



Integrating Piaget's theory of cognitive development in Islamic education and entrepreneurship in Indonesia: challenges and opportunities

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ABSTRACT

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Keywords

*Integration,
Islamic Education,
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Challenges and Opportunities,
Cognitive Development Theory*

This article aims to analyze the integration of Jean Piaget's cognitive development theory into Islamic education and entrepreneurship in Indonesia. The research method used is the study of literature by collecting data from various sources such as books, journals, and related articles. Research results show that Piaget's cognitive development theory can be integrated into Islamic education and entrepreneurship in Indonesia. However, there are challenges such as cultural, social, and educational differences that affect its implementation. On the other hand, this integration also opens up opportunities to develop learning that is more appropriate to the level of cognitive development of the student. In conclusion, integrating Piaget's theory into Islamic education and entrepreneurship in Indonesia needs to consider local contexts and use various approaches to optimal results.

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Introduction

Understanding of each person's developmental process affects education and learning. The concept of cognitive development, especially that developed by Jean Piaget (Aqüicultura et al., 2018; Marinda, 2020; Sinaga & Choiriyah, 2023), gives educators a basic understanding of how children learn and think. To enhance educational literacy, this article combines ideas from cognitive development theory and Indonesian educational context. This article, through empirical research and practical experience, finds areas in the Indonesian education system that need to be improved. They also offer recommendations for improving the curriculum, access to education, and the use of educational methods that are appropriate to the student's level of development.

It's important to understand intellectual development in education. Jean Piaget's theory of

evolutionary psychology helps us understand how human minds evolve over time (Pitriani et al., 2023). However, there are many obstacles that hinder the application of these concepts in the Indonesian education system. The purpose of this article is to study the relationship between intellectual development and learning as well as to explain the problems that exist in the education system in Indonesia. Jean Piaget's theory of cognitive development (Anidar, 2017) It really helps us understand how children learn and learn to think. According to Piaget, a child's cognitive development develops through various stages during his or her growth. This theory has been applied significantly in education in many countries, including Indonesia.

Entrepreneurship and Islamic education are two important components in building the character and competence of students in Indonesia (Marinda, 2020; Utama et al., 2022; Wekke, 2017). The purpose of Islamic education is to produce Muslim individuals who have faith, piety, and noble character. Nevertheless, the goal of entrepreneurship education is to teach students entrepreneurial attitudes and skills that they can use in their daily lives.

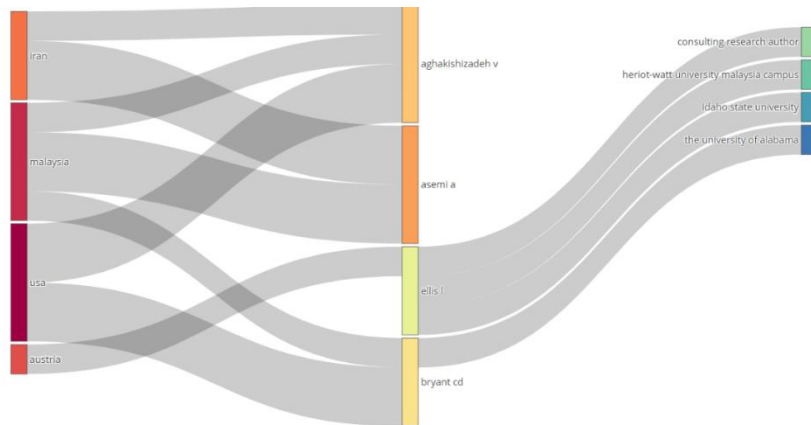


Figure 1. State of Art

The researcher explained in Figure 01 that research on Piaget's theory in Islamic education and entrepreneurship education has not been researched in Indonesia. The countries that have conducted the study are Iran, Malaysia, the USA, and Austria. This data was taken with a bibliometric application from Scopus data. So the position in this study is clear. Incorporating Piaget's theory of cognitive development into Islamic education and entrepreneurship in Indonesia has the potential to achieve more comprehensive educational goals and improve learning effectiveness (Arif Arif & Darul Ilmi, 2023; Suwaldiyana, 2023). However, challenges and prospects must be considered during this integration process.

Method

This study uses a type of literature research (Hadi, 1995; Purnomo, 2022). This study collects data from various sources, including books, journals, and articles, related to Piaget's theory of cognitive development, Islamic education, and entrepreneurship education in Indonesia. Next,

content analysis (Suwaldiyana, 2023) and descriptive analysis (Sudarmanto et al., 2023) bibliometric is used to find obstacles and opportunities in the application of Piaget's theory in Islamic education and entrepreneurship in Indonesia

Result and Discussion

A person's cognition develops in four stages, according to Piaget's theory (Nainggolan & Daeli, 2021a; Nisa, 2012) sensorimotor, pre-operation, concrete operation, and formal operation. It shows how children's thought processes change over time, as well as how they obtain and process data. The concept of cognitive development offers a positive perspective on how to optimize learning. However, it is often difficult to apply this concept to learning practices in Indonesia. Because the Indonesian education system faces several problems, including: first, lack of educational opportunities. Educational opportunities still differ between economic groups and between cities and rural areas. The curriculum also does not meet the needs of students and the needs of the world of work. Second, limited resources. Teachers in the regions are still very minimal (Furkan et al., 2021; Putera & Rhussary, 2018), Therefore, teacher equity is very important. So that students have teachers with good resources to improve their education.

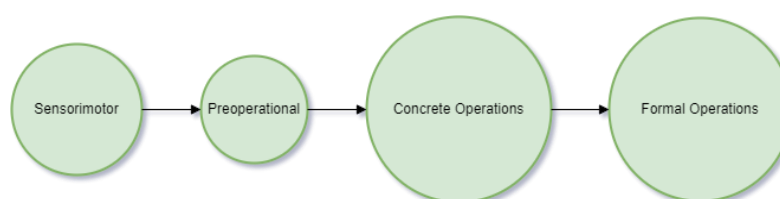


Figure 2. Piaget's Theory of Cognitive Development

Understanding the process of cognitive development is essential to creating a successful learning strategy. In Indonesia, educational institutions must strive to improve access to education, review the curriculum, and increase investment in educational resources to address this problem. As a result, education in Indonesia can become varied, relevant, and meet the needs of students. According to Piaget's theory of cognitive development (Pitriani et al., 2023), Children go through several stages of cognitive development. The sensorimotor stage (0-2 years), pre-operation (2-7 years), concrete operations (7-11 years), and formal operations (11-13 years). Each step has different cognitive abilities and features. Children in the sensorimotor stage use sensations and movements to interact with their environment and learn. In the preoperative stage, they can think symbolically and use language. At the concrete stage, they can think rationally and abstractly. In the formal stage, they can think logically, hypothetically, and abstractly.

The purpose of Islamic education in Indonesia is to shape students to become people who believe and fear Allah SWT, have noble character, are healthy, knowledgeable, capable, creative,

independent, and become democratic and responsible citizens. This goal is in line with the values contained in Pancasila and the 1945 Constitution. In reality, Islamic education in Indonesia includes teaching Arabic, Islamic history, creed, morals, fiqh, and the Qur'an (Adi Saputra, 2021; Rumbia, 2022; Tanjung & Namora, 2022). Learning is carried out through various ways, such as discussions, questions and answers, demonstrations, and religious actions. Meanwhile, the goal of entrepreneurship education in Indonesia, on the other hand, is to provide students with entrepreneurial knowledge, attitudes, and skills that can be applied in daily life. This goal is in line with the government's efforts to increase the number of entrepreneurs and reduce unemployment. Entrepreneurship education in Indonesia can be achieved through hands-on practice, extracurricular activities, and classroom learning. The subject matter covers the basic concepts of entrepreneurship, finding business opportunities, creating a business plan, managing a business, and building a network.

Integrating Piaget's Theory of Cognitive Development in Islamic Education and Entrepreneurship in Indonesia

The integration of Piaget's Cognitive Development Theory in Islamic Education and Entrepreneurship in Indonesia can improve the quality of education and achieve more comprehensive educational goals. The adjustment of learning materials to the stage of students' cognitive development is the result of this integration. For example, Islamic education can focus on daily worship and entrepreneurship can be focused on entrepreneurial practices. In using learning methods that are in accordance with the cognitive development of students (Al Ayyubi et al., 2024). Learning can use role-playing and storytelling approaches during the pre-operational stage. On the other hand, a discussion and problem-solving approach can be used during the formal operational stage. Interesting and interactive learning media must be adapted to the level of students' cognitive development. For example, concrete objects that can be touched, seen, and manipulated by children can be used as learning media during the sensorimotor phase (Hartono et al., 2022). According to Piaget's theory, it is important for children to learn through an active and constructive process in which they interact with their world. In Islamic education and entrepreneurship, it can be implemented with students being able to be actively involved in practice, discussion, and problem-solving.

Jean Piaget's theory of cognitive development influenced entrepreneurship and Islamic education in Indonesia. The internalization of Islamic values and learning outcomes can be improved through this integration. Piaget's Theory (Burhanuddin, 2020) can be used in Islamic education to help children understand and internalize Islamic values such as honesty, cleanliness, and social responsibility. Cognitive skills such as critical thinking, logical thinking, and creativity can be developed through practical activities and projects related to daily life. For example, children

can learn how entrepreneurship can use Piaget's theory to build skills such as creativity, critical thinking, and logical thinking. Thus, it becomes easier for Indonesian entrepreneurs to develop qualities such as patience, innovation, and ambition when facing business challenges. However, there are some difficulties with incorporating Piaget's theory into entrepreneurship and Islamic education in Indonesia. One of the problems is how to create a curriculum that is in accordance with Piaget's theory and Islamic principles. An effective curriculum should integrate Piaget's theory with Islamic principles so that it is easier for children (Farihen, 2013) to understand and internalize Islamic principles. In addition, teachers must also be educated to develop their teaching skills to apply Piaget's theory.

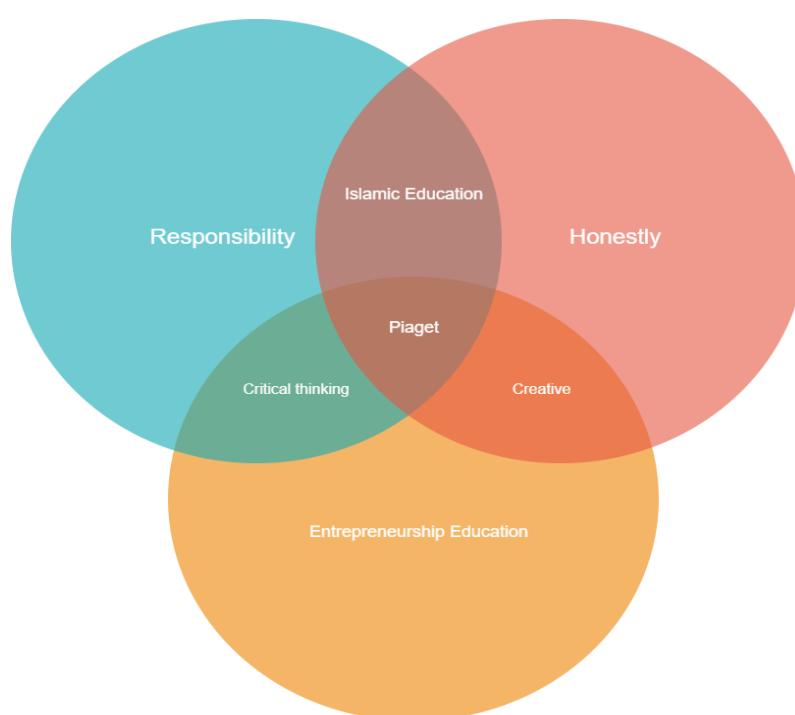


Figure 3. Integration of Piaget's theory with Islamic Education and Entrepreneurship Education

One of the other challenges for entrepreneurs is how to build Islamic business ethics, which is in line with Piaget's theory (Nainggolan & Daeli, 2021), must combine Islamic values with entrepreneurial skills. So that it becomes easier for Indonesian entrepreneurs to build an ethical and sustainable business. Therefore, the integration of Piaget's theory in Islamic education and entrepreneurship in Indonesia requires strong cooperation between educational institutions, companies, and society as a whole. As a result, this integration can help to improve the internalization of Islamic values and lessons learned, as well as help overcome the difficulties faced by Indonesian entrepreneurs and drive significant growth.

When Piaget's theory of cognitive development was incorporated into entrepreneurship (Yulia et al., 2021) and Islamic education in Indonesia, there are many difficulties and interesting

opportunities. Adjusting the stages of Piaget's cognitive development to Islamic values and entrepreneurial principles taught in schools is a big challenge. To create effective synergy, an in-depth understanding of these three components is required. In each stage of Piaget's development, teachers must find appropriate entrepreneurial and Islamic ideas (Hakim et al., 2023). They must also create learning activities that take into account students' cognitive abilities at each stage.

Inviting teachers to understand and apply Piaget's theory in Islamic education and entrepreneurship is also a big problem. This includes the creation of a comprehensive training program that incorporates Piaget's theory (Hidayati et al., 2023) and how to combine it with entrepreneurship and Islamic education. In addition to being encouraged to innovate in their teaching methods, teachers should be given the opportunity to develop practical skills in applying these theories in the local Indonesian context. In addition, the development of appropriate teaching materials is a big problem. Producing learning materials that reflect Piaget's stages while maintaining entrepreneurial principles and Islamic principles requires special expertise and creativity. This includes the development of teaching aids, learning media, textbooks, and teacher guides that combine all three components perfectly. Despite these difficulties, there is a great opportunity to improve the quality of education in Indonesia. By taking into account the stage of cognitive development of students, this integration can improve Islamic education and entrepreneurship. This method allows the creation of a curriculum that is more in line with the student's cognitive abilities. The results can increase students' understanding and retention of ideas about entrepreneurship and Islam.

By understanding the stages of Piaget's cognitive development, teachers can create a more interactive and student-centered approach to learning (Permadi & Dewi, 2022). It has the ability to create a more engaging and dynamic learning environment. Ultimately, it has the ability to increase student motivation and engagement in the learning process. In addition, this integration opens up opportunities for more holistic education (Kholis, 2022). Education can shape students' character more comprehensively by combining spiritual, intellectual, and entrepreneurial development. It can help students develop the ethical values, practical skills, and theoretical knowledge necessary to succeed in their lives and jobs. Finally, this integration has the potential to encourage students' critical thinking and creativity, which will align with the principles of entrepreneurship and Islam. Education can improve students' preparation for real-world challenges by designing activities that encourage higher-order thinking skills and creating projects that combine Islamic values, entrepreneurship, and Piaget's cognitive stages (Jahja et al., 2023).

Opportunities and Challenges

While there is a high possibility of incorporating Piaget's theory of cognitive development into Islamic education and entrepreneurship in Indonesia, there are several issues that must be

considered, including: educational, cultural, and social differences in Indonesia may affect the application of Piaget's theory. Changes that are in accordance with the local situation are urgently needed. Two things that can hinder the implementation of learning in accordance with Piaget's theory (Whildan, 2021) is the limitation of resources, namely educators, infrastructure, and budget. It is necessary to pay attention to the resistance to change from related parties, such as parents, the community, and even the educators themselves. This can hinder the process of integrating Piaget's theory into Islamic education and entrepreneurship (Anidar, 2017). Instead, there is an opportunity to create learning that is more in line with the stage of students' cognitive development by incorporating Piaget's theory of cognitive development into Islamic education and entrepreneurship in Indonesia. The following opportunities can be utilized: first, increasing student motivation and engagement in learning (Ali & Noor, 2019). Because the learning materials and methods are in accordance with their stage of cognitive development; Second, it improves students' understanding and skills of what they are learning. Third, increasing innovation and creativity in learning because teachers are encouraged to create learning methods and media that are in accordance with Piaget's theory. Fourth, Increase cooperation between schools, parents, and the community in implementing learning in accordance with Piaget's theory.

Conclusion

Incorporating Jean Piaget's theory of cognitive development into entrepreneurship and Islamic education in Indonesia has the potential to achieve more comprehensive educational goals and improve the effectiveness of learning. The results of this integration include the adjustment of subject matter, the implementation of learning strategies, the development of learning media, and the emphasis on an active and constructive learning process. The use of Piaget's theory also allows the development of learning that is more in line with the cognitive development of students. This happened despite some obstacles. Some of them are limited resources, social, cultural, and educational differences. Learning cooperation, motivation, understanding, and creativity can be enhanced by taking advantage of these opportunities.

To maximize the use of Piaget's theory of cognitive development in Islamic education and entrepreneurship in Indonesia, teachers must be improved, facilities must be better, and the curriculum must be designed with Piaget's theory in mind. Governments, parents, and communities also need to help to ensure that students receive quality learning that is in line with their cognitive development

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