Psychological Basis of Education: Developmental Theories and Their Influence on The Learning Process

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Abstract

Educational psychology is one of the key foundations for understanding effective learning and teaching processes. This study aims to examine various educational psychology theories and their contributions to supporting the learning process and student development. The method used is library research, using various literature sources, such as books, scientific journal articles, and other academic sources relevant to educational psychology. The data were analyzed descriptively through the review and synthesis of various theories related to learning. The results of the study indicate that educational psychology theories, such as cognitive theory, humanistic theory, behaviorism, Bloom's and Krathwohl's learning theories, Kolb's learning theory, and psychosocial development theory, play a significant role in explaining students' learning processes. These theories provide insights into cognitive, social, and emotional development, learning motivation, behavior formation, and learning strategies appropriate to students' characteristics. Furthermore, this study demonstrates that the application of educational psychology principles can assist teachers in designing more effective, adaptive, and learner-centered instruction. The contribution of this research lies in providing a comprehensive understanding of the relevance of various educational psychology theories as a foundation for the development of learning strategies.

Keywords: educational psychology; student development; learning processes; education.

Abstrak

Psikologi pendidikan merupakan salah satu dasar fundamental dalam memahami proses pembelajaran dan pengajaran yang efektif. Penelitian ini bertujuan untuk mengkaji berbagai teori dalam psikologi pendidikan serta kontribusinya dalam mendukung proses pembelajaran dan perkembangan peserta didik. Metode yang digunakan adalah studi kepustakaan (library research) dengan menelaah berbagai sumber akademik yang relevan, seperti buku, artikel jurnal ilmiah, serta publikasi ilmiah lainnya yang berkaitan dengan psikologi pendidikan. Data dianalisis secara deskriptif melalui proses kajian, perbandingan, dan sintesis terhadap berbagai teori pembelajaran dan perkembangan. Hasil penelitian menunjukkan bahwa teori-teori psikologi pendidikan, seperti teori kognitif, teori humanistik, behaviorisme, taksonomi Bloom dan Krathwohl, teori pembelajaran pengalaman Kolb, serta teori perkembangan psikososial, memiliki peran penting dalam menjelaskan proses belajar peserta didik. Teori-teori tersebut memberikan pemahaman yang komprehensif mengenai perkembangan kognitif, sosial, dan emosional peserta didik, motivasi belajar, pembentukan perilaku, serta strategi pembelajaran yang sesuai dengan karakteristik individu. Selain itu, penelitian ini menunjukkan bahwa penerapan prinsip-prinsip psikologi pendidikan dapat membantu pendidik dalam merancang pembelajaran yang lebih efektif, adaptif, inklusif, dan berpusat pada peserta didik. Kontribusi penelitian ini terletak pada pemahaman komprehensif mengenai relevansi berbagai teori psikologi pendidikan sebagai landasan dalam pengembangan strategi pembelajaran yang tepat dan bermakna.

Kata Kunci: *psikologi pendidikan; perkembangan peserta didik; proses pembelajaran; strategi pembelajaran; pembelajaran berpusat pada peserta didik.*

Introduction

Educational psychology is a crucial foundation for understanding how teaching and learning work. Basic guidelines are needed to direct and achieve the goals of the educational process, both formal and informal. Psychology is the science that studies the soul. Before discussing the soul further, it is important to understand the difference between life and spirit. Life refers to the physical forces necessary to maintain physical life and regulate bodily activities, which are driven by the learning process. Psychology is a branch of science that draws its knowledge from empirical facts and is obtained through scientific methods, organized, methodical, and controlled research activities. Psychology is a field that studies how people act, not only physically but also cognitively and emotionally. Human actions or behavior can be overtly observable (overbehavior) or not directly observable.(Lutfi et al., 2023).

Educational psychology is an important aspect of learning, and it examines various theories of motivation and how motivation can influence student learning success. Intelligence is also a focus of study in educational psychology, and educational psychology examines various theories of intelligence and how it can be measured. Social and emotional development is also a focus in educational psychology. This study examines how students build relationships with others, develop social skills, and how emotional development influences learning and academic achievement.(Magpiroh & Mudzafar, 2023)Educational psychology is closely related to learning theories because these theories provide a framework for understanding how students acquire, process, and retain knowledge. Each theory offers a different but complementary perspective on the learning process.(Yuliati & Atikah, 2025).

Research Methods

The research method used in this research is the library research method, namely a method used by studying literature books and other materials both in journals and existing books both on websites (journals/online books) and physical books owned

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by researchers related to the foundations of educational psychology which are then used for discussion in this research.

Results and Discussion

Various Theories of Educational Psychology

Cognitive theory discusses the mental processes involved in learning, such as information processing, memory, and problem solving. This theory was developed by Jean Piaget, Lev Vygotsky, and Jerome Bruner. Piaget stated that children actively construct an understanding of the world and go through four stages of cognitive development. Two processes underlie this development: organization and adaptation. To understand the world, humans organize our experiences; for example, we separate important thoughts from less important ones, we connect one thought to another. The cognitive learning theory perspective is an important approach in educational psychology, which directs attention to how information is processed and acquired in understanding and learning new things.(Tambrin, 2022)In an educational context, understanding these stages helps educators design learning experiences that are tailored to students' abilities and needs. For example, when teaching students in the concrete operational stage, educators can use learning materials that are concrete and relevant to the students' daily lives.(Setiawan, 2024).

Cognitive learning theory examines how cognition, including perception, memory, thinking, and problem-solving, plays a vital role in the learning and teaching process. Cognitive learning theory also encompasses the concept of social cognition, which emphasizes the role of the social environment in shaping understanding and motivation. Cognitive learning theory emphasizes the importance of factors such as the use of effective learning strategies, attention, information processing, and long-term memory in understanding and learning new things. This theory also considers concepts such as learning transfer, which encompasses how learned knowledge and skills can be applied to new situations.

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Humanistic Theory

The humanistic approach emphasizes the development of students' potential by ensuring they feel valued and accepted throughout the learning process. This perspective places great emphasis on the active role of individuals in teaching and learning activities, while emphasizing the importance of personal freedom in learning. Meanwhile, the social constructivist perspective sees the learning process as heavily influenced by the social environment and emphasizes the value of interaction and dialogue between teachers and students in building shared understanding. This theory emphasizes the importance of developing students' personal potential, where learning occurs when students feel accepted and valued. The humanistic approach highlights the role of individuals in the teaching and learning process and pays attention to students' personal needs and freedom in learning. Meanwhile, the social constructivist approach emphasizes the influence of the social environment on learning, emphasizing the importance of social interaction and dialogue between students and educators in building shared understanding. This embodies the development of students by giving appreciation for their potential.(Bilillah, 2023). This theory is difficult to translate into more practical and concrete steps. The following describes humanistic learning theories, namely Benjamin S. Bloom and Krathwohl's learning theory and Kolb's learning theory.

Benjamin S. Bloom and Krathwohl's Learning Theory

Learning, according to Bloom and Krathwohl, is a process of developing abilities that encompasses three domains: cognitive, affective, and psychomotor. Furthermore, Bloom and Krathwohl outlined the basic abilities of these three domains, better known as Bloom's Taxonomy, to be developed in students through the learning process. According to Bloom, the learning process, whether in school or outside of school, results in the formation of three abilities known as Bloom's Taxonomy: cognitive, affective, and psychomotor abilities. Cognitive abilities are abilities related to the mastery of science and technology. Each individual has a perception of the results of observations of an object.

Cognitive ability reflects an individual's mastery of science and technology. Cognitive ability is essentially a learning outcome. Learning outcomes are a combination of innate abilities and environmental influences. Basic factors that influence cognitive ability are prominent. Basic abilities in the cognitive domain include: knowledge, understanding, application of analysis, synthesis, and evaluation. Basic abilities in the affective domain include recognition, response, appreciation, and organization of values and experiences. Basic abilities in the psychomotor domain include reflex movements, basic movements, movement sequences, natural movements, skilled movements, and communicative movements.

Kolb's Learning Theory

Kolb(1984) states that learning can be divided into four stages: concrete experience, creative and reflective experience, conceptualization, and active experimentation. These stages occur continuously and occur outside of the student's awareness. The learning process can take place in several stages. The first stage is concrete experience, where students only experience an event directly without deeply understanding the nature of the event, including how and why it occurred. Next, students enter the creative and reflective observation stage, where they begin to actively observe an event and attempt to understand its meaning. The next stage is conceptualization, where students are able to form abstractions and generalizations based on various examples of events they have previously observed. The final stage is active experimentation, where students can apply the rules, concepts, or general principles they have learned to new situations and conditions.(Hidayah et al., 2017).

Behaviorism Theory

Behaviorism theory, developed by experts such as Ivan Pavlov, John B. Watson, and B.F. Skinner, provides a strong foundation for a behavior-based approach to education. This approach views learning as observable changes in behavior, influenced by interactions between individuals and their environments. The central tenet of behaviorism is the relationship between stimulus and response, where behavior can be shaped, strengthened, or eliminated through reinforcement and

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punishment. In an educational context, this theory is used to teach students specific skills or behaviors through repeated practice and direct feedback.(Jonnes, 2020). In other words, behaviorism does not recognize individual intelligence, talents, interests and feelings in learning. Learning events simply train reflexes in such a way that they become habits that are mastered by the individual(Wibowo, 2020).

The application of Behaviorism theory involves techniques such as positive reinforcement, negative reinforcement, and punishment. Teachers can provide appreciation in the form of praise, stickers, or small gifts to students who demonstrate good behavior or achieve certain achievements. This technique not only increases student motivation but also encourages the maintenance of positive behavior. Negative reinforcement is used to remove obstacles to learning, such as reducing additional assignments for students who have already understood the material. Behaviorists believe that all forms of behavior, both adaptive and maladaptive, are acquired through conditioning.(Jubaeli et al., 2025)However, the application of punishment must be carried out carefully so as not to cause negative impacts, such as reducing students' self-confidence. The use of appropriate reinforcement can help students form productive and disciplined learning habits.(Miller & Jhonson, 2023).

Although effective in shaping behavior, Behaviorism theory is often criticized for focusing too much on external aspects and ignoring internal processes, such as intrinsic motivation and critical thinking. This approach needs to be combined with other theories, such as constructivism, to create more holistic learning. In addition to providing reinforcement, teachers can also encourage students to explore new ideas and build deeper understanding through discussions or collaborative projects. Thus, Behaviorism theory remains relevant in modern education, especially in teaching basic skills or developing good study habits.(Judijanto, 2025).

This learning theory states that behavior is learned from the environment. According to behaviorism, innate (talent) or inherited factors have very little influence on behavior. Behaviorism is key for educators because it impacts how students react and behave in the classroom, and suggests that teachers can directly

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influence how their students behave. Understanding this will help teachers understand how students' home environments and lifestyles can influence their behavior, helping them view it objectively and improve learning outcomes.(Trianto & Ariesta, 2024).

Psychosocial Development Theory

The majority of school-age children have normal psychosocial development with average academic achievement. However, several factors can slow or even affect psychosocial development. One of these is the crucial role of parents in maintaining emotional stability so that children receive full support and sufficient learning experiences. In short, if a student's psychosocial development is slow or even hampered, it will affect their academic achievement. This is because students will experience emotional problems, which will affect their enthusiasm for learning. Cases like this are often found in children from broken homes and unhealthy friendships. To anticipate potential factors inhibiting psychosocial development, the role of parents is crucial in maintaining the circle of friends, maintaining the child's health and mindset, and engaging in frequent casual conversations to foster chemistry and build stronger emotional bonds.(Sugari & Hilalludin, 2025; Widodo & Masnawati, 2024)

Conclusion

Developmental psychology plays a fundamental role in education, particularly in helping educators understand the holistic growth and development of students, including cognitive, social, emotional, and moral aspects. This knowledge serves as an essential foundation for developing learning strategies that align with the characteristics and developmental needs of students at each age stage. The relationship between developmental psychology and education is very close, as each stage of student development requires a specific learning approach. Teachers who have a sufficient understanding of these stages will be able to develop more effective

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learning methods, address students' personal aspects, and create a more meaningful learning environment. Developmental psychology's tangible contribution to learning strategies is evident in various adjustments to teaching materials, motivational techniques, and the management of learning difficulties. Furthermore, this approach also helps develop students' social and emotional skills through collaborative and humanistic learning methods.

The influence of developmental psychology is also evident in curriculum design and the selection of learning methods. An approach that emphasizes process, not just outcomes, encourages teachers to act as facilitators, accompanying students through every stage of learning. This makes the educational process more responsive, flexible, and relevant to the real-world conditions of students. However, the application of developmental psychology in education still faces various challenges, such as limited teacher understanding, limited facilities, and large class sizes. To overcome these obstacles, it is necessary to improve teacher competency through training, the provision of developmentally based teaching materials, and collaboration with professionals such as educational psychologists. Therefore, it can be concluded that developmental psychology is a crucial foundation for developing adaptive, empathetic learning strategies that are oriented toward the holistic development of students. When learning is tailored to the developmental stages of students, education becomes more meaningful and can produce a generation that excels not only academically but also matures socially and emotionally.

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