Problems With the Behaviorist-Centric Approach in the Current Vietnamese Education System and Related Alternatives

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Abstract

The Vietnamese education system is heavily organized around the theory of behaviorism in its teaching paradigm, with little focus on how students accumulate and retain knowledge. Behaviorism is a teacher-centered method which focuses on reinforcement of expected student behavior to reach positive outcomes, punishment to limit undesired actions, and repetition to ingrain information. This approach can be characterized by drill practice, questions and answers with increasing difficulty, and reward systems. Despite being effective for certain learning outcomes and endorsing motivation to an extent, behaviorism poses many problems which will be examined in this paper through a literature review and natural observations of the Vietnamese educational landscape. This paper explores the main issues of a behaviorist-centric classroom, including the lack of understanding of how knowledge is acquired, unacknowledgement of the active human agency, individual learner differences, mechanisms of motivation, and whether certain punishment works in favor of both teachers and students. These traits are very prominent in the classroom of the Viet, where students take a more passive role in learning with no catering to the uniqueness of individuals. The author further examines applicable learning theory alternatives, specifically cognitivism and constructivism, and how they can be emphasized in the Vietnamese system. The implications of these findings can be utilized first in the Vietnamese school system where the psychological aspects of learning have been neglected, as well as in other educational systems in similar countries suffering from the same problem. Moreover, the author draws attention to existing cases of serious corporal punishment that are still justified by many groups. To recapitulate, the Vietnamese classroom's behaviorist-centric approach poses problems that can be solved with modern learning theories.

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Sitting in a high school biology classroom in a rather prestigious school in Vietnam, the author of this paper listened to a teacher's eloquent lecture on reflexes and the theory of behaviorism. However, to the author's surprise, the teacher derailed from the lesson and went on to justify the use of corporal punishment as a way to reinforce desired behaviors from students based on these theories. While it is certain that punishment can train students to learn, this situation poses a question of whether the sole use of punishment—disregarding students' well-being and cognitive processes—is the most effective tool. This example is an extreme case; however, it poses questions about the current Vietnamese education system.

In a broader picture, the Vietnamese education system is notoriously recognized for its passive learning approach with a focus on rote learning but without chances for students to raise their own critical voice (Tran, 2023). Such a mindset has been prevalent in not just Vietnamese society, but many other Asian countries throughout history due to Confucian Heritage Culture, with few changes in recent years. This literature review aims to address this problem with an in-depth understanding of the basic educational approach of behaviorism, problems it entails, and how schools can change their teaching methods in the best interests of students. Hence, this paper argues that the overemphasis on behaviorist practices in the

Vietnamese education system can be detrimental to the efficiency of knowledge acquisition and the mentality of students, proposing the combination of behaviorist, cognitivist, and constructivist approaches as an alternative.

Overview

Behaviorist Approach

Behaviorism was a dominant psychological perspective in the 20th century. Developed initially by John Watson and Ian Pavlov, the theoretical orientation strived away from the prevalent non-scientific analysis of learning processes at the time and instead focused on observable behaviors (Budrich, 2011, p. 17). According to Watson's writings in 1930, psychology should not be so concerned with unempirical mental states, such as animals' desires and beliefs, or mental processes where information is formed inside the brain. Rather, it should be on empirical and discernable processes.

There are three underlying assumptions for behaviorism theory (Bullock, 1982). First is objectivism, which means that observables, such as someone salivating, and external factors around a person are the keys to understanding behavior. Second is environmentalism, the assumption that the environment has a significant impact on behaviors. Third is the use of reinforcement, where consequences from our responses will shape future behaviors. For example, a teacher may use gifts to encourage a student to do an exercise correctly after figuring it out once.

In a behaviorist classroom, the teacher takes the focus (Anindyarini et al., 2017). They ought to possess knowledge of the subject they teach, as well as pedagogical skills to accomplish the goal of learning (Yilmaz, 2011). Students in behaviorist classrooms, therefore, are passive participants. Popular practices in a behaviorist classroom include drill patterns, questions in increasing difficulty, guided practice, regular review, reinforcements and punishments.

The Vietnamese Classroom

When describing the Vietnamese educational approach, we use the term "behaviorist-centric" to imply that the average Vietnamese classroom cannot be reduced to mere behaviorism in the modern day. Rather, behaviorism is the fundamental theory that dominates the basis of classroom activities.

To fully understand why this is the case, we will now review some basic characteristics of most Vietnamese public classrooms. However, there is relatively little literature on Vietnamese pedagogy and even less that considers psychological aspects, instead of only cultural and historical. Therefore, more research on Vietnamese teacher training and effects on student learning outcomes is needed. Statistics of test scores are unreliable, as they are weak reflectors of students' skills and logical abilities. Moreover, it is impossible to generalize across all classrooms because individual teacher's attitudes and methods vary. Therefore, the author will discuss inherent features in the educational curriculum of public schools below, while acknowledging the dearth of literature on this topic.

According to the Statistical Yearbook of the General Statistics Office of Vietnam in 2022, there were 18 million students in all educational stages, and over half of these were primary school students. As in most Asian countries, one of Vietnamese classes' core teaching methods is rote learning, a memorization technique relying on repetition (Crosthwaite, 2018). This translates to theoretical tests based on learned knowledge in textbooks. This reflects the characteristics and exercises mentioned in the above section about a typical behaviorist classroom, which might not always be a problem, but the rote mindset can exacerbate it.

Other Learning Theories

As an alternative to behaviorism, other theories have been developed. Cognitivism, developed out of limitations of behaviorism, defines learning as an active process where knowledge is internally encoded and students are active participants. The main difference between cognitivism and behaviorism is that there is an emphasis on mental processes of learning (Yilmaz, 2011). Another theory is constructivism, which views reality as determined by the student. Therefore, learning is based on inner motivations and there is a shift from objectivity to subjectivity (Cooper, 1993). We will discuss each of these alternative theories, as well as their applicability to Vietnamese classrooms below.

Literature Review and Observations

What a Behaviorist-centric Classroom Accomplishes

Before discussing the problems with the behaviorist-centric approach, we need to recognize contributions of this learning theory to education. It has provided the basis for building school curricula and has been implemented in educational institutions for decades.

The first is the use of lesson objectives, which set expectations about how to behave for students as well as propose a clear purpose of the learning experience. These goals, which are called behavioral objectives, are "specified, quantifiable, terminal behaviors" (Saettler, 1990, p. 288). To develop behavioral objectives, a learning task must be broken down into specific quantifiable assignments. Tests, therefore, are produced based on each lesson objective to measure the success of the learning process.

Second is "the behavioristic belief that the teacher has the duty to create a favorable environment for learners" (Ng'andu et al., 2013). According to this belief, to achieve effective knowledge acquisition the teacher should control the environment so that it is conducive to learning. Skinner (1968) claimed that "teaching is the arrangement of contingencies of reinforcement under which students learn," which emphasizes the significance of maintaining favorable learning conditions—a notable contribution to education. There are many ways a teacher can organize the classroom in order to reinforce behaviors most efficiently. A token economy, where students who display desired behaviors are offered rewards to endorse motivation, is a prominent example of the use of reinforcement in school settings to encourage student learning. Vietnamese classrooms, especially in primary schools where token economy using snacks and points is attractive, utilize this concept by giving good grades to boost students' GPA or monetary rewards.

Third is the invention of a number of teaching and learning methods. Assessment is a behavioral activity that indicates if there have been changes to behavior after a learning activity. For instance, teachers can use weekly quizzes to test if the students have understood how to do a math problem. Without this important tool, educators cannot tell if learning is occurring or not (Ng'andu et al., 2013). Another behavioral technique is "drill and practice," where the teacher presents a stimulus (e.g., an English word) and learners are expected to respond to it through constant practice (e.g., how to spell an English word) (Driscoll, 2000, p. 16). This method's use of repetition strengthens the link between the stimulus (the learning materials) and the response of students. It is incredibly useful in language learning where memorization is of great importance. Hence, this tool has been a central practice in the Vietnamese classroom across a large number of subjects.

Problems With the Behaviorist-centric Classroom

While the positive contributions of behaviorist learning theory are undeniable in the grand scheme of education, there are many criticisms that need to be addressed.

The first point is on behaviorism's foundation itself. Despite being able to explain how behaviors change, behaviorist learning theory fails to reason for conceptual changes due to its neglect of mental processes (Yilmaz, 2011). As a theory itself, it has been heavily criticized for its lack of understanding of the entire learning process. Behaviorism cannot fully capture the complexity of the learning process and does not acknowledge the subjective, creative, and intuitive dimensions of it as well as the concept of prior learning (Ng'andu et al., 2013). Memory is a crucial part of learning; however, behaviorism pays little attention to the exploration of how memories and habits are stored or recalled (Ertmer & Newby, 1993).

Secondly, the students take a passive role in learning. Passive learning is more teacher-focused in that students receive information and then internalize it, while active learning is concerned with involving students in the process more (Paul, 2017). As behaviorism is more teacher-centered, there is a lack of active learning from students. A direct consequence is rote learning, when students learn facts and figures by repetition and recitation, but critically without in-depth understanding of the material, which results in struggles to apply theoretical knowledge to practical scenarios (Riaz). This is a common criticism of the Vietnamese education system, where theory knowledge is heavily emphasized.

Thirdly, a closely linked argument to the two points above is the disregard for active human agency. Agency is defined as the capability of individuals to choose and act on their decisions (Martin, 2004). Key properties of active human agency are intentionality, forethought, and self-reactiveness (Bandura, 2006, p. 164-165), which are not considered in behaviorism. Intentionality is "an awareness and will to act in a particular way based on an idea or mental state"; forethought is "the ability to anticipate the outcomes of actions"; and self-reactiveness is "an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior, guided and constrained by their goals and the contextual features in the environment" (Code, 2020, p. 2). A common feature of these characteristics is the role of mental processes and cognitive intelligence in the process of learning which has direct effects on the response of students. To be more precise, students' goals and self-regulation affects how well they learn. This is important to note because students' own goals and agency are often disregarded in behaviorist-centric classrooms.

Moreover, external rewards can cause unexpected problems when motivation theories are taken into account. Behaviorist reinforcement is linked to extrinsic motivation, which is defined as the "performance of behavior that is fundamentally contingent upon the attainment of an outcome that is separable from the action itself" (Legault, 2016, p. 1). An example in the classroom is studying hard to receive good grades. Conversely, intrinsic motivation refers to "engagement in behavior that is inherently satisfying or enjoyable," meaning that behavior and outcome are non-separable (Legault, 2016, p. 1). This can simply be studying hard to make oneself smart or because of the joy of learning itself. While the idea of scores and gifts as rewards may seem attractive, those "external rewards" can undermine intrinsic motivation, leading to students losing interest in learning without rewards (Edwards, 1993, p. 64). Not only that, intrinsic motivation can draw humans' natural urge to strive forward, grow, and find novelty (Legault, 2016). According to Deci and Ryan (2008), it shares a special connection to creativity and vitality. Therefore, beyond extrinsic motivators, learning pedagogy should induce the feeling of enjoyment in learning and place growth as the main drive, not paper grades. The Vietnamese education system is criticized for its overemphasis of grades and not enough focus on helping students develop as independent people with goals.

Furthermore, behaviorism fails to consider individual differences in the learning process. The problem with the theory is that the explanation for responses dismisses higher brain functions and mental processes, as mentioned in the first point. It is also proven that humans nor animals respond to stimuli from the environment similarly (Matlin, 1994). In other words, each individual animal or person can have different responses to similar stimuli. Due to this, behaviorism cannot account for the variety in learning styles and the effects of individual students' personalities on the learning process (Rosander, 2013).

Applicable Learning Theory Alternatives

Spawning from the failure of behaviorism to account for mental processes, in the early 20th century, cognitivism challenged some basic assumptions of behaviorism. Cognitivists, while also making empirical observations of behaviors, use such information to explore mental structures and processes. This school of thought is defined by two main ideas. First, learning is an active process that involves "the acquisition or reorganization of the cognitive structures through which humans process and store information" (Yilmaz, 2011, p. 205). Second, the learner actively participates in this process. The main difference between behaviorism and cognitivism is cognitivism's emphasis on what students know and how they acquire information. Thus, in a cognitivist classroom, deep understanding and the ability to connect new materials to existing mental structures and schemas are enforced (Ertmer and Newby, 1993). In this way, cognitivist theory clearly addresses the first and second problems laid out in the previous section (neglect of mental processes and passive learning) on a conceptual level, for mental processes are understood and then learning is active. It also touches on the fourth point as the internal aspects of learners, such as motivations and goals, are taken into account to improve learning. To implement cognitivism in the classroom, teachers can utilize memory tools, such as chunking and mnemonics, and arrange for practice opportunities. Tutors can also help students self-regulate by assisting them in selecting appropriate studying strategies.

Constructivism, on the other hand, was born due to the dissatisfaction with objectivist epistemology and positivism (Yilmaz, 2008). Positivism can be understood as "a philosophical system of knowledge that only accepts observable or measurable experiences of the world as analytical data, the findings from which are considered positive or absolute truths about reality," a key characteristic of behaviorism (Hiller, 2016, p. 102). According to constructivism, there are three core ideas: knowledge exists in our mind, truth is relative, and knowledge is constructed by individuals based on experience rather than discovery (Yilmaz, 2008). In other words, the acquisition of knowledge is not passive reception from one's surroundings but a construction of the experiential world (Maclellan and Soden, 2004). Learners, therefore, are intellectually generative individuals who can pose questions and solve problems. This theory proposes that thinking capabilities should be developed instead because the core of intellectual authority is not teachers nor materials but academic discourse between tutors and students (Yilmaz, 2008). Taking a step further than cognitivism, constructivism takes into account the learner's active agency, as knowledge acquisition has been recognized as an active and constructive process. Individual learner differences are also considered since constructivism strives for personal understanding and construction of knowledge. To incorporate constructivism, teachers must first recognize students' backgrounds, beliefs, and prior knowledge, then provide group discussion opportunities to examine their assumptions, and finally develop meta-awareness of their own process of learning (Richardson, 2003).

Along with the contributions of behaviorism, cognitivism and constructivism can be combined in order to build an effective educational experience. Since psychology is still a

relatively infantile field in Vietnam, this process is difficult at the moment. It is highly encouraged that current psychologists and researchers of the field collaborate with educationists and teachers in school settings. More research is needed before any widespread change can be made. Furthermore, modern psychological-based knowledge should be considered in the educational discipline to update school curricula. By integrating new psychological theories into teaching and learning, not only can students learn better, but the school environment can also become more suitable.

Discussion

Alternative Perspectives

As evidenced by the story in the introduction, there are many objections to the phasing out of behaviorist-centric methods in the current educational system, especially in Vietnam. Aplenty restrictions are laden within social context that stand as obstacles to implementing change.

The two psychological theories of learning outlined above (cognitivism and constructivism) have faced critiques. Many researchers have criticized cognitivism because it refers to unempirical mental processes, which can be difficult to measure in school settings (Alahmad, 2020). Another criticism is of its failure to explain how social and cultural elements influence students' cognitive development (Shaffer and Kipp, 1988). While it is true that Skinner, a leading pioneer in cognitivism and developmental psychology, neglected such factors in his research, the main takeaway is still that cognition plays a large role in children's development.

For constructivism, some critics postulate that instructional learning is more effective than the sort of "discovery learning," where students are believed to be left to their own devices to discover information, also known as the premise of constructivism (Matthews, 1993). However, leading constructivist Rosalind Driver has pointed out that adopting this school of thought does not equate the lack of teachers' guidance in the process of discovering new knowledge. Also, constructivism and discovery learning are based on different pedagogical beliefs (Osborne, 2014).

It is important to note that no learning theory is without limitations. The best course of action is to take the values that each pedagogical method can bring in order to create the strongest curriculum. Behaviorist methods can still work best in many cases, but a purely behaviorist pedagogy is not the most effective. From behaviorism, curricula can take the use of reinforcement (such as in token economies) and clear goal setting. From cognitivism, we can take cognitive tools and the emphasis on deep comprehension learning. From constructivism, teachers can take group discussion methods and encouragement of self-study skills. For this new prospective curriculum to be developed, more research must be done to address the aforementioned limitations and effectively combine these approaches in the classroom.

Broader Implications

This paper has pointed out the inherent issues of behaviorist-centric approaches in the Vietnamese education system and advocated for pedagogical changes with the implementation of cognitivist and constructivist methods to maximize learning.

A grave issue in the Vietnamese education system is its overemphasis on theoretical knowledge, which is intertwined with the excessive use of rote learning. Vietnamese graduates possess strong academic skills yet lack the adequate work skills; in fact, around 70-80% of them do not have the necessary work skills set for high-paying jobs (World Bank, 2014). Academic skills refer to test-taking, theoretical reasoning, reading and listening, and literacy skills; work skills comprise communication, leadership, interpersonal, problem-solving, and

self-management skills. This calls for a curriculum change in light of findings of the current pedagogy's limitations in order to move away from rote techniques and toward developing critical thinking and interpersonal skills (World Bank and MPI, 2016). Educationists can learn a lot from the cognitivist and constructivist teaching and learning methods, and this would broadly benefit the Vietnamese workforce.

Further, many behavioral pedagogical methods such as corporal punishment are a grave issue in many countries, including Vietnam. Behaviorism may involve negative reinforcement, which requires the presence of a disliked activity by the student (i.e., physical punishment); however, this method can have adverse effects (Darby, 2003, p. 5). According to a quick U-report survey by UNICEF, 37% of students in Vietnam reported having witnessed corporal punishment in action, and 59% witnessed verbal abuse in school settings in the last 12 months (Miller, 2018). Because in a behaviorist classroom the teacher is considered to know best when to reward and punish, their actions are often justified to be in the interest of students. This mindset pervades Vietnamese culture where corporal punishment is considered necessary to shape good behaviors in children, hence the saying, "Spare the rod, spoil the child" (Beazley et al., 2006). Ample research has proved otherwise. A study has found a correlation between being physically punished and lower scores on IQ tests (Aucoin, Brick, and Bodin, 2006). Many institutions have recognized this unhealthy trend and banned it from the law; for instance, the UN Convention on the Rights of the Child has clearly stated that corporal punishment is a human rights violation (Committee on the Rights of the Child, 2006). Nevertheless, it still persists due to people's traditional beliefs. Outside of reducing cognitive ability, researchers have proven that corporal punishment leads to mental health problems, erodes family relationships, and increases aggressive and antisocial behavior when the children grow up (Gershoff, 2010). Understanding this, such a practice should be ceased, and more awareness about its effects should be spread.

Conclusion

The Vietnamese education system is highly behaviorist-centric in its instructional approaches. While behaviorism lays many important foundations in education, it has a multitude of conceptual and practical limitations that prevent it from helping students actualize their full learning potential. More modern learning theories, notably cognitivism and constructivism, can address these issues and provide more efficient pedagogies. These theories recognize the importance of mental processes and acknowledge that learning is an active process, which requires active understanding and construction of knowledge. Acknowledging this, students can better regulate their learning and be able to apply theoretical knowledge into the real world, as well as engage in activities that require critical thinking designed by their teachers. Using the findings from this paper, teachers as well as curriculum designers can better grasp the core issues of the education system in order to implement stronger instructional methods and provide the best learning environment for students of any schooling stage.

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