

Reinterpreting Ethical Values in "Ta'lim Al Muta'allim" for Contemporary Learning Contexts: A Humanistic Approach

Muhammad Nurul Mubin *

1 Universitas Islam Negeri Sunan Kalijaga Yoyakarta, Indonesia
mnmubin96@gmail.com

Iffah Khoiriyatul Muyassaroh **

2 * Universitas Islam Negeri Sunan Kalijaga Yoyakarta, Indonesia
iffahkms@gmail.com

Abstract

This study aims to reinterpret the ethical values presented in the classical Islamic text "*Ta'lim Al Muta'allim*" by Shaykh Az Zarnuji, adapting them for humanistic application within contemporary learning environments. Employing a qualitative literature review methodology, this research examines the compatibility of these traditional values with modern educational contexts. Through systematic selection and thematic analysis of academic sources, the study identifies critical critiques of Az Zarnuji's ethical prescriptions, including their perceived rigidity and hierarchical nature. The findings reveal that values such as the physical orientation of study, the avoidance of doubtful matters, and the hierarchical teacher-student relationship require adaptation to align with the dynamic, flexible, and inclusive nature of modern learning. The reinterpretation ensures these values remain relevant and beneficial by integrating academic integrity, collaboration, and digital literacy principles. The study's implications are significant for Islamic educational institutions seeking to modernize curricula, promoting a holistic educational model that combines religious and secular knowledge, fostering intellectual growth, moral development, and social responsibility. However, this research acknowledges its limitations in theoretical focus and context dependence, recommending future empirical validation in diverse educational settings.

Keywords: Ethical values, Contemporary learning, *Ta'lim Al Muta'allim*.

INTRODUCTION

The significance of rethinking humanized ethical values in education has never been more crucial in today's rapidly changing global context. With the increasing interconnectedness and complexities of contemporary learning environments, traditional ethical frameworks are often challenged and deemed insufficient to address modern educational needs (Auda, 2008; Rahman, 2006). "*Ta'lim Al Muta'allim*," a seminal work by Sheikh Az-Zarnuji, has long been a foundational text for students in Islamic boarding schools (pesantren) worldwide. This text provides comprehensive guidance on the ethics of learning, emphasizing behaviors and attitudes essential for students' intellectual and moral development. However, the evolving educational landscape necessitates critically examining and potentially re-interpretation of these traditional values to ensure their relevance and applicability in contemporary settings (Al-Jabri, 1990).

Previous studies have extensively explored the ethical dimensions of "*Ta'lim Al Muta'allim*," highlighting its enduring relevance in various educational contexts. For instance, research outlines the ethical imperatives prescribed by Az-Zarnuji, such as sincerity in learning, prayer, facing the *Qibla*, maintaining warm (caution), trust, patience, compassion, consultation, and respect for knowledge and teachers (Ramadhan et al., 2023). Similarly, other studies discuss aligning these ethical principles with the character education goals in Indonesia, affirming their continued significance (Irfan Faruq, 2024). Additionally, studies demonstrate the universal applicability of the teacher-student ethics delineated by Al-'Amili, underscoring their potential for contemporary actualization (Muntakhib et al., 2020).

Paragraph 3 Other scholars have examined the practical applications of Az-Zarnuji's ethics in modern educational settings. Some research emphasizes the foundational role of divine revelation and experiential learning in Az-Zarnuji's educational philosophy (Abdurrahman, 2022). Others identify Islamic values inherent in these ethical practices, such as emulating the Prophet Muhammad, adhering to Islamic personality traits, and engaging in *ijtihad* (independent reasoning) (Putra, 2021). Further studies elucidate the character values embedded in "*Ta'lim Al Muta'allim*," which include active learning, honesty, intelligence, and perseverance (Bela et al., 2022).

The practical implementation of Az-Zarnuji's ethical guidelines has also been a focus of empirical studies. Research reveals how applying "*Ta'lim Al Muta'allim*" fosters moral values among students in Indonesian Islamic boarding schools, such as love for Allah, knowledge, patience, and steadfastness (Setiyono et al., 2023). Other studies discuss the criteria for selecting ideal educators according to Az-Zarnuji, highlighting

attributes like piety and seniority (Hasanah & Aprilianto, 2020). Additionally, research extends this discussion by illustrating the ethical responsibilities of teachers towards themselves, their students, and their books to achieve ultimate spiritual goals (Hanipudin et al., 2023).

Further research outlines the dual role of teachers in Az-Zarnuji's framework, balancing sufistic and pragmatic approaches to moral education (Candra et al., 2020). Other studies emphasize the importance of a supportive learning environment for character development, advocating for carefully selecting educators and peers (Huda & Kartanegara, 2015a). Additional research details the role of Islamic education teachers in nurturing moral development, stressing the integration of faith and love for God as foundational elements (Aulia et al., 2022).

Despite the robust body of literature on "*Ta'lim Al Muta'allim*," notable gaps and limitations warrant further exploration. Contemporary critiques highlight the need to adapt ethical practices to modern educational contexts. For example, facing *Qibla* during study sessions may be less relevant in today's global and virtual learning environments (Ramadhan et al., 2023). Similarly, war can be perceived as overly restrictive, potentially hindering the openness and experimentation crucial for modern innovation (Auda, 2021). These limitations underscore the need to re-interpret Az-Zarnuji's ethics to accommodate contemporary educational demands.

This study aims to reinterpret the ethical values in "*Ta'lim Al Muta'allim*" to enhance their applicability and humanism in contemporary learning contexts. This research seeks to offer a nuanced understanding that bridges the gap between classical Islamic ethics and contemporary pedagogical practices by critically examining these traditional ethical principles through the lens of modern educational needs and dynamics. The findings of this study are expected to contribute significantly to the ongoing discourse on ethical education, providing a framework that integrates timeless values with the demands of modernity.

METHODS

The study employs a literature review methodology to examine and reinterpret the ethical values in "*Ta'lim Al Muta'allim*" for their application in contemporary learning contexts, adopting a qualitative and exploratory research design. The research topic was initially defined, and objective criteria for literature selection were established. Relevant sources were meticulously chosen from academic materials, including journal articles, books, research reports, theses, dissertations, and online content, and evaluated for relevance, quality, and contribution to the topic. Tools such as digital databases (Elsevier, Google Scholar, university library systems) and reference management software (EndNote, Mendeley) facilitated the literature review process by

ensuring systematic documentation and retrieval of references. Data collection involved systematic searching and screening of literature based on predefined criteria, followed by thematic analysis to extract and synthesize pertinent information on ethical values in "*Ta'lim Al Muta'allim*" for modern educational applications. To ensure reliability and validity, the quality and credibility of sources were critically assessed, triangulation was employed to enhance robustness, and opposing viewpoints were included to provide a balanced perspective. This methodological rigor aimed to contribute significantly to the discourse on enhancing educational quality by applying ethical values from "*Ta'lim Al Muta'allim*" in contemporary learning environments (citation needed).

RESULT AND DISCUSSION

Conflicting Ethical Values in Learning in the Book "*Ta'lim Al Muta'allim*" in the Modern Era

In the book "*Ta'lim Al Muta'allim*," Shaykh Az Zarnuji outlines various ethical points in seeking knowledge that has received criticism from modern figures for being incompatible with contemporary contexts. This criticism encompasses several aspects reflecting the changing values and needs in modern learning, which is more dynamic, flexible, and inclusive. One critique raised is the recommendation to face the *Qibla* when studying. Modern figures argue that such physical orientation is irrelevant in globalization and modern technology, where learning often occurs virtually and cross-culturally. According to them, the focus should be more on the substance and quality of learning rather than physical orientation.

Additionally, the concept of *Wara'*, or avoiding doubtful matters, is considered too restrictive in the modern context. Modern figures encourage openness to new knowledge and experimentation that can drive innovation and creativity as long as it does not violate universal moral principles (Shen et al., 2019). Respecting peers also remains essential, but perspectives on this can differ. In the modern era, healthy collaboration and critical discussion are valued more than mere respect without providing input or constructive criticism.

In choosing a teacher, in the digital era, access to knowledge is no longer limited to a specific teacher. Many modern figures encourage learning from various sources and online platforms and developing self-learning skills. While respecting teachers is still important, an overly hierarchical approach is criticized. Contemporary learning promotes a more egalitarian relationship between teachers and students, where dialogue and two-way feedback are more appreciated (Weiss et al., 2024).

Appreciating knowledge in the modern context is through symbolic respect and applying and developing that knowledge for societal advancement. Criticism arises if

the appreciation of knowledge is merely ceremonial without tangible implementation. Finally, respecting books remains essential, but modern figures emphasize that the value of knowledge is not only found in the physical form of books but also in various digital forms and other media that should be equally valued.

These critiques reflect efforts to adapt the tradition of ethical knowledge-seeking to the ever-changing times so that learning values can remain relevant and beneficial in a broader context. Fazlur Rahman criticized the intellectual stagnation in the Islamic educational tradition, focusing on memorization and commentary on classical texts without innovation. According to him, the dualism in Islamic education that separates religious and secular sciences hinders the development of holistic and integrative education. Rahman argues that traditional education emphasizes acquiring knowledge rather than encouraging creativity and critical thinking. In the context of "*Ta'lim Al Muta'allim*," Rahman's approach underscores the importance of teaching methods that promote critical exploration, profound understanding, and systematic interpretation for solutions relevant to contemporary contexts. He proposed integrating Western intellectualism with the Islamic tradition, emphasizing creativity, systematic interpretive methodology, and applying Quranic values in modern social-moral contexts (Rahman, 2006).

Jasser Auda reinterpreted the Maqasid Shariah to ensure the relevance of Shariah in the modern context, expanding its scope to include universal values such as justice and freedom, which are not recognized in classical fiqh literature. Auda also responds to global challenges by incorporating human rights, social reform, and women's rights, following thinkers like Rashid Rida and Yusuf al-Qaradawi. In the context of "*Ta'lim Al Muta'allim*," Auda's approach broadens the understanding of humanistic educational ethics, integrating universal values into learning. He introduces new concepts reflecting contemporary needs and values, ensuring Islamic law remains relevant and effective in the modern context (Auda, 2008).

Both thinkers contribute to efforts to make Islam more adaptive and responsive to contemporary needs in the context of learning. Rahman focuses on creativity and systematic interpretive methodology, while Auda offers a reinterpretation of Maqasid Shariah that encompasses universal values and global issues. They emphasize the importance of a holistic and integrative approach in Islamic education and interpretation, combining religious and secular sciences and ensuring the relevance of Shariah in the modern context. Their approaches reflect efforts to integrate universal human values with Islamic teachings, creating space for cross-cultural and interfaith dialogue and cooperation and paving the way for a just, balanced, and civilized society facing global and local challenges. This approach is highly relevant for reinterpreting "*Ta'lim Al Muta'allim*," emphasizing the importance of human-centered educational

ethics in contemporary learning.

Reinterpreting the Ethical Values of Learning in the "*Ta'lim Al Muta'allim*" Book Humanistically in Contemporary Learning

This research aims to reinterpret the ethical values of learning in the book "*Ta'lim Al Muta'allim*" so that they can be humanistically applied in the context of contemporary learning. One of the values examined is the intention of learning, which is traditionally focused on worship and seeking the pleasure of Allah. In the modern context, this intention can be expanded to include goals such as improving the quality of life, contributing to society, and personal development. Additionally, praying before studying to seek guidance and blessings can be adapted into the practice of reflection or meditation to calm the mind before studying, recognized for its benefits across various traditions and scientific studies.

Furthermore, the value of facing the *Qibla* as a form of respect can be transformed into a mental orientation and deep focus on the material being studied, regardless of the location. The concept of *Wara'*, which means avoiding doubtful or suspicious matters, can be translated into the modern context as maintaining academic integrity and research ethics and being critical of the information received while remaining open to innovation. The value of *tawakkal*, rooted in surrendering to Allah after making an effort, can be understood in the contemporary context as acknowledging the importance of hard work and perseverance while accepting outcomes with a positive mindset and developing resilience in the face of failure.

Patience in the long learning process, as taught in the classical tradition, can be reinterpreted to emphasize the importance of patience in skill and knowledge development and in facing learning challenges and difficulties. The value of compassion towards fellow seekers of knowledge can be developed into efforts to foster empathy, cooperation, and mutual support within academic and professional communities.

Musya*Wara'h*, or discussion and consultation with teachers and peers in the modern context, becomes the promotion of collaboration, scientific discussion, and peer review to enrich understanding and innovation. Selecting knowledge that benefits both this world and the hereafter can be adapted to choosing fields of study relevant to contemporary needs, personal interests, and social contributions. Similarly, choosing good friends who support the learning process can be translated into building positive and inspiring professional and academic networks.

Selecting pious and knowledgeable teachers in the past can now be translated into choosing competent and inspiring mentors and learning sources that facilitate intellectual and personal growth. Valuing knowledge as something noble can be realized through practical application, innovation, and the dissemination of knowledge

for the common good.

In the classical tradition, respecting teachers with obedience and reverence can be adapted into appreciating their contributions while encouraging open dialogue and constructive feedback. Honoring books as sources of knowledge can be interpreted as respecting all forms of knowledge, whether in physical books, electronic journals, or other digital media. Finally, respecting fellow learners can be adapted into professional attitudes, openness, and cooperation in modern learning communities.

Table 1. The reinterpretation of ethical values in seeking knowledge from traditional to modern contexts

No.	Ethical Values in Seeking Knowledge	Traditional Context	Modern Context
1	Intention to Learn	Learning with the intention of worship and seeking Allah's pleasure	The intention to learn can be expanded to include goals of improving quality of life, contributing to society, and personal development.
2	Prayer	Commencing learning with prayers for guidance and blessings	Prayer can be interpreted as contemplation or meditation to calm the mind before learning, recognized for its benefits in various traditions and scientific studies.
3	Facing <i>Qibla</i>	Facing <i>Qibla</i> as a form of respect and sacredness	Physical orientation can be replaced with mental orientation and deep focus on the material being studied, wherever it may be.
4	<i>Wara'</i>	Avoiding doubtful or suspicious matters	They uphold academic integrity and research ethics and are critical of received information while remaining open to innovation.
5	<i>Tawakkal</i>	Surrendering to Allah after making an effort	We acknowledge the importance of hard work and effort while accepting outcomes with a positive mindset and developing resilience in facing failures.

6	Patience	Patience in the lengthy learning process	It is understanding the importance of patience in developing skills and knowledge and facing challenges and learning difficulties.
7	Compassion	Showing compassion to fellow seekers of knowledge	Cultivating empathy, cooperation, and mutual support in academic and professional communities.
8	Consultation	Discussion and consultation with teachers and peers	Promoting collaboration, scientific discussions, and peer review enriches understanding and innovation.
9	Choosing Knowledge	Choosing knowledge beneficial for this world and the hereafter	Selecting fields of study relevant to contemporary needs, personal interests, and societal contributions.
10	Choosing Friends	Choosing good friends who support the learning process	Building positive and inspiring professional and academic networks.
11	Choosing Mentors	Choosing knowledgeable and righteous mentors	Selecting mentors and learning sources that are competent, inspiring, and facilitate intellectual and personal growth.
12	Valuing Knowledge	Valuing knowledge as something noble	I value knowledge through practical application, innovation, and dissemination of knowledge for the collective good.
13	Respecting Teachers	Respecting teachers with obedience and reverence	They respect teachers by appreciating their contributions while encouraging open dialogue and constructive feedback.
14	Revering Books	Revering books as sources of knowledge	I am revering all forms of knowledge, whether in physical books, electronic journals, or other digital media.
15	Respecting Peers	Respecting fellow seekers of knowledge	I respect peers in learning with a professional attitude, openness, and collaboration.

This table summarizes the reinterpretation of ethical values in seeking knowledge from traditional to modern contexts, aligning with the adapted thoughts of Syekh Az Zarnuji and Jasser Auda.

By reinterpreting these values, this research aims to make the ethics of seeking knowledge more relevant and applicable in the modern world without neglecting its essence and fundamental values. This adaptation seeks to bridge the gap between traditional teachings and contemporary needs, recognizing the evolving nature of knowledge acquisition and application. By embracing a broader perspective on the intentions behind learning, the methods of seeking guidance, and the attitudes towards fellow seekers and mentors, these ethical values can resonate more deeply with individuals navigating the complexities of today's educational and professional landscapes. Through this process of reinterpretation, the aim is to foster a culture of ethical conduct, critical thinking, and continuous learning that enriches both personal growth and societal progress..

Analysis of Reinterpreting the Ethical Values of Learning in the "*Ta'lim Al Muta'allim*" Book Humanistically

The primary objective of this research was to reinterpret the ethical values of learning as outlined in Shaykh Az-Zarnuji's "*Ta'lim Al Muta'allim*" and to apply them humanistically within contemporary learning contexts. This investigation was motivated by the critique that some ethical guidelines in the text may be outdated or incompatible with modern educational settings, emphasizing flexibility, inclusivity, and technological integration (Irfan Faruq, 2024; Ramadhan et al., 2023). These critiques reflect a broader trend within Islamic education to reconcile traditional teachings with contemporary needs, which involves critical reinterpretation and contextual adaptation (Huda & Kartanegara, 2015b).

The study found several conflicting ethical values in "*Ta'lim Al Muta'allim*" when applied to modern contexts. The recommendation to face *Qibla* during the study is notable among these, deemed irrelevant in a globalized, virtual learning environment. Similarly, *Wara'*, or avoiding doubtful matters, is seen as overly restrictive, potentially stifling innovation and openness to new knowledge (Candra et al., 2020). Furthermore, the hierarchical teacher-student relationship promoted by the text contrasts with contemporary educational practices that value egalitarian dialogue and mutual feedback (Putra, 2021; Setiyono et al., 2023).

These findings align with Fazlur Rahman's critique of intellectual stagnation in Islamic education, which he attributed to an overemphasis on rote memorization and commentary on classical texts without fostering critical thinking and innovation (Rahman, 2006). Rahman's advocacy for integrating Western intellectualism with

Islamic tradition mirrors the call for a more dynamic and inclusive approach to learning ethics. Additionally, Jasser Auda's reinterpretation of Maqasid Shariah, emphasizing justice, freedom, and universal human rights, supports updating educational values to remain relevant in a modern context (Auda, 2008).

The research also resonates with contemporary educational models prioritizing practical application and social contribution over ceremonial respect. For instance, the study's emphasis on modernizing the value of facing the *Qibla* to focus on mental orientation and deep engagement parallels global educational practices that stress mindfulness and reflective learning techniques (Abdurrahman, 2022). Moreover, the reinterpretation of *tawakkal* to highlight perseverance and resilience aligns with modern educational psychology, which values grit and a growth mindset as crucial for academic and personal success (Rosidah et al., 2024).

The findings suggest that while traditional ethical values in "*Ta'lim Al Muta'allim*" have foundational significance, their application requires adaptation to remain effective in contemporary learning contexts. This reinterpretation involves transforming physical and ceremonial practices into mental and practical orientations that align with modern educational philosophies. However, it is essential to approach this reinterpretation cautiously, ensuring that the core ethical principles, such as respect for knowledge and teachers, are preserved while making necessary adjustments (Maslani et al., 2018).

Significantly, this research underscores the need to balance traditional Islamic values with contemporary educational practices. The reinterpreted values, such as maintaining academic integrity and fostering collaboration, can enhance the relevance and effectiveness of Islamic education today. However, careful contextual understanding and application are crucial to avoid superficial or misaligned adaptations that may dilute the essence of the original ethical teachings (Hanipudin et al., 2023). This balanced approach ensures that ethical guidelines remain meaningful and practical in a rapidly changing educational landscape.

The implications of these findings are profound for Islamic educational institutions and scholars seeking to modernize their curricula. By adapting traditional ethical values to contemporary contexts, educators can cultivate a learning environment rooted in Islamic principles and responsive to global educational standards. This approach promotes a holistic and integrative educational model that combines religious and secular knowledge, fostering intellectual growth, moral development, and social responsibility. Ultimately, this research contributes to the ongoing dialogue on educational reform within the Islamic tradition, highlighting the importance of human-centered ethics in contemporary learning.

CONCLUSION

This study aimed to reinterpret the ethical values of learning as delineated in the book "*Ta'lim Al Muta'allim*" to ensure their humanistic application within contemporary educational contexts. The main findings indicate that several ethical values prescribed by Shaykh Az Zarnuji face criticism in the modern era for being incompatible with the dynamic, flexible, and inclusive nature of contemporary learning environments. Critical critiques involve the physical orientation of study, restrictive avoidance of doubtful matters, hierarchical teacher-student relationships, and symbolic appreciation of knowledge. The implications of these findings are significant for the field of Islamic education. By modernizing these traditional ethical values, educators can create a learning environment that adheres to Islamic principles while meeting global educational standards. This dual approach fosters a holistic and integrative educational model, combining religious and secular knowledge to promote intellectual growth, moral development, and social responsibility. Such a model aligns with contemporary educational needs and preserves the essence of Islamic ethical teachings. However, this study has limitations that must be acknowledged. The reinterpretation of ethical values is context-dependent and may vary significantly across cultural and educational settings. Furthermore, the study primarily focuses on theoretical aspects, necessitating empirical validation through practical implementation in various educational institutions. Future research should aim to empirically test these reinterpreted values in diverse educational contexts to assess their practical applicability and effectiveness. Additionally, further exploring integrating universal values with Islamic teachings can provide deeper insights into creating a balanced and comprehensive educational framework. By addressing these areas, future studies can contribute to the ongoing dialogue on educational reform within the Islamic tradition, emphasizing the importance of human-centered ethics in contemporary learning environments.

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INTRODUCTION

Today, we can witness many interesting changes in the domain of spirituality and religiosity. While technology and material progress continue to advance rapidly, interest in the search for deeper existential meaning and higher purpose is increasing. This development has changed our paradigm towards spirituality. Spirituality is an important aspect in the formation of a whole human character. Spirituality is not only related to religious beliefs, but also includes inner dimensions, values, meaning of life, and connection with something transcendent. The development of spirituality from an early age can provide a strong foundation for individuals in facing the challenges of life and forming a positive character. (Wasisto, 2012). Many factors influence a person's spiritual understanding, one of which includes individual experience and learning

things related to spirituality. One of the scientific disciplines that studies spirituality is neurospirituality, which is a branch of neuroscience.

But in recent decades, research in the field of neuroscience has provided new insights into how the human brain is involved in spiritual experiences and character development processes. Studies show that certain activities in the brain, particularly in the prefrontal, parietal and temporal areas, are associated with spiritual experiences, meditation and appreciation of values. Brain-based education is an approach to learning that takes into account the principles of the brain and neuroscience. By understanding how the brain learns, processes information and forms neuronal connections, learning methods can be designed to optimize the brain's potential and support the cognitive, emotional and spiritual development of individuals.

The development of neuroscience has influenced the understanding of spirituality. Spirituality includes the meaning of life, rituals, positive emotions, and spiritual experiences that direct life goals to be important (Asrori, 2020). The spiritual neuroscience approach is an important alternative to improve Islamic Religious Education learning (Fadkhulil Imad Haikal Huda, 2022). This approach has the advantage of integrating neuroscience in multidisciplinary studies. Therefore, education should capitalize on these advances in neuroscience, especially since in some countries, neuroscience has been incorporated into the education curriculum (Nurul Istiqomah & Rio, Pebrian & Susi, 2018).

Spiritual neuroscience is a sub-discipline that focuses on the study of the brain and human spirituality. This sub-discipline has a strong relevance to the characteristics of PAI as both are related to the study of God (Heni Listiana, Achmad Yusuf, Supandi, 2021). According to Ari Ginanjar, an Emotional Spiritual Quotient (ESQ) expert, within humans there is what is referred to as the "God Spot". God Spot refers to the spiritual potential that every human being is born with. It is the deepest aspect of the human personality that is connected to God or the Almighty. This God dimension is the center of a person's inner strength, intuition and spiritual awareness. It is the source of human values such as love, truth, justice, and benevolence. By developing and activating the God Spot, one can achieve a balance between intellectual intelligence (IQ), emotional intelligence (EQ), and spiritual intelligence (SQ) that complement each other (Al Ahyadi, 2015).

Neuroscience at MPAI UAD is an interesting and important course to learn. Neuroscience itself is the study of the human nervous system, especially the brain, and its relationship with behavior and mental processes. (Hidayat, 2017). In this course, students will study the structure and function of the brain in detail, starting from neurons as the basic unit of the nervous system to the division of major areas of the brain such as the cerebral cortex, limbic system, and others. The material also covers

the process of neurotransmission, brain development from the womb, and research methods in neuroscience. Neuroscience theories are combined with concepts in psychology to provide a complete understanding of mental processes (Taufik, 2010). In addition, this course also touches on current issues in neuroscience such as cognitive neuroscience, social neuroscience, as well as neuroscience applications in the fields of mental health, education, and spirituality. The discussion of neuroscience in Islamic religious education is certainly a major highlight in this MPAI study program (Yusmaliana et al., 2022). Although the material is quite challenging, this course is very important to broaden students' understanding in understanding psychological phenomena and their relationship with human spirituality as a whole (Yakin, 2018).

Some previous studies have reviewed character brain education in Islamic education, linking a sharp analysis of Islamic character education with neuroscience. In addition, there are also studies that examine character education through a neuroscience-based behavioristic approach. The results of these studies show that students need motivation and supervision from educators in internalizing religious teachings appropriately according to the goals of school education (Nashihin, 2018). In addition, there is also research that reviews the brain and mind from the perspective of the Quran and neuroscience. This research discusses human perfection that lies in the normality of reason, while the brain functions as the control center of human activity (Ahwinarto & Suyadi, 2020). According to Suyadi, character education actually helps develop the potential of the human brain, with the six brain systems playing a role in shaping individual attitudes and behavior. The importance of maintaining the balance and optimal performance of the brain allows better control of human behavior by involving the emotional and spiritual dimensions (Suyadi, 2017). Then in the research conducted by (Dahuri, 2023) By using the brain effectively and naturally in the thinking process, a person can demonstrate good morals that are reflected in spiritual values in their daily life. This will ultimately increase their faith and devotion to God, because as humans, they become more diligent and consistent in their worship.

This research presents a new perspective in the world of Islamic religious education by integrating the brain-based education approach and holistic spiritual character development. The brain education approach considers how the brain works in the learning and teaching process, involving an understanding of neurology, cognitive psychology and learning science. The aim is to create an optimal learning environment by utilizing the brain's potential to the fullest. On the other hand, spiritual character development is at the core of Islamic religious education, which focuses on building a strong character based on spiritual principles in Islamic teachings. It emphasizes on the appreciation of religious values, such as faith, piety, noble character, and relationship with Allah SWT. The aim is to form individuals who are not only

academically intelligent but also have spiritual maturity.

By integrating these two approaches, this research seeks to create a novelty in the context of Islamic religious education. It combines the brain education approach with spiritual character development efforts in the curriculum and learning methods. By utilizing an understanding of how the brain works, this research aims to facilitate effective learning in instilling Islamic spiritual values. This is done by creating a learning environment that is conducive to cognitive development as well as the formation of a strong spiritual character.

Through this integration, this research is expected to produce learning methods that are more effective and optimize the potential of students as a whole, both in terms of cognitive and spiritual. By integrating rational and spiritual aspects in the education process holistically, it is hoped that individuals can be formed who not only have high intellectual intelligence, but also have a strong spiritual character in accordance with Islamic teachings. The success of this research will provide a better understanding of the role of the brain in shaping spiritualist character, as well as provide a basis for developing more effective teaching methods in achieving the objectives of Islamic religious education, especially at advanced education levels such as Masters Programs. (Lalu Abdurrahman Wahid, 2022).

METHODS

In this study, researchers used the library research method (library research) Library research is a traditional research method that has been widely used by researchers to evaluate various scientific studies (Nashihin, 2023). By using this method, the researcher seeks to conduct an in-depth and comprehensive analysis and obtain optimal results. In the context of this research, the desk research method is used to explore and analyze the relationship between brain education and spiritual character development in the context of Islamic religious education. This research also involves collecting data from various sources relevant to the object of research, such as books, scientific works, and journals. The approach used is qualitative, where data is obtained through literature study by carefully examining articles, books, and scientific journals related to the influence of brain education on the character of special spirituality (Pahleviannur, M. R., De Grave, A., Saputra, D. N., Mardianto, D., Hafrida, L., Bano, V. O., ... & Sinthania, 2022). To enrich the data, researchers also conducted unstructured interviews with students of the Ahmad Dahlan University Master of Islamic Education Study Program (MPAI UAD) regarding their opinions on Neuroscience courses and their influence on their spirituality character. Data was collected by tracing and collecting information from various sources that became a reference for research. After the data is collected, a discussion is carried out on all the problems studied to produce

accurate and precise data and study materials. The data that has been collected is then analyzed qualitatively with an approach from the general to the specific, in accordance with the method used in this study (Hakim, 2023).

RESULTS AND DISCUSSION

1. The Role of Brain Education at MPAI UAD Yogyakarta

The brain is a very important part of humans. Not only as a physical organ, but also as a control center that regulates various bodily functions and complex mental processes. Even in religious views, the brain is also considered a tool that enables humans to carry out their duties as caliphs on earth. (Tamin, 2022). The brain's ability to adapt and develop over time is amazing. The concept of "use dependent development" that you mentioned is one of the things that makes the brain so unique. The brain's ability to renew itself and improve its performance as it experiences and learns is what sets it apart from machines or other inanimate objects (Ahwinarto & Suyadi, 2020). With its complex capabilities, the brain allows humans to do a variety of things, from thinking, feeling emotions, making decisions, to performing reflexes and survival. Without the brain, humans would not be able to do many things that make them unique and able to adapt to the surrounding environment. So, it can be said that the brain is one of the most defining aspects of human identity as an intelligent and complex being (Setyawan, 2017).

For centuries, humans have relied on brainpower and reasoning as the main foundation in various aspects of life. However, a view that puts intellectual intelligence above all else often neglects other aspects such as attitude and behavior. This can result in detrimental imbalances in the lives of individuals, which can eventually give rise to serious multidimensional crises (Dr. Jonaedi Efendi, S.H.I., M.H, Prof. Dr. Johnny Ibrahim, S.H., S.E., M.M., 2016). Thus, there are three important things that can be drawn from the description: first, the importance of responding to the findings of neuroscience in the development of education; second, the recognition that all aspects of humans, including character and knowledge, are related to brain processes; and third, the need for harmony between intellectual intelligence and emotional and behavioral aspects to achieve balance and a better quality of life (Rusuli, 2014).

Brain Education at MPAI UAD Yogyakarta offers a different approach amidst the density of materials and theories in education. Through this approach, individuals are guided to deeply understand how their brain works and reach their full potential. For example, activity in the prefrontal cortex and limbic system are

linked to meditation skills, emotional control, and self-awareness which are important in spirituality.

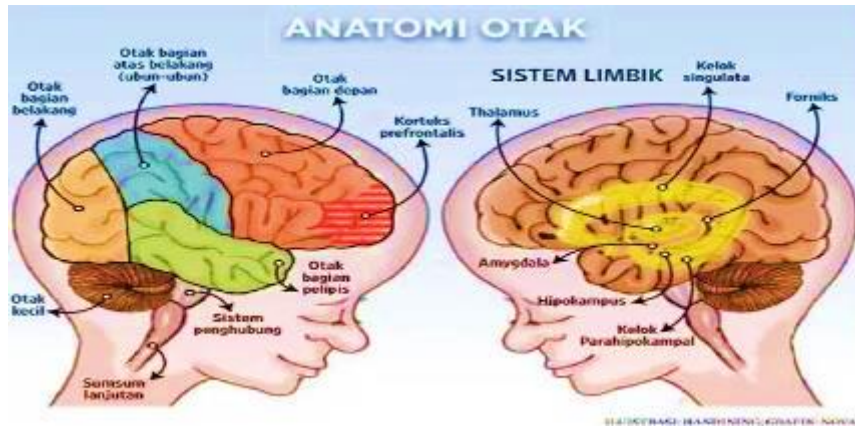


Figure 1. Anatomy of the Brain

Spiritual experiences such as meditation, prayer, and dhikr practices can be understood and analyzed in greater depth through neurospiritual education (Fitriani & Abdullah, 2021). This helps students understand spiritual aspects more scientifically and rationally, which can strengthen the foundation of their faith. This was expressed by Muhammad Ilham Baihaqqi, one of the MPAI UAD students.

"In the context of Islamic religious education, brain education can be a very valuable addition because it helps students understand religious teachings more deeply, and develop a strong spiritual character" (Baihaqqi, 2024).

Then in an interview with Reyhan, one of the MPAI UAD students, he also said

"In my opinion, brain education is an effort to optimize the potential of our brain through scientific approaches such as cognitive learning and strategies to improve brain performance. The role of brain education in spirituality character development is to help us understand and control cognitive and emotional processes related to spiritual values, such as self-awareness, empathy, and inner calm" (Reyhan, 2024).

From the interview, the researcher concluded that understanding the relationship between brain activity and spiritual experiences is important. Brain education helps us know how the brain functions while we are engaged in spiritual practices such as meditation, prayer or reading scriptures. By understanding these brain activation patterns, we can design strategies and exercises that can enhance brain performance in a spiritual context. For example, mindfulness or meditation practices can stimulate the brain regions responsible for emotion regulation, empathy and self-awareness.

Then further researchers explore how the role of brain education on the relationship between students' spiritual characteristics. Muhammad Ilham Baihaqqi as one of the students at MPAI UAD revealed the importance of brain education as a means of developing students' spiritualist characteristics. The following are the results of his interview:

"I think brain education is very important because the brain is the control center for all the functions of our body and mind. When we understand how the brain works, we can understand how our mindset and behavior are formed. This is particularly relevant in the development of spiritualist characteristics as spirituality involves a deeper understanding of the self and the purpose of life" (Baihaqqi, 2024).

This is also in line with Reyhan's expression who said.

"The brain also has parts associated with the subconscious, the place where our deepest beliefs, values and motivations are formed. Through brain education, we can open access to this subconscious and unearth spiritual potential that may not have been revealed" (Reyhan, 2024).

Based on the results of the interview above, the researcher concluded that the brain is the control center for all functions of the human body and mind. By understanding how the brain works, we can understand how our thought patterns and behaviors are formed. An understanding of the brain is particularly relevant in the development of spiritualist characteristics as spirituality involves a deeper understanding of self and life purpose. The brain has parts associated with the subconscious, the place where our deepest beliefs, values and motivations are formed. Through brain education, we can open access to the subconscious and unearth spiritual potential that may not have been revealed yet. Overall, brain education helps us understand ourselves deeply, including the spiritual aspect, so that we can better develop spiritualist characteristics (Akbar, et.al, 2023).

Furthermore, Professor Suyadi as Head of MPAI UAD Yogyakarta as well as a lecturer in Neuroscience and learning theory explained the influence of character education on brain education. It is explained in his journal article that character education actually helps develop the potential of the human brain, with the six brain systems playing a role in shaping individual attitudes and behavior. The importance of maintaining the balance and optimal performance of the brain allows better control of human behavior by involving the emotional and spiritual dimensions. (Suyadi, 2017).

In addition, several activities are often carried out at MPAI Ahmad Dahlan University in supporting the development of students' spiritual character. Such as always starting learning by saying a prayer together, and ending also with prayer.

Then conduct research whose approach always leads to Islamic studies with collaboration with other disciplines. Facilities for places of worship such as mosques in the campus environment also support activities to develop students' spirituality characteristics at MPAI UAD Yogyakarta. The following is a more detailed explanation.

1. Starting and ending learning with prayer together Before starting teaching and learning activities, lecturers and students pray together. This is a form of respect to Allah SWT and realizing that knowledge is a gift from Him. By praying, they ask for blessings and ease in the learning process. After finishing, they also close with a prayer as an expression of gratitude and ask that the knowledge gained can be useful.
2. Research with an Islamic studies approach and collaboration with other disciplines MPAI Ahmad Dahlan University encourages students to conduct research that integrates Islamic studies with other disciplines. For example, in the field of education, students can conduct research on learning methods that are in accordance with Islamic values. Or in the field of psychology, they can study spiritual aspects in the development of the human soul. This approach helps students understand the interrelationship between religious and general sciences and enriches their spirituality.
3. Facilities for Places of Worship (Mosques) in the Campus Environment The existence of a mosque in the campus environment provides a means for students to carry out worship regularly, such as congregational prayers and Islamic studies. This helps students to practice their spiritual values and grow closer to Allah SWT. In addition, the mosque can also be used as a place to gather and discuss spiritual issues, thus adding insight and fostering a spirit of spirituality among students.
4. Spiritual extracurricular activities MPAI Ahmad Dahlan University also organizes spiritual extracurricular activities, such as Quranic studies, religious lectures, and commemoration of Islamic holidays. These provide opportunities for students to deepen their religious knowledge and apply it in their daily lives. Such activities also facilitate interaction between students and spiritual sources, so that they can learn directly from people who have experience in the field of spirituality (Observation of Religious Activities of MPAI UAD, 2024).

With these various activities, MPAI Ahmad Dahlan University seeks to create an environment conducive to the development of the spiritual character of its

students. This is in line with the university's vision and mission to produce graduates who not only have intellectual intelligence, but also spiritual intelligence.

2. Spiritual Development and Modern Neuroscience

Developments in the field of cognitive neuroscience have revealed more in-depth information about the connection between the brain and spiritual experiences (Rohmadi, 2018). Neuroimaging technologies such as fMRI have enabled the identification of brain areas that are active while individuals engage in spiritual practices such as meditation, prayer, reading the Qur'an, prayer and other acts of worship. Some studies have also highlighted specialized brain networks involved in spiritual experiences, such as the default mode network and the saliency network. These networks have an important role in the processes of self-awareness, attention and emotion regulation that influence a person's spiritual experience. The neurobiology of spirituality is becoming a major focus in modern neuroscience research. This research includes understanding the neurobiological mechanisms behind spiritual experiences, such as the role of neurotransmitters, alpha and theta brainwave activity, and the impact of long-term spiritual practices on brain structure and function (Suyadi, 2020).

Neurospiritual research has uncovered complex neurobiological mechanisms behind spiritual experiences and religious practices performed by humans.

1. At the neurochemical level, there is an important role of several neurotransmitters such as dopamine, serotonin and endorphins associated with spiritual experiences (Irfan, 2017).
 - a. *Dopamine*, which plays a role in positive experiences, motivation, and rewards, increases in levels when individuals engage in spiritual practices such as prayer, scripture reading, prayer, meditation or other worship.
 - b. *Serotonin*, which is associated with mood regulation, emotions, and a sense of peace, also increases in levels during intense spiritual experiences.
 - c. *Endorphins*, known as natural happiness hormones, are also released during deep spiritual practices, providing a sense of calmness to the individual.



Figure 2. Structure of Neurotransmitters

2. At the level of brain activity, neurospirituals observed an increase in alpha (8-12 Hz) and theta (4-8 Hz) brainwave activity during spiritual practices (Ubudiyah, 2020). Alpha waves are associated with states of relaxation, meditation and increased awareness, while theta waves are associated with states of deep relaxation, intuition and emotional processing. During prayer, meditation or scripture reading, there is an increase in alpha wave activity in the prefrontal cortex and other brain regions, and an increase in theta waves as the spiritual experience reaches its peak.

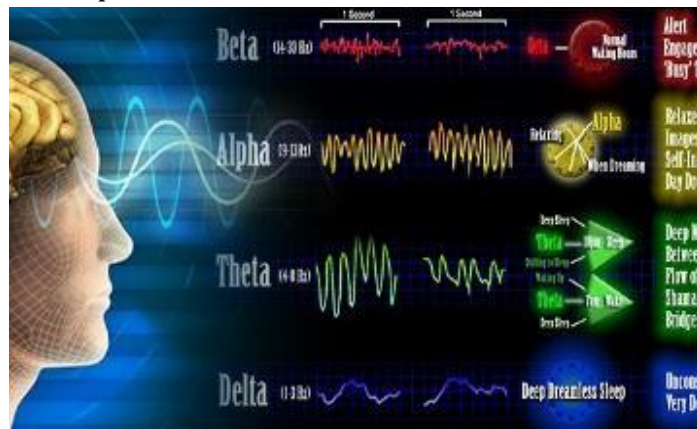


Figure 3. Brain Wave Activity

A more surprising finding was the impact of long-term spiritual practices on the structure and function of the brain itself. Individuals who meditate regularly show increased gray matter volume in brain regions associated with attention, emotion regulation, and empathy, such as the prefrontal cortex and insula. The more surprising finding is the impact long-term spiritual practices have on the structure and function of the brain itself. Individuals who meditated regularly showed

increased gray matter volume in brain regions associated with attention, emotion regulation, and empathy, such as the prefrontal cortex and insula (Novia, 2010). Connectivity between brain regions involved in spiritual experiences also increases after long-term meditation practice. In fact, long-term spiritual practice can improve cognitive capacities such as attention, working memory and emotion regulation. In addition, spiritual neuro-science also reveals differences in brain activation patterns in various spiritual practices. When praying, there is increased activity in brain regions associated with focused attention, emotions, and moral decision-making. Meanwhile, when reading the Quran, there is stronger activation in brain regions associated with language processing, memory, emotions, and spiritual experiences compared to reading a regular book.

Neuroscience studies have also revealed a strong connection between spirituality and mental health (Hanafi, 2016). Spiritual practices such as meditation can activate areas of the brain associated with emotion regulation, mindfulness and stress resilience, which in turn contribute positively to an individual's mental health. With this development, there is a greater effort to integrate scientific discoveries with spiritual traditions from different cultures and religions. This opens the door for dialogue between science and spirituality in deepening the understanding of the whole human experience. An interdisciplinary approach is also increasingly emphasized in the study of spiritual neuroscience, involving collaboration between various disciplines such as neuroscience, psychology, anthropology, philosophy and religious studies (Maunah, 2023).

According to Ari Ginanjar, an Emotional Spiritual Quotient (ESQ) expert, every human being has a spiritual potential called God Spot. God Spot refers to the deepest aspect of the human personality that is connected to God or the Almighty. It is the center of one's inner strength, intuition, and spiritual awareness. God Spot can be likened to a point or area within a human being that is the bridge between ourselves and the Creator. (Al Ahyadi, 2015). This God Spot has been present in every human being since birth, but is often neglected or covered by the busyness of daily life and the influence of the surrounding environment. Therefore, it is necessary to develop and revive this God Spot so that we can achieve a balance between intellectual intelligence (IQ), emotional intelligence (EQ), and spiritual intelligence (SQ) that complement each other.

This God dimension or God Spot is the source of human values such as love, truth, justice and virtue. When we are able to access and activate our God Spot, we will become more sensitive to these values and be able to apply them in our daily lives (Chaer, 2017). This will make us a more complete, thoughtful human being with strong integrity.

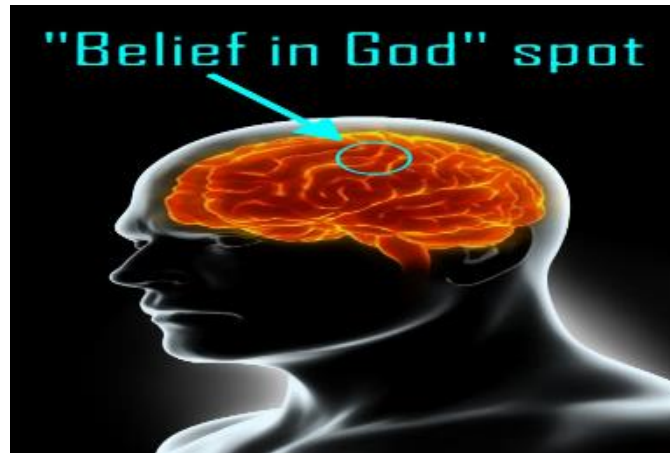


Figure 4. God Spot in the human brain

In addition, the God Spot is also the source of deep intuition and inner strength. This intuition can help us make the right and wise decisions, even in difficult or uncertain situations (Supriaji, 2019). This inner strength can also be a source of motivation and resilience in facing the challenges and trials of life. Developing and activating the God Spot requires a conscious and consistent effort in practicing spiritual activities such as meditation, prayer or contemplation. Through these practices, we can calm our minds and hearts, and open ourselves to the presence of the Almighty in our lives.

Then recent findings in neurospirituality have changed the paradigm on the neurobiological basis of spiritual experiences. Previously, many believed that spirituality originates from one specific brain region called the God Spot. However, recent research reveals that spiritual experiences instead involve the activation of a complex and integrated set of brain networks or circuits (Husnaini et al., 2021). This spiritual circuit is a network consisting of several brain regions that are interconnected and work in synergy. These brain regions include the prefrontal cortex, anterior cingulate cortex, insula, and several other regions associated with cognitive, emotional, and spiritual functions. During spiritual experiences, there is increased functional connectivity between these brain regions, which means that the communication and synchronization of neural activity becomes stronger. This connectivity allows for better integration of information and coordination in processing spiritual experiences holistically (Handojoseno, 2016). Interestingly, the activation of spiritual circuits is dynamic and fluctuates according to the stage and intensity of the spiritual experience.



Figure 5. Spiritual Circuit

This concept of spiritual circuits provides a more comprehensive understanding of the Neurospiritual basis. By understanding these circuits, we can better understand how the brain processes and integrates cognitive, emotional and spiritual aspects holistically, and how spiritual practices can shape and optimize these circuits in the long run. These findings open new avenues in exploring the potential of spirituality in improving mental health and overall human well-being.

CONCLUSION

The brain has a central role in enabling humans to perform various activities, including spiritual experiences. Brain education helps to understand how the brain works and optimize its potential, including in the context of spirituality. At MPAI Ahmad Dahlan University, brain education is integrated into learning to develop students' spiritual character through neurobiological understanding of spiritual experiences such as reading prayers at the beginning and end of learning, conducting research on Islamic studies, mosque facilities that become the center of student rituals and spirituality, reading the holy book Alqur'an, and PHBI activities that are always held. Modern neuroscience research reveals the neurobiological mechanisms behind spiritual experiences, such as the role of neurotransmitters, patterns of brain wave activity, and changes in brain structure due to long-term spiritual practices. God Spot findings refer to the deepest aspect of the human personality that is connected to God or the Almighty. It is the center of a person's inner strength, intuition and spiritual awareness. Recent research has also found that there are complex spiritual circuits in the brain, which involve a network of several brain areas in processing spiritual experiences in an integrated manner. Brain education and understanding spiritual neuroscience helps to develop spiritual character in a more in-depth and scientific manner, while respecting religious and cultural values. This opens up opportunities for

dialogue between science and spirituality in understanding the human experience in a holistically selected manner

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