

The Relevance of the Qur'an to Piaget's Stages of Cognitive Development: A Critical Analysis and Perspective on Childhood Education

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Abstract: *Piaget's cognitive theory has been used extensively in modern education, but it is not entirely free from criticism. The values of the Qur'an present a more holistic cognitive approach rooted in the value of spirituality. This study aims to reveal the relevance of the Qur'anic values in the context of Piaget's theory of cognitive development, so as to provide a more contextual guide to the needs of children's intellectual development. The type of research is qualitative descriptive with a literature study approach. Data collection is carried out by tracing data sources, including books, articles, news, and other related documents. The data analysis technique uses content analysis. The results of the study show that the Qur'an is relevant to the four stages of Piaget's cognitive theory, namely sensorimotor, pre-operational, concrete operational, and formal operational, reviewed from the rules and recommendations that must be carried out when a child passes through certain phases. The Qur'an contextually pays attention to the psychological development of children. The Qur'an has a theory that answers reality better, when Piaget's theory received criticism about the difference in children's cognitive abilities at the same age or phase, as evidenced by the discovery that concluded that there is a difference in children's cognitive level after 6-12 years. Based on the perspective of Qur'anic values, cognitive development does not have to be spurred by measuring the age of children specifically as formulated by Piaget's cognitive theory.*

Keywords: *Relevance of the Qur'an, Stages of Development, Piaget's Cognitive Theory*

Abstrak: Teori kognitif Piaget telah digunakan secara luas dalam pendidikan modern, namun tidak sepenuhnya bebas dari kritik. Nilai-nilai Al-Qur'an menghadirkan pendekatan kognitif yang lebih holistik berakar pada nilai spiritualitas. Penelitian ini bertujuan mengungkap relevansi nilai Al-Qur'an dalam konteks teori perkembangan kognitif Piaget, sehingga memberikan panduan yang lebih kontekstual terhadap kebutuhan perkembangan intelektual anak. Jenis penelitian adalah kualitatif deskriptif dengan pendekatan studi literatur. Pengumpulan data dilakukan dengan penelusuran terhadap sumber data, meliputi buku, artikel, berita, dan dokumen terkait lainnya. Teknik analisis data menggunakan analisis konten (*content analysis*). Hasil penelitian menunjukkan bahwa Al-Qur'an relevan dengan empat tahap teori kognitif Piaget yaitu sensorimotor, pra-operasional,

operasional konkret, dan operasional formal ditinjau dari aturan dan anjuran yang harus dilakukan ketika seorang anak melewati fase-fase tertentu. Al-Qur'an secara kontekstual memberikan perhatian terhadap perkembangan psikologis anak. Al-Qur'an memiliki teori yang lebih menjawab realitas, ketika teori Piaget mendapat kritik tentang perbedaan kemampuan kognitif anak pada usia atau fase yang sama, terbukti dari penemuan yang menyimpulkan bahwa terdapat perbedaan tingkat kognitif anak pada usai 6-12 tahun. Berdasarkan perspektif nilai Al-Qur'an, perkembangan kognitif tidak harus terpacu dari pengukuran usia anak secara khusus sebagaimana dirumuskan teori kognitif Piaget.

Kata Kunci: Relevansi Al-Qur'an, Tahapan Perkembangan, Teori Kognitif Piaget

Introduction

The current globalization is running rapidly, demanding the role of education to increasingly strive for the formation of quality individuals who are able to compete.¹ The development of children's cognitive abilities is urgent in the context of modern education.² Rapid changes have consequences on the needs of human resources in the world of work, innovation and leadership in society. Without optimally supporting cognitive growth, children will find it difficult to adapt and develop critical thinking skills in facing global challenges. As a result, education cannot maximally achieve the expected goals and ideals.

In the context of Islam, the Qur'an is a reference and guide in responding to all human problems that are relevant to the times.³ This includes an in-depth explanation of the values associated with individual cognitive development. The Qur'an not only provides moral and spiritual guidance, but also offers concrete steps in managing the process of daily life, including education. Thus, studying and analyzing the Qur'an as a source of teaching and guidance in individual cognitive development has significant relevance, both in intellectual and spiritual contexts.

The main potential given to humans is reason (cognitive). Success in developing cognitive aspects becomes the main reference in developing and determining other aspects. By understanding cognitive concepts, children

¹ Nina Oktarina, "Peranan Pendidikan Global Dalam Meningkatkan Kualitas Sumber Daya Manusia," *Journal of Chemical Information and Modeling* 53, no. 9 (2019): 189-98.

² Eka Mei et al., "Urgensi Bagi Pendidikan Di Negera Indonesia Yang Sedang Berkembang," *Jurnal Edukasi Nonformal* 1, no. 1 (2023): 2714-2634, <https://ummaspul.e-journal.id/JENFOL/article/view/5764>.

³ Kristin Zahra Sands, "Interpreting the Qur'an," 2006, 206.

will be able to use their minds to think well, including understanding, reasoning, believing, and applying everything they catch, both subject matter and moral messages in their developing environment.⁴ Therefore, the task of education is to be able to optimize and develop the concept of thinking in children.

A theory related to cognitive development that is quite familiar in the world of education was formulated by Jean Piaget. Jean Piaget is a cognitive-minded figure who examines personal stages, age development that affects individual learning abilities. According to him, a person's behavior is always based on the ability of cognition, namely knowing and thinking about the conditions in which the behavior occurs.⁵ It can be concluded, that according to cognitive theory, individual personalities can be formed through a learning process that involves a complex thinking process so as to encourage the birth of an attitude and behavior. Piaget's cognitive development theory consists of four main stages, namely sensorimotor, pre-operational, concrete operational and formal operational, contributing to the world of education to deeply understand how individuals develop and learn and how to design learning that can maximize the development of their potential.

Previous research related to this study includes; Research entitled "Islamic Personality and Jean Piaget's Cognitive Development Theory" found a combination of Islamic ways of working and Piaget's cognitive development, especially on the principle of equilibration in cognitive theory in harmony with Islamic principles, namely the balance of world affairs and the hereafter.⁶ Furthermore, the research entitled, "Human Development in the Review of Psychology and the Quran" the results found Qur'anic verses that show the nature of human development and are compared with the discipline of psychology.⁷ The study entitled, "Qur'anic Verses on Human Potential", shows that humans are the most perfect creatures and are given potential in the form of mind, heart and senses.⁸ This research will make a new contribution in comprehensively linking all stages of Piaget's cognitive

⁴ Lissya Whildan, "Analisis Teori Perkembangan Kognisi Manusia Menurut Jean Piaget," *Permata: Jurnal Pendidikan Agama Islam* 2, no. 1 (2021): 11, <https://doi.org/10.47453/permata.v2i1.245>.

⁵ Jeremy Trevelyan Burman, *The Genetic Epistemology of Jean Piaget*, Oxford Research Encyclopedia of Psychology, 2021, <https://doi.org/10.1093/acrefore/9780190236557.013.521>.

⁶ Mukodi, "Kepribadian Islami Dan Teori Perkembangan Kognitif Jean Piaget," no. 4 (n.d.): 1279-86.

⁷ Imam Hanafi, "Perkembangan Manusia Dalam Tinjauan Psikologi Dan Al-Qur'an," *IQ (Ilmu Al-Qur'an): Jurnal Pendidikan Islam* 1, no. 01 (1970): 84-99, <https://doi.org/10.37542/iq.v1i01.7>.

⁸ Fatika Sari, Neng Badrah, and Potensi Manusia, "AYAT AL- QUR ' AN TENTANG POTENSI MANUSIA," n.d., 72-81.

development to the values contained in the verses of the Quran, as well as showing how the Qur'an practically pays attention to the psychological stages of children. This research is also expected to open new knowledge about the correlation of religious values with modern educational concepts, so as to achieve the development of individual intellectual potential in a more holistic and sustainable education. The focus of this research will analyze the Qur'anic verses and their relevance to Piaget's theory and show the implications of cognitive development theory in the context of the Quran and Piaget on educational practice.

Method

This research is a descriptive qualitative research with a literature study approach, which is focused on the relevance of Qur'anic verses in the context of Piaget's cognitive development theory. The selection of Qur'anic verses is based on themes relevant to aspects of cognitive development, such as the ability to think, learn, reflect and so on that refer to authoritative sources. The research data was collected by searching the data sources, including books, articles, news, tafsir al-Qur'an and other related documents.

After the data is collected, it is then analyzed using content analysis. Content analysis is a technique used to draw conclusions through message characteristics objectively and systematically.⁹ The analysis process includes; 1) identifying data in the form of Qur'anic verses and Piaget's cognitive theory, 2) grouping the verses according to Piaget's four stages of cognitive development including sensorimotor, pre-operational, concrete operational, and formal operational, 3) interpreting based on all sources that have been collected to understand their relevance, and 4) drawing conclusions from the relationship between the verses and Piaget's stages of cognitive development.

Data triangulation is done to increase the credibility of research by comparing the results of analysis from various sources, such as literature related to Piaget's cognitive theory, interpretation of Al-Qur'an verses, opinions of experts and related previous research. The research procedure in general can be described as follows;

⁹ Lexy J. Moelong, *Penelitian Kualitatif* (Bandung: PT Remaja Rosdakarya, 2015).

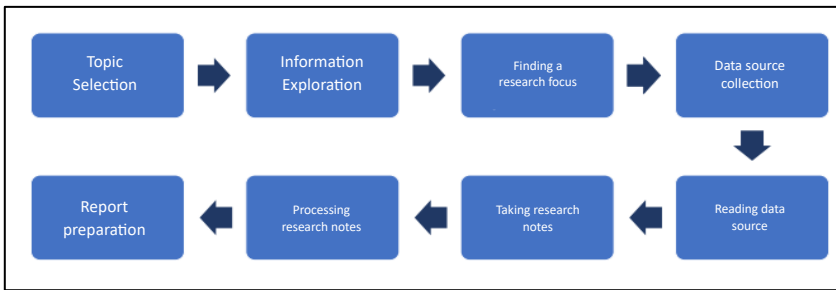


Figure 1. Research Flow Literature Study

Result and Discussion

Analysis of Qur'anic Verses and their Relevance to Piaget's Theory

Theories on development have been formulated by various experts who have different perspectives. The differences that occur prove that the truth of a theory cannot be measured absolutely to provide a point of view on a problem. Although, logically we see that the various theories developed are built by observing real conditions. In fact, subjective assessments show that the theories formulated are often at odds with reality.

Several studies have criticized Piaget's theory of development, which is considered to have a major influence on education. In perspective, Piaget formulated that children go through a series of cognitive stages, starting from the sensorimotor, pre-growth, concrete operational to formal operational stages.¹⁰ The focus of his theory, Piaget emphasizes the importance of the role of direct experience in the formation of children's understanding. This theory is criticized from several points of view; first, individual variability. Piaget is considered unable to account for individual variability in cognitive development. Second, the limitations of the method. Further research has shown that children may have more advanced cognitive abilities than Piaget described.¹¹ *Third, contemporary relevance. While some of these theories are still relevant, such as the theory of constructivism, some of his theories have been revised or abandoned in modern developmental thinking.*¹²

In the Islamic context, the Qur'an also provides an explanation of the process of individual development. For example, in QS. Ar-Rum verse 54 :

¹⁰ Rabindran and Darshini Madanagopal, "Piaget's Theory and Stages of Cognitive Development- An Overview," *Scholars Journal of Applied Medical Sciences* 8, no. 9 (2020): 2152-57, <https://doi.org/10.36347/sjams.2020.v08i09.034>.

¹¹ Mana Alahmad, "Strengths and Weaknesses of Cognitive Theory," 1936, 1584-93.

¹² Rabindran and Madanagopal, "Piaget's Theory and Stages of Cognitive Development- An Overview."

اللَّهُ الَّذِي خَلَقَكُمْ مِنْ ضَعْفٍ ثُمَّ جَعَلَ مِنْ بَعْدِ ضَعْفٍ قُوَّةً ثُمَّ جَعَلَ مِنْ بَعْدِ قُوَّةٍ ضَعْفًا
وَشَيْبَةً يَخْلُقُ مَا يَشَاءُ وَهُوَ الْعَلِيمُ الْقَدِيرُ

Meaning: "It is Allah who created you from a state of weakness, then He made you after that weakness strong, then He made you after that strength weak and gray. He creates what He wills. And He is All-knowing, All-powerful".

The phases of human development in the verse include several phases, including; the child phase (thift), the adult phase (baligh), and the old age phase (tua). The childhood phase is called a weak condition because humans are in a state of infancy. The adult phase of a person becomes strong because he is in a prime physical and mental state. The old age phase, psychologically, is characterized by physical and psychological weakening and functional decline.¹³

In another verse, it is also explained about knowledge or human cognition;

وَاللَّهُ أَخْرَجَكُمْ مِنْ بُطُونِ أُمَّهَاتِكُمْ لَا تَعْلَمُونَ شَيْئًا وَجَعَلَ لَكُمُ السَّمْعَ وَالْأَبْصَارَ وَالْأَفْئِدَةَ، لَعَلَّكُمْ
تَشْكُرُونَ

Meaning: "And Allah took you out of your mother's womb knowing nothing, and He gave you hearing, sight and conscience, that you may be grateful." (QS. An Nahl; 78)

This verse specifically explains that Allah bestows potentials and abilities such as thinking, prejudice, sensing and so on on human beings. After man is born, all these potentials can develop and his mind is able to think about good and evil, truth and error and right and wrong.¹⁴ From the verse, it can be seen that in terms of cognition, Allah does not explain any decline in abilities as well as physical conditions.¹⁵

This understanding is in line with modern research by psychologists which shows that psychological abilities, especially cognitive in the elderly, do not decrease drastically and can even be actualized with various routine cognitive activities, in contrast to their physical abilities which have decreased.¹⁶

¹³ Hanafi, "Perkembangan Manusia Dalam Tinjauan Psikologi Dan Al-Qur'an."

¹⁴ Abdul Ghafar E.M, "Tafsir Ibnu Katsir 5.1.Pdf," 2003.

¹⁵ LSM SPADA Indonesia, "Psikologi Islam (Konsentrasi Konseling)_Perkembangan Manusia Dalam Psikologi Islam," n.d.

¹⁶ Adriana Dewi Riani Djajasaputra and Magdalena S Halim, "Fungsi Kognitif Lansia Yang Beraktivitas Kognitif Secara Rutin Dan Tidak Rutin," *Jurnal Psikologi* 46, no. 2 (2019): 85, <https://doi.org/10.22146/jpsi.33192>.

In another verse, it also explains the process of human development from the womb;

أَيُّهَا النَّاسُ إِن كُنْتُمْ فِي رَيْبٍ مِّنَ الْبَعْثِ فَإِنَّا خَلَقْنٰكُمْ مِّن نُّرَابٍ ثُمَّ مِنْ نُطْفَةٍ ثُمَّ مِنْ عَلَقَةٍ ثُمَّ مِنْ مُّضْغَةٍ مُّخَلَّقَةٍ وَغَيْرِ مُخَلَّقَةٍ لِّنَبِّئَنَّ لَكُمْ وَنُقَرِّ فِي الْأَرْحَامِ مَا نَشَاءُ إِلَىٰ أَجَلٍ مُّسَمًّى ثُمَّ نُخْرِجُكُمْ طِفْلًا ثُمَّ لِّنَبْلُغُوا أَشَدَّكُمْ وَمِنْكُمْ مَّن يُتَوَفَّىٰ وَمِنْكُمْ مَّن يُرَدُّ إِلَىٰ أَرْذَلِ الْعُمُرِ لِكَيْلَا يَعْلَمَ مِن بَعْدِ عِلْمٍ شَيْئًا وَنَرَى الْاَرْضَ حَامِئَةً فَإِذَا أَنزَلْنَا عَلَيْهَا الْمَاءَ اهْتَزَّتْ وَرَبَتْ وَأُتْبِتَتْ مِن كُلِّ رَوْحٍ يَخْرِجُ

Meaning: "O people! If you doubt the Day of Resurrection, then We have made you from earth, then from a drop of semen, then from a clot of blood, then from a clot of flesh, perfect and imperfect, that We may make it clear to you; And We fixed it in the womb according to Our will until the appointed time, then We brought you out as infants, then (gradually) you came to adulthood, and among you there were those who passed away and (there were) those among you who were brought back to a great age (senility), so that he no longer knew anything that he had known. And you saw that the earth was dry, but when We sent rain upon it, it became alive and fertile and grew beautiful plants of various kinds." (QS. Al-Hajj: 5).

The verse shows related human development from the womb to death through several stages, including; 1) the first human being was created from the ground, namely Adam. From Adam and Eve, then multiply through a long process; 2) humans are said to come from nuthfah or in medical language is zygote, which is an ovum that has been fertilized by sperm; 3) 'alagah, which is a zygote that has been attached to the woman's womb; 4) mudghah, which is a zygote in the form of a collection of meat cells. In this process there are mudhahs that grow perfectly and some that are deformed. These perfect and defective events give rise to human physical perfection, defects or miscarriage.¹⁷ This process continues until the baby is born and until the human dies. At an advanced age (old), some experience senility (dementia) but not all experience this because it is limited to a certain age point.

The stages of development described in the verses of the Quran and hadith as a guide to human survival can be analyzed and linked to Piaget's theory of cognitive development. Piaget formulated four stages of cognitive development, including:

¹⁷ E.M, "Tafsir Ibnu Katsir 5.1.Pdf."

1. Sensorimotor Stage (Age 0-2 years)

At this stage, from birth to two years old, human cognitive activity is centered on the aspects of the sensory (sensory) and movement (motor) tools, meaning that children are only able to recognize the environment through their sensory and movement tools. This situation is the basis of other cognitive development.¹⁸ In Islamic teachings, this period is called the ash-shobiy phase. Some of the recommendations in this phase include tahnik babies with the aim of stimulating their sense of taste with sweet flavors. This is believed to bring out his positive perception of the world. According to research, tahnik also has the benefit of protecting the baby from glucose deficiency and strengthening the oral muscles.¹⁹ In addition, it is recommended to give the child a good name. This practice is an effort to internalize good values to the child. In this phase, it is also recommended to breastfeed the child for two years as explained in QS. Al-Bagharah verse 233;

وَالْوَالِدَتُ يُرْضِعْنَ أَوْلَادَهُنَّ حَوْلَيْنِ كَامِلَيْنِ لِمَنْ أَرَادَ أَنْ يُنِيمَ الرِّضَاعَةَ ۖ

This means: "Mothers should breastfeed their children for two full years, for those who wish to complete breastfeeding".

Proper breastfeeding can foster the bond between mother and child, thus forming a healthy personality.²⁰ Baby tahnik and breastfeeding for two years are activities that can stimulate and strengthen the sensory and motor skills of children.

2. Pre-operational Stage (Age 2-7 years)

At this stage, cognitive abilities are able to understand environmental reality using signs or symbols. Although, their thinking activities are not yet organized, not yet systematic, not yet consistent and not yet logical. The child is able to recognize and use simple language, obtain information from a slightly abstract impression, this stage is also known as the intuitive stage.²¹ This phase in the Islamic context is known as the pre-tamyiz phase or early thufulah. Islam considers that children should be allowed to explore during this period, even though it may seem inappropriate from a social point of view. In the Prophet's hadith, the Prophet let Hasan and Hussein play in the

¹⁸ Minanur Rohman, "Teori Kognitif Dalam Al-Qur'an," n.d.

¹⁹ Niken Bayu Argaheni and Gita Kostania, "Tinjauan Literatur: Pengaruh Tahnik Terhadap Bayi Baru Lahir," *Journal of Health Research* 5, no. 2 (2022): 47-61.

²⁰ Indonesia, "Psikologi Islam (Konsentrasi Konseling)_ Perkembangan Manusia Dalam Psikologi Islam."

²¹ Rohman, "Teori Kognitif Dalam Al-Qur'an."

middle of the prayer congregation and even ride on his back.²² This phase the child begins to master the mother tongue, shows egocentric nature, social sense begins to grow and the desire to learn appears.²³ At this stage the Quran recommends starting to teach children about several things, including; moral and ethical values that can be understood through explanation and concrete examples as explained in QS. Luqman verses 18-19, about the importance of respecting parents (QS. al-Isra' verse 23) and so on. The following is an explanation of the content of these verses.

Surah and Verse Name	Content	Verse Meaning
QS. Luqman : 18	Teaching not to act arrogantly through concrete examples and symbols of turning away and walking proudly	<i>"And do not turn your faces away from people (out of pride) and do not walk the earth arrogantly. Indeed, Allah dislikes those who are arrogant and boastful"</i>
QS. Luqman : 19	Teaching not to walk arrogantly and speak loudly through the depiction of the donkey's voice	<i>"And be modest in your walk and soft in your voice. Verily, the worst voice is that of a donkey"</i>
QS. Al-Isra' : 23	Teaching to respect parents with concrete illustrations not saying "ah"	<i>"... then you shall not say to them the word "ah" and you shall not yell at them..."</i>

3. Concrete operational stage (7-11 years old)

At this stage, humans begin to be able to manipulate or use concrete objects without the need for trial and error. Their egocentricity is reduced with their ability in observational tasks becoming better. However, without being confronted with a physical object, children in the concrete operational stage still have difficulty.²⁴ This phase is known in Islam as the tamyiz phase

²² Indonesia, "Psikologi Islam (Konsentrasi Konseling)_ Perkembangan Manusia Dalam Psikologi Islam."

²³ Meilinda Ekawati, Azkiy Silva Setti, and Siti Triani Amelia Mulyati, "Fase Perkembangan Anak Sekolah Dasar Dan Pembinaannya Dalam Perspektif Islam," *Jurnal Pendidikan Islam* 1, no. 4 (2024): 14, <https://doi.org/10.47134/pjpi.v1i4.762>.

²⁴ SKB 4 Menteri Republik Indonesia, "Perkembangan Kognitif: Teori Jean Piaget," *Intelektualita* 3, no. 1 (2015): 242904.

or the final *thufulah*. There are different scholars in interpreting "tamyiz". Some interpret that the first sign of *tamyiz* is the child's ability to understand and respond well to other people's conversations. Some also interpret it as the ability to know the difference between what is good or beneficial and bad or harmful for him.²⁵

In the context of Islam, humans in this phase already have the responsibility to learn to carry out Allah's commands and stay away from them. The Hadith that is a reference to how to educate children at this time is, "*Command your children to pray when they are 7 years old, and beat them if they leave the prayer when they are ten years old, and separate their beds.*" (HR. Ahmad, Abu Dawud, and al-Hakim from Abdullah bin Amar). From this Hadith, it can be seen that Islam recommends that children begin to command prayer, give consequences when they leave it, and separate their beds. In addition, this period the child begins to enter puberty or *baligh* which is marked by menstruation for women and wet dreams for men. So, this phase is an important stage to provide opportunities for children to recognize, train and prepare to be more disciplined in fulfilling religious obligations, especially in the next phase.

At the concrete operational stage, the Qur'an provides several concrete ways to teach children about good values, including; the concept of charity with a concrete analogy in QS. al-Bagarah verse 261: "*The example of those who spend their wealth in the way of Allah is like a seed that grows seven stalks, on each stalk there are a hundred seeds. Allah multiplies for whom He wills, and Allah is All-Wide, All-Knowing.*"; concrete moral teachings on avoiding slander and ascertaining the truth of facts before assuming in QS. Al-Hujurat verse 12: "*O you who believe! Avoid much prejudice, indeed some prejudice is sin, and do not find fault with others, and do not backbite some of you. Do any of you like to eat the flesh of his dead brother? Surely you feel disgusted*"; examples of things that harm themselves such as drinking *khamr* (alcohol) and gambling with concrete reasons and impacts in QS. al-Maidah verse 91: "*By drinking alcohol and gambling, Satan only intends to cause enmity and hatred among you, and prevent you from remembering Allah and performing prayers, so do you not want to stop?*"; invites to think about creation through creation through the creation of the world."; invites to think about creation through research and observation according to the logical and concrete abilities of children as described in QS. al-Ankabut verse 20: "*Walk on the earth, then see how (Allah) begins the creation (of creatures), then Allah makes the final event. Indeed, Allah is in control of all things*" and many other verses.

²⁵ Ekawati, Setti, and Mulyati, "Fase Perkembangan Anak Sekolah Dasar Dan Pembinaannya Dalam Perspektif Islam."

4. Formal operational stage (11-18 years old)

At this stage, humans are able to use their concrete operations to form more complex operations. They have the ability to think abstractly, including understanding the form of arguments.²⁶ This phase is known in the Islamic context as early adulthood or early puberty. The Prophet Muhammad at the age of 12 was involved in the Fijar war waged by the Quraysh. He played a role in the smooth supply of weapons. Thus, this period is considered important to teach leadership and independence. In this phase, children begin to seek self-identity and develop it. Intellectually they already have the ability to think abstractly, so they can be taught various sciences.²⁷

At this time, the Prophet Muhammad was also invited by his uncle Abu Talib to trade in the Levant. During the trip, the Prophet learned about financial management, how to apply honesty and justice in trading, how to communicate and interact with others, and many other basic business principles. (meilinda)

inviting children to contemplate the creation of the heavens and the earth as explained in QS. Ali 'Imran verse 191: *"(those) who remember Allah while sitting, standing, or lying down, and they think about the creation of the heavens and the earth (saying), 'O our Lord, You have not created all this in vain, Glory to You, protect us from the torment of hell'"*; inviting to critically analyze beneficial and harmful actions as described in QS. al-Bagarah verse 219: *"They ask you (Muhammad) about alcohol and gambling. Say, 'In both there is a great sin and some benefit to man. But the sin is greater than the benefit'. And they ask you about what they should spend. Say, 'the excess (of what is necessary)'"*. Thus Allah explains His verses to you so that you may think"; invites to reflect on the glory of man and the moral responsibility that comes with it as contained in QS. al-Isra' verse 70: *"And indeed, We have honored the sons and daughters of Adam, and We transported them on land and sea, and We gave them sustenance from the good and We favored them over many of the creatures We created with perfect advantages"*; invites thinking about the purpose of life and the test of life and the meaning and purpose of human existence as contained in QS. al-Mulk verse 2: *"Who made death and life, that He might test you, who among you is better in deeds. And He is the Mighty, the Forgiving"* and many other verses.

Explicitly, the Quran does not mention the age level at each stage of development as described by Piaget's theory, but the Qur'an explains the principles and values that are relevant to directing children's education and learning according to their development. Thus, classifying the Qur'anic verse in Piaget's developmental theory does not mean that the verse explicitly

²⁶ Indonesia, "Perkembangan Kognitif: Teori Jean Piaget."

²⁷ Indonesia, "Psikologi Islam (Konsentrasi Konseling)_ Perkembangan Manusia Dalam Psikologi Islam."

mentions the age or stage of development, but because the value described is in accordance with the educational and guidance needs of children at each stage of their development.

Implications of Cognitive Development Theory in the Context of the Quran and Piaget on Educational Practice

In its journey, Indonesian education has often undergone curriculum changes. Until now, the independent curriculum is in effect. The changing regulations indirectly show the efforts of the education system to adapt and move better and contextualize with the socio-cultural culture and national identity. Although, practically, it raises many pros and cons and complex problems, especially for teachers and students as learning actors. In addition, curriculum renewal should be able to provide convenience in achieving educational goals, including optimizing student potential.

The research findings show implementation efforts in the context of Piaget's theory in education, including through several steps; 1) focus more on children's thinking processes, not only on the results, 2) appreciate and recognize the important role of children's active involvement in learning activities that they initiate independently, 3) do not emphasize learning practices that make children think like adults, and 4) accept the diversity of differences in individual abilities and development.²⁸

In the fourth implementation, namely acceptance of differences in individual developmental progress, indirectly states that there are developmental differences in children. This is in line with the results of research in an elementary school which concluded that the cognitive level or intellectual ability of children is different after 6-12 years. According to Piaget's theory of cognitive development, the age range is in the concrete and abstract thinking stages. In fact, at that age children were also found to be able to think at the formal operational stage.²⁹

Islam explains the possibility of differences in cognitive development in children. This is illustrated from the point of view of Muslim scholars regarding the difference in determining the age of puberty between men and women. In the rules of *fiqh*, the age of puberty for men is 15 *hijriyah* years and for women 9 *hijriyah* years after they experience *ihtilam* (wet dream) and

²⁸ Tri Wahyuni Nurul Uswatun Endang Fauziati, "Merdeka Belajar Dalam Perspektif Teori Belajar Kognitivisme Jean Piaget" 3 (n.d.): 129-39, <https://doi.org/https://doi.org/10.58578/tsaqofah.v3i1>.

²⁹ Erita Rahmaniar and Indri Mahmudah, "Kritik Terhadap Teori Perkembangan Kognitif Piaget Pada Tahap Anak Usia Sekolah Dasar Erita Rahmaniar 1 □ , Maemonah 2 , Indri Mahmudah 3" 6, no. 1 (2022): 531-39.

haid (menstruation).³⁰ However, some scholars argue that there is no difference after the age of puberty, which is 15 years for men and women, based on the hadith of Ibn Umar (may Allah be pleased with him: *"I volunteered to the Prophet (peace be upon him) to join the battle of Uhud when I was 14 years old, and he did not allow me. I applied to him again at the time of the battle of Khandak when I was 15 years old, and he gave me permission."*) (Saheeh al-Bukhori, no. 2664 and Saheeh Muslim, no. 1868)

To measure the phase of puberty in Islam reaps various differences.

This is because the period of puberty has several consequences in the form of Shari'a obligations for every Muslim. In fact, the process of menstruation and ihtilam of one child to another is different. In addition, lifestyle, family upbringing, geographical conditions of residence will affect the acceleration of the maturity level of children's thinking patterns (cognitive).³¹ The point of view of the differences in the development of the baligh phase in children shows that the basis of Islamic law both al-Qur'an and hadith views that there will be differences in the development of children, in various aspects, including cognitive.

The developmental theory formulated by Piaget and the Qur'an, epistemologically, is different. Piaget's theory is based on research so as to produce a theoretical construction that still reaps various criticisms of the theory in practical areas. In contrast to the theory of development put forward by the Qur'an based on deduction patterns, making the Qur'anic theory more relevant and even more able to answer various challenges of reality comprehensively.

Efforts to address the challenges of Piaget's theory in this practical area have basically been formulated in the concept of an independent curriculum. The basic principle in independent curriculum learning is that a teacher must master the characteristics of students or commonly called profiling. The independent curriculum also applies a diagnostic assessment system to recognize the abilities that students already have and the potential that can be developed.³²

Based on the findings of this study, in seeking to optimize children's cognitive development, several concrete steps can be taken. Teachers can design learning strategies based on the level of children's thinking ability using a differentiation approach. Gradually, teachers can also conduct formative reflection to ensure learning is in accordance with

³⁰ Afwah Mumtazah, "Pemaknaan Baligh versus Dewasa Dalam Beragam Konteks _ Swara Rahima," n.d.

³¹ Mumtazah.

³² Fauziati, "Merdeka Belajar Dalam Perspektif Teori Belajar Kognitivisme Jean Piaget."

students' abilities and make improvements if the strategy used is not appropriate. Teachers also need to avoid applying a uniform approach because in one phase or age it is possible that there are cognitive differences between children.

Conclusion

Many verses of the Qur'an explain the stages of human development.

However, Piaget's theory specifically formulates four stages of cognitive development, including sensomotor (age 0-2 years, pre-operational (2-7 years), concrete operational (7-11 years), and formal operational (11-18 years). These four phases are known in the Islamic context as the ash-shobiyyah phase, pre-tamyiz phase, tamyiz phase and baligh phase. All of Piaget's cognitive phases have also been explained in detail in the Islamic context, starting from the rules for when tahnik is recommended, breastfeeding for two years, the rules for when to command prayer and provide consequences when leaving, when it is important to teach leadership and independence and so on. From these rules and recommendations, it is understood that Islamic religious guidance in both the Quran and hadith contextually pays attention to the psychological development of children in a comprehensive manner.

The theory of development formulated by Piaget and the Quran, epistemologically, is different. Piaget's theory is based on research so as to produce a theoretical construction that still reaps various criticisms in practical areas. The finding of differences in cognitive abilities of children at the same age or phase shows the weakness of this theory. However, from an Islamic point of view, cognitive development does not have to be triggered by measuring the age of the child specifically. In fact, the process of baligh (maturity) which is measured by the process of menstruation and ihtilam to determine the tamyiz phase of a person experiences differences between individuals. Thus, the verses of the Qur'an are relevant in the context of Piaget's cognitive development, and even have a theory that can better answer reality when Piaget's theory is criticized and some of its weaknesses are proven.

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