson's basic argument was that conclusions about the development of individuals should be based on observation of behavior rather than estimation about cognitive processes or consciousness. (Shaffer, 2000) the theory of Operant Conditioning is about the individual's change in behavior as a result of consequences. It argues that behavior may change in frequency, strength, and structure and relies on reinforcement and punishment to change the individual's behavior.

b) Behaviorism in the English Language Classroom

In educational settings, behaviorism has adequately embraced a system of rewards and punishments in language classrooms by rewarding desired and wanted behaviors and punishing inappropriate and unwanted behaviors. As behaviorists argue that behaviors can be measurable and observable as it must have a drive and desire which leads to the behavior change which is the stimulus and also needs a response which is the behavior which happens as a reaction to the stimulus; generally, the model of behaviorism can be as follows.



As methods for managing a language classroom, behaviorist philosophy can be used to change behavior in addition to certain strategies and methods. As each learner's stimulus and response are related to the change of their behavior and their learning achievement depends on associations made by each of the learners. Behaviorist principles have long been applied in language teaching to foster behavior which is aspired and discourage everything which is not. Among the tools used within the behaviorist learning theory for

classroom management use are consequences, reinforcement, extinction, and behavior change.

In effect, there are certain classroom behaviors which can be employed in the language classroom to enhance education and increase attention for learning. Pavlov's theory of classical conditioning generally occurs when a conditioned stimulus which is a neutral stimulus, is linked with an unconditioned stimulus. It can be a sound of a tuning fork, while the US is biological such as the taste of food. Also an unconditioned response paired with Unconditioned stimulus is an unlearned response like salivation, after pairing is repeated learning may occur. This can be seen in the experiment of Pavlov who rang a bell and then gave food to the dog, and then the dog started to salivate by responding to the bell.

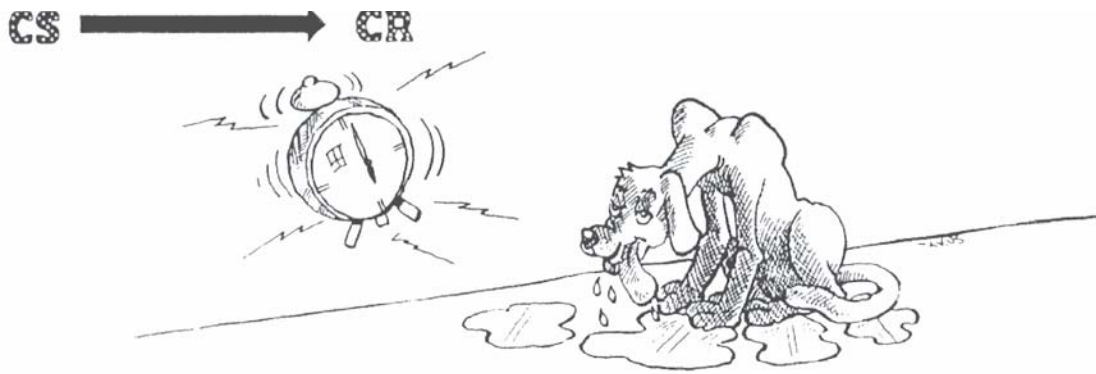
The bell is referred to as the conditioned stimulus because the change of behavior occurs as a result of its association with food; whereas food is called the unconditioned stimulus because its effects did not rely on circumstances or previous experience. This theory involves the association of a stimulus and the production of a response under certain conditions with a neutral stimulus, with the neutral stimulus obtaining a response when handing out alone. Pavlov's theory of Classical conditioning is distinctive from Operant conditioning, a theory developed by Skinner in which a behavior is strengthened or weakened as a result of behavioral consequences such as reward or punishment. Operant conditioning is about how an organism works with this operation, behavior and consequences. As revealed in the following model of Pavlov of Operant Conditioning theory which illustrates the steps and development of behavior.



STEP ONE: The unconditioned stimulus (food) is presented to the animal and produces a reflex or unconditioned response (drooling).



STEP TWO: The unconditioned stimulus (food) is presented at the same time as the conditioned stimulus (noise). The response continues to be produced to the food, but the sound is beginning to be associated. After several pairings -



The conditioned stimulus presented alone causes the animal to drool. Because this is a learned response, the response is now called a conditioned response.

Figure 2: Pavlov's Model of Classical Conditioning (cited in Bleus, 1989, p.129)

In operant conditioning, behavior operates on the environment and is maintained by conditioning of behavior. Behavior is changed depending on conditions while classical conditioning is maintained by its consequences. As (Skinner, 1972) argues that:

Behaviors conditioned through a classical conditioning procedure are not maintained by consequences. They both, however, form the core of behavior analysis and have grown into professional practices. His model was based on the premise that satisfying responses are conditioned, while unsatisfying ones are not. Operant conditioning is the rewarding of part of a desired behavior or a random act that approaches it. Skinner remarked that the things we call pleasant have an energizing or strengthening effect on our behavior (p. 74)

On the other hand, Edward Thorndike also conducted his learning experiment with hungry cats put in a puzzle box made several responses. Then the cats discovered that pressing a lever would help them get out them from the box and get access to the food outside. Based on his experiment, Thorndike introduced his principles of learning among which the Law of Effect which is typically based on the emotional reaction and

feeling of the learner. According to this principle, a satisfying feeling contributes to strengthening learning and learning can be weakened by a feeling of anger and frustration.

As (Thorndike, 1911) claims: "several responses made to the same situation, those which are closely accompanied or closely followed by satisfaction to the animal will, other things being equal, be more firmly connected with the situation, so that, when it recurs, (the behaviors) will be more likely to recur" (as cited in Mcleod, 2018, p. 01) as he yet asserts that:

Of several responses made to the same situation those which are accompanied or closely followed by satisfaction to the animal will, other things being equal, be more firmly connected with the situation, so that, when it recurs, they will be more likely to recur; those which are accompanied or closely followed by discomfort to the animal will, other things being equal, have their connections to the situation weakened, so that, when it recurs, they will be less likely to occur, the greater the satisfaction or discomfort, the greater the strengthening or weakening of the bond. (Dabell, 2018, p 01).

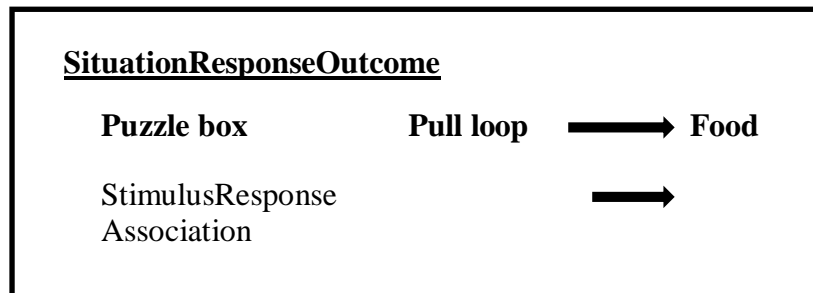


Figure 3: Thorndike's Law of Effect "Association of Stimuli and Responses" (Adapted from Estes, 1967, p, 28)

According to this law, the relation of stimulus and responses is not bounded for learning to occur. Reinforcement is required for learning to occur. This is that when a behavior is followed by a reward, it tempts to repeat itself, while when it is followed by a punishment the prospect of its repetition decreases.

Thorndike tried to explicate learning by associating stimuli and responses. He claims that the most distinctive issue of science in humans and animals is learning by errors and trials. This is vital when the learner faces obstacles which must be solved and investigated.

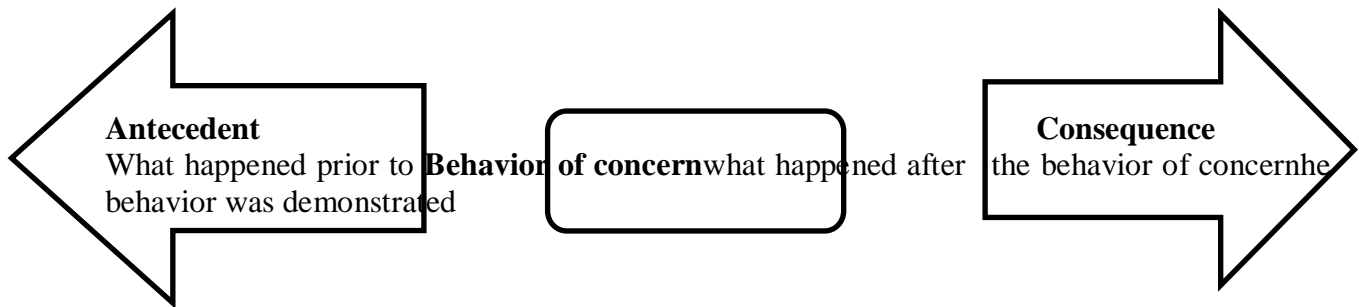


Figure 4: Antecedent Behavior Consequences Model (Adapted from Lee, cited in Alberto & Troutman, 1999, p 157)

Generally, behavior is affected by its consequences when a stimulus leads to a particular response which is reinforced, or leads to reinforcement. The stimulus for Thorndike's cats was the box and response was the action of pressing the lever, as reinforcement was food. Operant conditioning is applied to this form of behavior change after extending the concept with rats. In the box suggested by Skinner, rats learned to press a lever when a stimulus was present like a sound or light, the lever press resulted in the delivery of food which causes reinforcement. Applying this to behavior, the stimulus, response, and reinforcement association parallels the Antecedent Behavior Consequences (ABC) model that is used to change and behavior.

In the language classroom, behavior can be shaped or maintained in an operant manner for enhancing learning. Stimulus is given by the teacher to the learner who will receive it and make response through his reactions to the stimulus as processes happening between stimulus and response cannot be observed or measured. (Sarah, 2006) However, (Fauziati, 2016) claims that stimulus is given by the teacher response is accepted by the students which should be observed and measured through measurement theory which regulates the change in behavior.

Operant conditioning can be employed to promote learning and change behaviors in class. It can be used as a behavioral management which may increase attention for learning. Behavioral contracts can be used in school as well as at home. This can typically occur through behavioral partnership between the teacher and the learner to achieve the desired goal for learning. For instance, a learner can receive negative punishment for not doing a home work or for having their phone on. In the classroom, the learner can have efficient learning results by viewing the direct consequences of their use.

Teachers can familiarize learners with a task and ask them to use their own strategies of learning. Generally, the positive feedback learners receive from the teacher or having a higher grade is a positive reinforcement. If they get a lower grade or negative feedback from the teacher, they will receive a negative reinforcement. Giving extra marks or praising learners is due to their good use of learning strategies for example or having good language skills which will construct their behavior. The consequence immediately comes after the behavior of the learner. For instance, a learner who makes more efforts and spend much time in revision will have more chance for receiving a positive reinforcement due to the fact of being more engaged in shaping their behavior.

Shaping behaviors will be stronger when learners receive reinforcement and will decrease when it is weaker. If a learner shows a change in behavior, they are supposed to have learned something. Learning through behaviorism theory is typically based on stimulus response integration and it is efficient through the impetus of input and output relationship. Alissa (2003) the behavioral consequence should come right after a behavior which can be positive or negative, immediate or long-term, extrinsic or intrinsic, emotional or unconscious.

After the behavior is shaped, a positive or negative reinforcement may be received. Positive reinforcement is presenting a stimulus which increases the probability of a response to occur recurrently in the language classroom. A positive reinforcement may be offered directing learners through a home work or praising their projects. However, negative reinforcement increases the probability of a response which tempts to prevent a counter condition.

This type of behavioral consequence increases the probability of a shaping behavior, but it denotes removing a consequence which is unpleasant for learners. For example, rewarding a home work pass with

perfect participation or attendance, also submitting a task lately will result in a lower grade. On the other hand, punishment implies the presentation of a strong stimulus which decreases the recurrence of a significant response and promptly banishes undesirable behavior. For instance, giving the grade of zero to those who submit a home work after the deadline or excluding those who have weak attendance in the classroom.

c) *Behavioral Dogmatism of Motivation*

Motivation is deeply related to the learner's extrinsic behavior. This is the perspective of behaviorism as a way of thinking about the learning process. Behaviorism focuses on what can be directly seen or heard about the learner's behavior. Motivation refers to reducing the distinction between the energy of learners, and the outward behaviors that express this energy. Performing a learned behavior results in reinforcement when this behavior increases in recurrence. Within the frame of motivation, response is equivalent to motivation and reinforcement acts as a motivator. In the classroom, learners can learn through operant conditioning through discussions and answering questions, they can be rewarded for each right answer when the teacher praises their work. This will reinforce their behavior and their motivation increases as a result of the praise of the teacher who is the motivator.

Intrinsic motivation derives from inside of individuals and not as an effect of external desire so that the learner accomplishes a task because of its importance because they are intrinsically motivated. (Edwards, & Johansen, 2015) Learned behavior can be lowly reinforced which results in extinction. This extinction is about a decrease in recurrence of performance and subsequently leads to loss of motivation. Behaviorists argue that lack of reinforcement is equivalent to deprivation of motivation. (DeGrandpre, 2000) For instance, (Seifert & Sutton, 2009) argue that "the distinction between "inner" motives and

expressions of motives in outward behavior do not disappear just because a teacher or a psychological theory chooses to treat a motive and the behavioral expression of a motive as equivalent. Students usually do know what they want or desire, and their wants or desires may not always correspond to what a teacher chooses to reinforce or ignore" (p. 32) learners may receive a reward by the teacher for their behavior through reinforcing it; this can be a motivating issue for them as a result of external reinforcement.

Motivation can be intrinsic which is viewed by (Legault, 2016) as "engagement in behavior that is inherently satisfying or enjoyable. IM is non-instrumental in nature, that is, intrinsically motivated action is not contingent upon any outcome separable from the behavior itself" (p.01) and it can be supported by operant conditioning theory so that reinforcement of a particular action can be the task itself. For example, if learners write a paragraph, they can be reinforced by the writing itself by being intrinsically motivated. However, respondent conditioning can promote both intrinsic and extrinsic motivation of learner in one instant. (Seifert & Sutton, 2009) For, if a learner is extrinsically motivated, their reinforcement derived from an experience or consequences not only from a part of the behavior itself which can be observed within the individual.

Extrinsic motivation is about performing behavior and this behavior is 'fundamentally contingent upon the attainment of an outcome that is separable from the action itself. In other words, EM is instrumental in nature. It is performed in order to attain some other outcome' (Legault, 2016, p.01) Extrinsic motivator's role can promote action for a behavior which is not intrinsically attractive such as doing a home work or memorizing as it can contribute to developing self-learning and autonomous behavior. (Kohn, 1999)

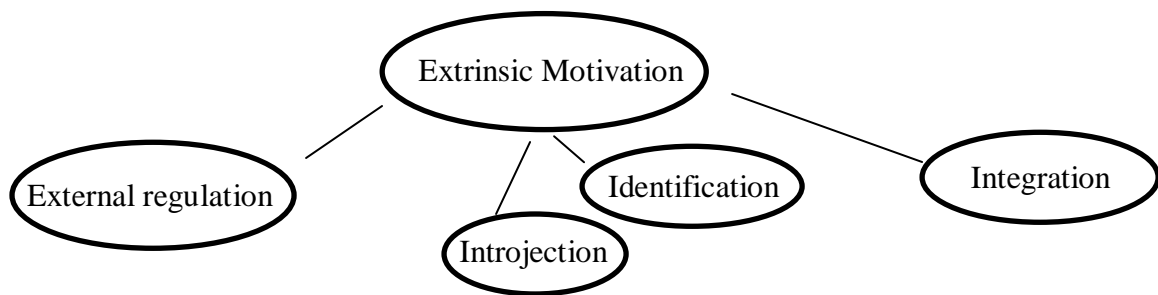


Figure 5: Human Motivation Taxonomy (Adapted from Deci & Ryan, 1985; as cited in Ryan & Deci, 2000, p. 61)

This motivation is about a large sort of motivations which originate from an internal perceived situation causal situation. (Deci and Ryan 1985) for instance, even if an activity is intrinsically motivated, it

may then be internally adapted. The stigma of motivating learners through managing classroom activities for the sake of achieving self-regulated learning can be illustrated through (Deci & Ryan, 1985) Model of

human motivation according to whom motivating learners doesn't need an external stimuli.

Fostering internalization of values and behavioral regulations is typically addressed which refers to a process of taking in a regulation through integration in which learners can transform the regulation into their own self. Internalization is about how motivation of learners for behavior can derive from unwillingness to active personal adherence. Extrinsic rewards can undercut intrinsic motivation often enough that they can to be applied effectively and rigorously. (Deci, Koestner, & Ryan, 2001) extrinsic rewards are offered by managers to their employees, such as salary and promotions, and benefits are called extrinsic because they are external to the work itself. (London, 2009)

III. MATERIALS AND METHODS

a) Participants

The design of the study was carried out with the role of behaviorism in developing learners' extrinsic motivation. It uses a triangulation data collection method and adapts a survey for achieving the aim and proving the hypothesis of the study. The study used purposive sampling which consists of three teachers of English at Higher College of Laghouat. The researcher tempts to conduct an empirical study to put this problem under investigation. Though incorporating Behaviorism theory of learning, the participants in this study are supposed to recall and prove the extent to which behaviorism is efficient in learning and how can learning strategies and behaviorist principles help in changing behavior and make it considerable though answering a set of questions about the classroom methodology and explain how learners can deal with the task.

For the sake of validating the research hypothesis and answer the research question, the researcher induced two research variables which are

behavioral consequences and extrinsic motivation. Tempting to classify these variables through an ordinal scale measurement to measure their causal relationship and consider the impact of one variable over the other.

IV. RESULTS AND DISCUSSION

a) Instruments and Procedures

The researcher has opted for a survey tool through which she can be conductive to the rigidity of the research design and get adequate interpretation of the findings. A survey research is viewed by (Kerlinger, 1973 & Parten, 1950) as "a social scientific research and focuses on people, the vital facts of people, and their beliefs, opinions, attitudes, motivations and behavior' as 'the social scientific nature of the survey research is revealed by the nature of its variables which can be classified as sociological facts, opinions and attitudes" (as cited in Mathiyazhagan & Nandan, 2010, p.34) The methodology adopts a flow plan to outline the design and investigation of the survey starting with objectives and ending with research solution. To enrich the analysis process, the researcher longs to identify aspects, and then conduct an inquiry of certain aspects for interpreting the findings through triangulation.

The motivation and academic achievement motivation were measured using close ended questions and a likert scale to which EFL teachers responded to. Aspects of Behaviorism based on Skinner theory of Operant conditioning have been implemented to complete the survey. The researcher first asked teachers about learning through principles of behaviorism in class and what they use when they reward or punish their students after the consequences which first reinforce the desired behavior before being arranged to follow the desired behavior during the accomplishment of the task. Teachers are represented as T1, T2, and T3.

Table 1: Application of Behaviorist principles

Aspects and principles of Behaviorism	
Drills and Rote Learning	T2
Extra points	T1, T2
Verbal Reinforcement	T2
Establishing Rules	T2

T2 claims that she ignores bad behavior and doesn't pay attention to it; she only pays attention to the good behavior so that it receives a reward via reinforcement like giving extra marks for attendance or verbal public praise. Finally, most of them claim that each student can receive a particular reinforcer according to the nature of the task and particularly on

their behavior. Sometimes a meaningful reinforcer depends on the nature of the environment which can influence the students' behavior so it should be favorable and allow him behave well.

Table 2: Techniques used to reinforce behavior in the classroom

Increasing a well performed behavior rewarded by verbal reinforcement	T1, T2
Paying attention to an inappropriate behavior for the sake of increasing it	T1, T2, T3
Being selective about the attention teachers give to students.	T1, T2, T3
Using the social reinforcer of attention	/
Ignoring bad behavior and only paying attention to the good behavior when possible.	T2
Determining what is a meaningful reinforcer for each student.	T1, T2, T3

On the other hand, the participants answered the question of their attitudes towards the use of reinforcement and its effects on learning. The three teachers have been given characteristics of the use of this type of behavioral consequences in operant conditioning theory adapted from Belsky (2008),

participant teachers are asked to rate and answer the following question by claiming their level of agreement about the following statements. The table below reveals the answer of the participants in a numerical way.

Table 3: Effects of Reinforcement on student's learning and Academic Motivation

Items	Agree	Disagree
. Descriptive encouragements are powerful motivators	3 (100%)	0 (0%)
. When a student is learning a new skill, giving reinforcement often keeps them motivated and committed.	3 (100%)	0 (0%)
. Students seem self-sufficient and still need the teacher's approval	2 (67%)	1 (33%)
. Encouraging a student's preferences can enhance motivation by introducing a choice and therefore fostering a sense of autonomy.	1 (33%)	2 (67%)
With teenagers giving more privileges or increasing responsibilities can also be a very effective form of reward.	2 (67%)	1 (33%)
. Monitoring progress is crucial so adjustments can be made based on the student's preference for the type of rewards.	0 (0%)	3 (100%)

Data from question three reveal that teachers' views varied and this is typically due to their personality differences and teaching direction. All participant teachers are familiar with offering descriptive encouragements to their students as reinforcement which they usually use in their language class so that their students can be motivated. Participants also share the claim that reinforcement contributes to academically motivating students when they learn a new language skill. T1 and T3 believe that students seem self-sufficient when receiving positive reinforcement and keep waiting for another approval and praise from the part of their teacher while T2 doesn't agree anymore.

Besides, two respondents disagree with the statement of inducing a student's preferences can enhance motivation by fostering autonomy, while T1 agrees with this claim. Generally, for achieving learner autonomy, the student requires full responsibly and independent choices without the need of the teacher's praise, encouragement, or approval. Two respondents share their agreement about increasing responsibilities can also be a very effective form of reward since this will build self-confidence in students, increase their

motivation, as well as promoting their self-guided learning.

Finally, all respondents disagree with the fact that so adjustments can be made based on the student's preference for the type of rewards, as the student is affected by the type and degree of rewards, they also can be meta-cognitively active without the need of rewards. For instance, self-reflection, self-assessment, and monitoring are strategies used by students to increase their motivation and independent learning without the need of the teacher's approval or reward to perform well in class.

The coming question is addressed to be answered which is about the effects of punishment on student's learning adapted from (McLeod, 2018) Punishment is yet another type of behavioral consequences which can be used in the language learning class to decrease the students' behavior through punishing them using certain techniques and principles by teachers. Using positive punishment, the teacher can give unpleasant response to the student's behavior. For instance, punishing a student because they chew gum in class, which is forbidden in class, the

teacher indeed tries to disciplining them publically in front of their peers, while taking away a positive reinforcement in response to a behavior refers to negative punishment.

Table 4: Effects of punishment on student’s learning (adapted from McLeod, 2018, p.75)

	Agree	Disagree
. Do not deprive the student of key opportunities to build their social and academic skills.	3 (100%)	0 (0%)
. Punishment can create fears that generalize to other situations.	3 (100%)	0 (0%)
. It does not always guide students toward the desired behavior; it tells them what not to do, but may not tell them what they should do instead.	2 (67%)	1 (33%)
. Punished behavior is not necessarily forgotten, it may return when the punishment is no longer used.	2 (67%)	1 (33%)
. Allow students to provide input on any behavior plans being developed by accepting any punishments they earn.	0 (0%)	3 (100%)
. Students would be raised with both reinforcement and punishment receiving rewards for good behavior and being corrected for bad behavior.	3 (100%)	0 (0%)
. Students are given a good reason to behave more appropriately in the future by having been given an opportunity to do so.	3 (100%)	0 (0%)

Data from table (4) show that the answers of the respondents partially vary in content. All respondents do agree that punishment as a type of behavioral consequences which decreases the students’ behavior can encourage them to build their social and academic skills. Students can learn from any punishment they receive by raising fears which generalize to other situations, also participants agreed that reinforcement and punishment evolve with students as they receive rewards for good behavior and being corrected for bad behavior. On the other hand, all respondents disagreed that punishment helps students to provide input on any behavior plans being developed by accepting any punishments they earn.

Ultimately, language teachers need to think about what they can do to allow their students achieve higher level of motivation achievement. The researcher familiarizes the participants with techniques of increasing students’ motivation and assists them to become more self-directed learners through using principles of behaviorism. The table below shows the level of agreement and disagreement among the three participant teachers about the extent to which changing behavior affects achievement motivation of students and also improving their learning.

Respondents agreed that students become aware of their strengths and limitations once their

behavior is increased or decreased. They also argue that students can be independent learners by making independent choices and chose their own learning strategies. As they claim that students can be assisted to be able to set and achieve reasonable goals and objectives for their learning themselves.

The Classroom behaviorism theory is becoming highly incorporated in the language classroom as teachers tempt to apply behaviorist principles to change behaviors and encourage the use of mechanisms for the sake of increasing attention for learning and dealing with classroom behaviors. According to Skinner’s Operant Conditioning, praise, positive or negative feedback, or reward can contribute to changing and correcting behavior in the classroom based on environmental effects on students’ behavior. Skinner’s theory involves reinforcement which increases behavior while punishment tempts to decrease it; as Mergel (2011) claims that “punishment that bring painful or undesirable consequences will be suppressed. But they could reappear if reinforcement contingencies change. For example, penalizing late students by withdrawing privileges will likely stop their lateness” (as cited in Omomia, 2014, p. 02)

Table 5: Determinants of High level of Motivation due to change in behavior

	Agree	Disagree
Encouraging students to try new activities just for the experience	2 (67%)	1 (33%)
Challenging students with tasks that are neither too easy, nor too difficult	0 (0%)	3 (67%)
Informing students of their strengths as well as their limitations	3 (100%)	0 (0%)
Permitting students to make choices in the classroom	3 (100%)	0 (0%)
Assisting students to set reasonable goals for themselves	3 (100%)	0 (0%)

Skinner's theory of reinforcement is based on reward and punishment; this can impact the flow of teaching and learning. It has been applied recently in most educational establishments. The students' educational achievements and motivation can be improved due to positive reinforcement as a means of feedback to them. Efficient feedback should be provided by teachers to improve their output, as learners should be rewarded in order to improve their academic motivation. Yet, the teaching and learning processes in the language class can be positively enhanced if the learners are motivated enough through rewards.

By applying reinforcement schedules with students whose behavior requires the teacher's intervention as external stimuli to reinforce positive behavior through a system of positive incentives. This could be done by rewarding positive behavior before punishing negative behavior; this positive reinforcement should be immediately applied to be associated with the already rewarded positive behavior. Positive reinforcement tempts to make behavior be repeated not like negative reinforcement which contributes to increasing and motivating behavior to get rid of unwanted outcomes.

Giffith (2006) claims that behaviorism deals with the consequences of observable and measurable behavioral responses which affects learning process and classroom management. As (Kohn, 2004) views that "rewards and extrinsic motivation yields compliance, which is not, as Skinner suggested, a natural behavior devoid of willful choice" (p.23) He means that rewards helps students achieve high motivation and the more students receive rewards, the more they become adjusted with them and want them.

These behavioral consequences majorly contribute to increasing efficiency in the teaching which can contribute to the professional growth and reflective practice of the teacher. Learners can be guided and instructed by teachers by being able to cope with different circumstances they may face in their language classroom. Also, learners who are well guided and advised perfectly come to know how to deal with directions and strategies done by their teachers; they can be academically motivated through higher desirable growth needs.

V. CONCLUSION AND RECOMMENDATIONS

This investigation has tempted to set up coaches with putting light on the role and contribution of behaviorism in dealing with behavioral responses of students in the class for the sake of managing their learning and highly motivating them. The process of classroom methodology and evaluation, role of the teacher, student performance, and learning process are all based on the implementation and use of the appropriate theories geared towards language teaching

and learning. Behaviorism has become a vital issue of great importance in addressing the future needs of learners and helps them cope with the difficulties and learning complexities they face adequately.

It is necessary to know about the complexities the learners may face in learning regarding their stages of development and growth. Teachers of language may be aware of classroom environment, learners' needs and skills, classroom obstacles, classroom management techniques, effective methods of teaching, assessment, curriculum, and mental health of learners. All these items can contribute to maintaining positive attitudes, high level of motivation, and facilitates professional growth, change attitudes, and change observable and measurable behaviors of students. This entirely will result in making learning convenient and results in high academic motivation achievement.

The application of behaviorism theory in the language class can be rewarding for both learners and teachers. When learners learn something, they will change their behavior as a result of an experience which can be based on their feelings. The change in their behavior can satisfy desirable wants and needs. As Parkay & Hass (2000) claim that learners tempt to avoid behaviors associated with their unpleasantness and develop their behaviors which are habitually repeated. Once the behavior is changed it is typically learned as it sometimes can be unlearned if it is unrewarded or put out when it is undesired and unwanted. Among the classroom study strategies in addition to punishment and reinforcement are consequences, contracts, and extinction. If the teacher doesn't react through either reward or punishment, the behavior is eliminated.

Considering the research question of the study of the role of behaviorism in the achievement of self-directed learning and in processing of learning in language classes, the findings advocated that the students who receive reinforcement and punishment when accomplishing a learning task can highly achieve fundamental and high level of extrinsic motivation. Once they receive a reward, their behavior is repeated through wishing more rewards from the part of the teacher. They have been directed to changing their behavior through receiving external stimuli, which is the teacher's reward or punishment. This will effectively contribute to changing their behavior and helped them pursue a high level of motivation as illustrated in the results of the teacher's survey.

The study resulted in the fact that behavioral consequences, namely reinforcement and punishment contribute a lot in developing students' language and skills, self-reflection and meta-cognitive abilities. Thus, by being extrinsically motivated, learners continue to developing good behaviors once they are usually rewarded by their teacher, at the same time it prevents them from making independent choices and make them rely more on external stimuli and environment.

Finally, the findings of the study stimulated to be highly functional and dynamic compared to other research findings in the language teaching and learning setting which assured and validated the high benefit of behaviorism and behavioral consequences in encouraging behavior change and extrinsic motivation of learners in Algerian higher education. The study has overturned the protocol for further research in learning spots including the process of knowledge acquisition, modeling and behavior, observational learning, Self-efficacy Theory, Moral development theory, sociocultural theory, experiential learning theory, and self-regulation in the ELT classroom, as the study offered myriad practical implications for educationalists and EFL learners to achieve independent learning through intrinsic motivation under the Constructivist theory in a language class. Over and above, researches and investigations should hence reflect how these matters are examined and practiced in the learning progress and educational curriculum.

Behaviorism theory is not only a means of increasing a desired behavior in the learning arena. Behavior change mechanisms are used by language teachers to assure efficient learning of students in the class and even outside; although, Behaviorism has been criticized for being applied only to change behaviors within an environmental and external input namely, the teacher presence; and with absence of an internal psychological and mental processes. Behaviorism was developed as a reaction to the introspective method which emphasizes on internal input, self-monitoring and self-reflection and meta-cognition.

Extreme behaviorism can be bounded and plays more a vital role in emphasizing the psychological development of the scientific persecution of knowledge and acclaim about human behavior. Though, the relation between stimulus and response is not just a direct causal relationship, the stimulus can play the role of determining and identifying a response; as, human behavior requires the inclusion of the external stimuli, physical side, and the inner state of the mind.

Conflicts of interest

The researcher declares that there is no conflict of interest.

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