



Integrating Islamic Psychology and Developmental Neuroscience in Early Childhood Islamic Education: A Holistic Fitrah-Based Approach

Nurhayati^{1*}, Juni Mahanis², Yuli Fatimah Warosari³

¹ Sekolah Tinggi Agama Islam Ibnu Sina Batam, Indonesia.

² Sekolah Tinggi Ilmu Tarbiyah Internasional Muhammadiyah Batam, Indonesia.

³ Sekolah Tinggi Agama Islam Ibnu Sina Batam, Indonesia.

Received: April 12, 2026

Revised: May 8, 2026

Accepted: June 25, 2026

Published: June 30, 2026

Corresponding Author:

Nurhayati

nurhayatistaiisb@gmail.com

DOI: [10.29303/jppipa.v12i6.14970](https://doi.org/10.29303/jppipa.v12i6.14970)

 Open Access

© 2026 The Authors. This article is distributed under a (CC-BY License)



Abstract: This study aims to examine the integration of Islamic psychology and developmental neuroscience in early childhood Islamic education through a holistic fitrah-based approach. A qualitative field research design was employed in Raudhatul Athfal institutions in Batam City, involving teachers, principals, and parents. Data were collected through observation, in-depth interviews, and documentation, and analyzed using an interactive model. The findings indicate that Islamic psychological principles are implemented primarily through value internalization and behavioral habituation rather than explicit theoretical instruction. Learning practices emphasize the balanced development of cognitive, emotional, social, and spiritual domains, reflecting a holistic approach aligned with children's innate disposition (fitrah). These practices are consistent with neuroscience perspectives highlighting the importance of early experiences and environmental stimulation in shaping development. However, several challenges were identified, including limited conceptual understanding among educators, lack of interdisciplinary training, absence of standardized assessment tools, and variation across institutions. The study concludes that a more structured and theoretically grounded model is needed to strengthen the integration of Islamic psychology and developmental science in early childhood education.

Keywords: Developmental neuroscience; Early childhood Islamic education; Fitrah; holistic approach; Islamic psychology

Introduction

Early childhood education represents a critical phase in human development, particularly in shaping cognitive, emotional, social, and spiritual capacities. From a scientific perspective, especially in developmental neuroscience, early childhood is recognized as a sensitive period during which brain architecture is rapidly formed and highly responsive to environmental stimuli (Shonkoff, & Phillips, 2000; Child, 2021). Contemporary research further emphasizes that effective learning is not solely cognitive but also deeply influenced by emotional and social processes (Immordino-Yang, Darling-Hammond, & Krone, 2019). Therefore, educational approaches that

focus exclusively on academic achievement are increasingly considered insufficient, highlighting the need for a more holistic and integrative framework.

Within the Islamic educational paradigm, the concept of fitrah serves as a foundational principle in understanding human nature and development. Fitrah refers to the innate disposition endowed by God, encompassing a natural inclination toward faith, morality, and truth. This concept aligns with contemporary developmental psychology theories on innate predispositions and nature-based development (Berk, 2018). Recent studies in Islamic psychology also suggest that human development should be understood through the integration of spiritual, emotional, and cognitive dimensions, offering a more comprehensive

How to Cite:

Nurhayati, Mahanis, J., & Warosari, Y. F. (2026). Integrating Islamic Psychology and Developmental Neuroscience in Early Childhood Islamic Education: A Holistic Fitrah-Based Approach. *Jurnal Penelitian Pendidikan IPA*, 12(6), 641–648. <https://doi.org/10.29303/jppipa.v12i6.14970>

framework compared to secular models (Rothman, A., & Coyle, 2018); (Awaad, R., Sultan, S., Ali, S., 2022).

However, in practice, Islamic religious education for young children often remains fragmented and normative, with a strong emphasis on memorization rather than developmental appropriateness. Such approaches frequently overlook scientific insights into how children learn and develop. Recent studies indicate that neuroscience-informed education can significantly enhance learning effectiveness by aligning instructional strategies with brain development processes (Howard-Jones, 2014); (Tokuhamu-Espinosa, 2019). This gap between traditional religious instruction and contemporary scientific understanding underscores the urgency of integrating Islamic psychology with modern scientific approaches in early childhood education.

In addition to the theoretical and scientific considerations, the urgency of integrating Islamic psychology and modern science in early childhood education is also driven by contemporary socio-cultural challenges. Children today are increasingly exposed to digital environments, rapid information flows, and shifting moral values, which may influence their cognitive and emotional development. Studies indicate that early exposure to unfiltered digital content can affect attention, emotional regulation, and social behavior in young children (Organisation for Economic Co-operation and Development, 2023). In this context, early childhood Islamic education must go beyond conventional instruction by incorporating scientifically informed and spiritually grounded approaches that support children's holistic development and resilience.

Furthermore, early childhood institutions play a crucial role in translating theoretical frameworks into practical pedagogical strategies. However, many educators still lack a clear model for integrating spiritual values with scientific approaches in classroom practices. Research shows that teachers often experience difficulties in applying interdisciplinary frameworks due to limited training and conceptual understanding (Darling-Hammond, L., Hyler, M. E., & Gardner, 2017). Therefore, developing an integrative model based on Islamic psychology, *fitrah*, and developmental science is essential to provide practical guidance for educators in designing meaningful and developmentally appropriate learning experiences.

This study is conducted in Raudhatul Athfal (RA) institutions across Batam City. Batam represents a unique urban context characterized by rapid economic growth, cultural diversity, and strong exposure to globalization. These conditions create both opportunities and challenges for early childhood education, particularly in maintaining Islamic values while adapting to modern educational demands. RA institutions in Batam serve as strategic sites for

examining how Islamic educational principles are implemented in a dynamic and modern environment. Additionally, the diversity of institutional backgrounds and teaching practices in Batam provides a rich context for analyzing variations in the integration of Islamic psychology and scientific approaches.

This topic is particularly important because it addresses a critical gap between traditional Islamic education and contemporary scientific knowledge. While Islamic education emphasizes moral and spiritual development, modern science provides empirical insights into how children learn and develop. Recent studies highlight that advances in neuroscience and developmental science have significantly improved the understanding of learning processes, particularly the interaction between cognition, emotion, and environment in shaping children's development (Immordino-Yang, M. H., Darling-Hammond, L., & Krone, 2019); (Child, 2021). At the same time, contemporary educational research increasingly emphasizes the need to integrate multiple dimensions of human development, including cognitive, emotional, social, and spiritual aspects, within a unified framework (Noroz, 2023). Integrating these perspectives offers a more comprehensive approach to education that is both value-driven and evidence-based.

Moreover, the growing global demand for holistic education reflects the need to move beyond purely academic outcomes toward fostering character, well-being, and lifelong competencies. Empirical evidence shows that social and emotional learning approaches significantly contribute to students' overall development, including emotional regulation, empathy, and psychological well-being (Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, 2011); (Organisation for Economic Co-operation and Development, 2021).

In addition, research in educational neuroscience highlights that aligning teaching practices with brain development processes can enhance both character formation and learning effectiveness (Immordino-Yang, 2016). This growing body of evidence underscores the urgency of developing integrative educational models that combine spiritual values with scientific approaches, making this study highly relevant in addressing current educational challenges.

The novelty of this study lies in its integrative and interdisciplinary approach that systematically bridges Islamic psychology, the concept of *fitrah*, and contemporary developmental science within the context of early childhood Islamic education. Unlike previous studies that tend to examine spiritual development, psychological theories, or neuroscience perspectives in isolation, this research proposes a unified, holistic framework that connects these dimensions into a

coherent educational model. It not only conceptualizes fitrah as a theological construct but also operationalizes it within a scientific perspective aligned with findings from developmental psychology and neuroscience. Furthermore, this study offers contextual originality by focusing on Raudhatul Athfal institutions in Batam City, a dynamic urban environment shaped by globalization and cultural diversity, which remains underexplored in existing literature. By integrating theory with practical application, this research contributes a novel model that is both spiritually grounded and empirically informed, providing a meaningful advancement in the development of holistic early childhood Islamic education.

Method

Time and Place of the Research

This study was conducted from July to October 2025 in selected Raudhatul Athfal (RA) institutions in Batam City, Riau Islands Province, Indonesia. Batam City was selected because it has diverse Islamic early childhood education institutions that integrate religious learning, character education, and child development activities. This setting provided an appropriate context for examining the integration of Islamic psychology, fitrah-based principles, and holistic child development within Islamic Religious Education for early childhood.

Research Design

This study employed a qualitative field research design to explore the integration of Islamic psychology into early childhood Islamic education through a holistic fitrah-based approach. Qualitative research was selected because it enables researchers to understand participants' experiences, perspectives, meanings, and educational practices within their natural settings (Creswell, 2024). The population consisted of principals, teachers, and parents from Raudhatul Athfal institutions in Batam City who were involved in the implementation of Islamic Religious Education and early childhood development programs. The sample comprised [number] principals, [number] teachers, and [number] parents selected from [number] RA institutions. Participants were selected through purposive sampling because they had direct knowledge and practical experience related to fitrah-based learning, Islamic values education, and children's developmental activities. Purposive sampling is appropriate for qualitative studies because it allows researchers to recruit information-rich participants who can provide detailed and relevant data regarding the phenomenon being investigated (Creswell, 2024). The areas of inquiry included the implementation of Islamic psychological principles, fitrah-based educational practices, teachers'

instructional strategies, parental involvement, and children's cognitive, emotional, social, spiritual, and moral development. Data were collected through classroom observations, semi-structured in-depth interviews, and document analysis. Observations were conducted to examine learning activities and teacher-child interactions; interviews were conducted with principals, teachers, and parents to explore their perspectives and experiences; and documents, including curriculum materials, lesson plans, learning modules, and institutional records, were reviewed to support the findings. The tools and materials used in this study consisted of observation sheets, semi-structured interview guides, audio recorders, field-note forms, document-review checklists, informed-consent forms, and a laptop for transcription, data organization, and analysis.

Research Procedure

The research procedure was carried out in several stages. First, the researcher identified the research problem and reviewed relevant literature on Islamic psychology, fitrah, early childhood Islamic education, and developmental neuroscience. Second, research permission was obtained from the selected RA institutions, followed by the identification of eligible participants based on predetermined inclusion criteria. Third, preliminary observations were conducted to understand the learning environment, classroom routines, teacher-child interactions, and the implementation of Islamic values in daily educational activities. Fourth, semi-structured in-depth interviews were conducted with principals, teachers, and parents to obtain detailed information about their understanding and implementation of Islamic psychological principles and fitrah-based education. Fifth, relevant documents, such as curriculum documents, lesson plans, learning materials, and institutional records, were collected and reviewed. Sixth, the researcher transcribed, organized, and verified the data through source triangulation and technique triangulation. Finally, the findings were interpreted to identify themes, patterns, and implications regarding the integration of Islamic psychology and developmental neuroscience in early childhood Islamic education.

Data Analysis

Data analysis followed the interactive qualitative data analysis model of Miles, Huberman, and Saldaña (2020), which consists of data condensation, data display, and conclusion drawing or verification. Data condensation involved selecting, focusing, simplifying, coding, and categorizing relevant information obtained from observations, interviews, and documents. The condensed data were subsequently displayed through

narrative descriptions, thematic matrices, and tables to facilitate the identification of patterns, relationships, and emerging themes. Conclusions were drawn and continuously verified throughout the research process by comparing data across participants, data-collection techniques, and documentary sources. The trustworthiness of the findings was established through credibility, transferability, dependability, and confirmability. Credibility was strengthened through source triangulation, technique triangulation, and member checking with selected participants. Transferability was supported through detailed descriptions of the research context, participants, and procedures. Dependability and confirmability were maintained through systematic documentation, reflexive field notes, and an audit trail (Norozi, 2023).

Result and Discussion

The Conceptual Integration of Islamic Psychology in Early Childhood Education

The findings of this study reveal that the integration of Islamic psychology in Islamic Religious Education (IRE) within Raudhatul Athfal (RA) institutions across Batam City is predominantly realized through value internalization and structured behavioral habituation. Teachers embed essential Islamic psychological constructs—such as *fitrah*, *tazkiyat al-nafs* (self-purification), and moral consciousness—into everyday pedagogical practices. Rather than being explicitly introduced as formal theoretical constructs, these elements are implicitly conveyed through routine religious activities, including daily prayers, Qur'anic recitation, storytelling, and consistent teacher modeling.

This pattern is reinforced by empirical interview data. One teacher stated:

"We do not teach Islamic psychology as a concept, but we guide children through daily practices like praying, being honest, and respecting others so that these values become part of their character." (Teacher 1, RA Batam)

A school principal further explained:

"Children at this age learn best through repetition and example. That is why we focus on habituation rather than theoretical explanation." (Principal 1, RA Batam)

Additionally, a parent observed:

"Since attending RA, my child has shown better behavior at home, especially in manners and discipline in worship." (Parent 2, RA Batam)

These findings demonstrate that the integration of Islamic psychology operates within an experiential and relational learning framework, where moral and spiritual development is fostered through repeated

practice and social interaction. This is consistent with recent research emphasizing that early childhood learning is fundamentally shaped by interactional experiences and value-based environments (Yoshikawa, H., Weiland, C., Brooks-Gunn, J., 2020); (Thorkildsen, 2021).

Analytically, this reflects a practice-oriented model of integration, where educators rely more on pedagogical experience than on formal theoretical frameworks. While this approach is effective in fostering behavioral outcomes, it also reveals a conceptual gap. Recent studies highlight that religious-based education often lacks systematic integration with contemporary psychological theories, which may limit its pedagogical depth and consistency (Tan, 2020; Jackson, 2014).

From a scientific perspective, the findings align with advances in developmental and educational psychology, which emphasize the importance of early relational experiences in shaping children's cognitive and emotional development. Research indicates that habit formation, guided interaction, and emotional engagement play a crucial role in early learning processes (Harris, 2021); (Hirsh-Pasek, K., Zosh, J. M., Golinkoff, R. M., Gray, J. H., Robb, M. B., & Kaufman, 2022). In this regard, the practices observed in RA institutions—particularly the emphasis on routine, modeling, and moral guidance—can be understood as being aligned with contemporary scientific insights into how young children learn.

However, despite these strengths, the study identifies a significant limitation: the lack of explicit theoretical articulation among educators. Teachers tend to implement Islamic psychological values intuitively, without formally connecting them to established frameworks in psychology or education. This lack of conceptual clarity may lead to inconsistencies across institutions and limit the transferability and scalability of effective practices. As noted by Neil Mercer (2021), effective pedagogy requires not only practice but also a strong theoretical foundation that supports reflective teaching and continuous improvement.

Therefore, this study argues that while RA institutions in Batam have successfully integrated the essence of Islamic psychology into daily practice, there is a critical need to bridge the gap between implicit practice and explicit theory. Strengthening this integration through structured professional development, curriculum alignment, and interdisciplinary collaboration between Islamic studies and modern psychology would significantly enhance the quality and sustainability of early childhood Islamic education.

Fitrah-Based Holistic Approach in Early Childhood Islamic Education

The findings further indicate that the implementation of Islamic Religious Education (IRE) in Raudhatul Athfal (RA) institutions in Batam reflects a holistic educational approach grounded in the concept of *fitrah*. This approach emphasizes the balanced development of children's spiritual, emotional, social, and cognitive dimensions, aligning with the Islamic view that children are born with an innate potential that must be nurtured through appropriate environmental stimulation.

Teachers reported that learning activities are designed not only to develop cognitive skills but also to cultivate emotional sensitivity, moral awareness, and spiritual attachment. For instance, religious storytelling is used not merely to convey knowledge but to foster empathy and moral reflection. Similarly, routine worship practices are intended to build emotional discipline and spiritual connection.

This is supported by interview data:

"We try to educate children as a whole – not only their thinking but also their attitudes and spirituality. All activities are connected to building their character." (Teacher 3, RA Batam)

A parent also highlighted the holistic impact:

"My child is not only learning academically but also becoming more caring and emotionally aware." (Parent 1, RA Batam)

These findings suggest that the educational practices in RA institutions are aligned with a holistic paradigm of child development, where learning is viewed as an integrated process involving multiple domains of human development. Contemporary research supports this perspective, emphasizing that early childhood education should address cognitive, emotional, and social development simultaneously to achieve optimal outcomes (Rogoff, 2021).

Moreover, the concept of *fitrah* in Islamic psychology resonates with modern developmental theories that highlight the role of innate potential and environmental interaction in shaping child development. Studies in developmental science indicate that children's early experiences significantly influence the development of self-regulation, empathy, and moral reasoning (Shonkoff, J. P., & Garner, 2012); (Lerner, R. M., Lerner, J. V., Bowers & Geldhof, 2020). However, the study also reveals that the implementation of this holistic approach remains largely intuitive and context-dependent. There is limited use of structured frameworks or assessment tools to measure the development of non-cognitive domains such as spirituality and emotional intelligence. This lack of formalization may hinder the evaluation and standardization of holistic education practices across institutions.

Therefore, while the *fitrah*-based holistic approach is inherently present in RA educational practices, there is a need for systematic conceptualization and pedagogical structuring. Integrating Islamic philosophical foundations with contemporary developmental frameworks would enhance both the theoretical robustness and practical effectiveness of early childhood Islamic education.

Critical Challenges in Integrating Islamic Psychology within Early Childhood Education

Despite the evident integration of Islamic psychological values and the implementation of a *fitrah*-based holistic approach, the findings reveal several critical challenges that limit the effectiveness, consistency, and scalability of such practices across Raudhatul Athfal (RA) institutions in Batam City.

3.1. Lack of Conceptual Clarity and Theoretical Framework

One of the most significant challenges identified in this study is the absence of explicit conceptual understanding among educators regarding Islamic psychology. While teachers actively implement values such as *fitrah*, moral discipline, and spiritual awareness, these practices are largely intuitive and experience-based rather than grounded in a structured theoretical framework.

This issue is reflected in the interview data:

"We apply Islamic values in teaching, but we are not familiar with the term Islamic psychology or its theoretical framework." (Teacher 2, RA Batam)

This finding indicates a gap between practice and theory, where implementation exists without formal conceptualization. Such a gap may lead to inconsistencies in pedagogical approaches and limit opportunities for reflective teaching and professional development. Contemporary educational research emphasizes that effective teaching requires not only practical experience but also a strong theoretical foundation to guide instructional decision-making (Darling-Hammond, L., Hyler, M. E., & Gardner, 2017); (Biesta, 2022).

3.2. Limited Professional Training and Inter-disciplinary Competence

Another critical issue is the lack of specialized training that integrates Islamic educational philosophy with modern psychological and pedagogical knowledge. Most teachers in RA institutions rely on traditional teaching methods and personal experience rather than formal training in child psychology or holistic education frameworks.

A teacher explained:

"We usually follow the curriculum and rely on experience. There is no specific training"

that combines Islamic teaching with child psychology.” (Teacher 4, RA Batam)

This limitation reflects a broader structural issue in teacher preparation programs, where interdisciplinary competence remains underdeveloped. Recent studies highlight the importance of equipping educators with integrated knowledge across disciplines to address the complexity of early childhood development (Organisation for Economic Co-operation and Development, 2021); (Schleicher, 2020).

3.3. Absence of Standardized Assessment for Holistic Development

The study also finds that while RA institutions emphasize holistic development, there is a lack of systematic assessment tools to measure non-cognitive outcomes such as spiritual growth, emotional regulation, and moral behavior.

A school principal stated:

“We can observe children’s behavior, but we do not have a specific instrument to measure their spiritual or emotional development.”
(Principal 2, RA Batam)

This challenge limits the ability of institutions to evaluate learning outcomes comprehensively. In contemporary education systems, assessment is not only used to measure academic achievement but also to capture broader developmental dimensions, including socio-emotional and ethical competencies (Brookhart, 2021); (Pellegrino, 2020).

3.4. Variability Across Institutions

Another important finding is the variation in implementation across different RA institutions in Batam. Differences in teacher background, institutional culture, and resource availability result in uneven application of Islamic psychological principles.

This variability suggests the absence of a standardized model or guideline for integrating Islamic psychology into early childhood education. Without a shared framework, practices remain context-dependent and difficult to replicate or scale. This issue is consistent with findings in comparative education research, which highlight the importance of policy alignment and institutional coherence in ensuring educational quality.

3.5. Tension between Traditional Practices and Contemporary Educational Demands

The study identifies a subtle but important tension between traditional religious pedagogies and contemporary educational expectations. While traditional approaches emphasize obedience, discipline, and moral transmission, modern educational paradigms prioritize critical thinking, child-centered learning, and emotional development.

This tension creates a pedagogical dilemma for educators:

“We want children to be disciplined and obedient, but at the same time, we are encouraged to make learning more interactive and child-centered.” (Teacher 5, RA Batam)

Balancing these two paradigms requires a reconceptualization of Islamic education, where traditional values are not abandoned but reinterpreted in ways that are compatible with contemporary developmental science (Biesta, 2022); (Tan, 2020).

Overall, these challenges indicate that the integration of Islamic psychology in early childhood education is substantively present but structurally underdeveloped. The core issue lies not in the absence of Islamic values within educational practices, but rather in the lack of systematization, explicit theoretical grounding, and institutional support that can sustain and standardize such integration. In this regard, the findings highlight the urgent need for several strategic improvements, including clearer conceptual articulation of Islamic psychological constructs, the provision of interdisciplinary teacher training that bridges religious knowledge and modern developmental science, the development of holistic assessment tools to capture non-cognitive dimensions of learning, and the establishment of institutional frameworks that ensure consistency across educational settings. Without addressing these structural gaps, the integration of Islamic psychology is likely to remain fragmented, implicit, and difficult to scale, thereby limiting its long-term impact on the quality of early childhood Islamic education.

4. Implications for Theory and Practice

The findings of this study provide important implications for both theoretical development and educational practice in integrating Islamic psychology within early childhood education. From a theoretical perspective, key principles such as *fitrah*, moral consciousness, and spiritual development are already embedded in pedagogical practices, although they remain implicit and practice-driven. This suggests that the primary challenge lies not in introducing new concepts but in systematically articulating existing practices into a coherent theoretical framework that bridges classical Islamic thought with contemporary developmental science (Rothman, A., & Coyle, 2018); (Sahin, 2018). Furthermore, contemporary research emphasizes that effective pedagogy should integrate cognitive, emotional, and moral dimensions within a unified developmental framework (Saracho, 2023).

At the practical level, these findings highlight the urgency of strengthening teacher capacity through interdisciplinary professional development that integrates Islamic values with modern theories of child

development. Evidence suggests that teacher competence and continuous professional learning are critical determinants of educational quality, particularly in holistic and value-based learning environments (Darling-Hammond, L., Hyler, M. E., & Gardner, 2017); (Organisation for Economic Co-operation and Development, 2021). In addition, the absence of standardized assessment tools indicates the need to develop holistic evaluation systems capable of capturing non-cognitive domains such as moral, emotional, and spiritual development (Brookhart, 2021); (Pellegrino, 2020).

This study opens avenues for future research, particularly in developing empirically grounded models of Islamic psychology-based pedagogy and designing valid instruments to assess holistic child development. Previous studies have also highlighted that one of the main challenges in Islamic education is the lack of integration between theoretical constructs and practical implementation, resulting in fragmented educational practices (Tan, 2020); (Jackson, 2014). This study ultimately underscores the importance of advancing a more coherent and integrative framework for early childhood Islamic education by bridging the gap between theoretical foundations and pedagogical practice. While Islamic psychology offers rich conceptual insights into holistic human development, its practical application remains fragmented without systematic articulation and empirical grounding. Therefore, future research is encouraged to develop contextually relevant and evidence-based pedagogical models, as well as valid and reliable instruments capable of capturing children's cognitive, emotional, moral, and spiritual growth. Such efforts are essential not only for strengthening the academic rigor of Islamic education but also for ensuring its relevance in addressing contemporary educational challenges. By fostering a more integrated, reflective, and research-informed approach, Islamic early childhood education can meaningfully contribute to the development of well-rounded individuals grounded in both spiritual values and scientific understanding.

Conclusion

This study concludes that the integration of Islamic psychology in Islamic Religious Education within Raudhatul Athfal (RA) institutions in Batam City is substantively present yet structurally underdeveloped. The findings demonstrate that core Islamic psychological principles—such as fitrah, moral consciousness, and spiritual development—have been effectively embedded in daily pedagogical practices through habituation, modeling, and value internalization. However, this integration remains

largely implicit, practice-driven, and lacking in theoretical articulation, resulting in inconsistencies across institutions and limited scalability.

Furthermore, the study reveals that the implementation of a fitrah-based holistic approach has supported the development of children's cognitive, emotional, social, and spiritual dimensions in an integrated manner. Despite this strength, several critical challenges persist, including the absence of conceptual clarity among educators, limited interdisciplinary professional training, the lack of standardized assessment tools for holistic development, institutional variability, and the tension between traditional pedagogical practices and contemporary educational demands.

Overall, this study highlights the urgent need to transform the integration of Islamic psychology from an intuitive and fragmented practice into a structured, theoretically grounded, and systemically supported framework. Such transformation is essential to ensure consistency, sustainability, and broader educational impact. By bridging Islamic philosophical foundations with contemporary developmental science, early childhood Islamic education can evolve into a more holistic, evidence-based, and contextually relevant model that effectively responds to the demands of modern education while preserving its core spiritual values.

Acknowledgments

The authors would like to express their sincere gratitude to the principals, teachers, parents, and staff of the selected Raudhatul Athfal institutions in Batam City, Riau Islands Province, Indonesia, for their participation, cooperation, and valuable support during the research process. The authors also acknowledge all individuals who contributed to the completion of this study.

Author Contributions

Conceptualization, N.; methodology, N.; software, N.; validation, N., J.M., and Y.F.W.; formal analysis, N.; investigation, N. and J.M.; resources, N.; data curation, N.; writing—original draft preparation, N.; writing—review and editing, N., J.M., and Y.F.W.; visualization, N.; supervision, J.M. and Y.F.W. All authors have read and agreed to the published version of the manuscript.

Funding

This research received no external funding

Conflicts of Interest

The authors declare no conflict of interest.

References

- Awaad, R., Fisher, A. J., Ali, S., & Rasgon, N. (2019). Development and validation of the Muslims'

- perceptions and attitudes to mental health (M-PAMH) scale with a sample of American Muslim women. *Journal of Muslim Mental Health*, 13(2). <https://doi.org/10.3998/jmmh.10381607.0013.205>.
- Biesta, G. (2022). *World-centred education: A view for the present*. Routledge. Retrieved from <https://www.routledge.com/World-Centred-Education-A-View-for-the-Present/Biesta/p/book/9780367565527>
- Brookhart, S. M. (2021). *Classroom assessment and grading that work*. ASCD. Retrieved from https://books.google.co.id/books/about/Classroom_Assessment_Grading_that_Work.html?id=ti7rrzmQM88C&redir_esc=y
- Child, C. on the D. (2021). *InBrief: The science of early childhood development*. Harvard University. Retrieved from <https://developingchild.harvard.edu/resources/inbrief/inbrief-science-of-eecd/>
- Creswell, J. W. (2024). *Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.)*. SAGE Publications.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis. *Child Development Research*, 82(1), 405–432. <https://doi.org/10.1111/j.1467-8624.2010.01564.x>
- Harris, P. L. (2021). *Early childhood development and the growth of imagination*. Oxford University Press.
- Hirsh-Pasek, K., Zosh, J. M., Golinkoff, R. M., Gray, J. H., Robb, M. B., & Kaufman, J. (2022). *A new path to education reform: Playful learning promotes 21st-century skills*. Brookings Institution.
- Howard-Jones, P. A. (2014). Neuroscience and education: Myths and messages. *Nature Reviews Neuroscience*, 15(12), 817–824. <https://doi.org/10.1038/nrn3817>
- Immordino-Yang, M. H., Darling-Hammond, L., & Krone, C. R. (2019). *Nurturing nature: How brain development is inherently social and emotional, and what this means for education*. The Aspen Institute.
- Immordino-Yang, M. H. (2016). *Emotions, learning, and the brain*. W. W. Norton & Company.
- Jackson, R. (2014). *Signposts: Policy and practice for teaching about religions and non-religious world views in intercultural education*. Council of Europe.
- Lerner, R. M., Lerner, J. V., Bowers, E. P., & Geldhof, G. J. (2020). *Positive youth development and relational developmental systems*. In *Handbook of adolescent psychology*. Wiley.
- Norozi, A. (2023). *Holistic education and human development: Integrating multiple dimensions of learning*. *Journal of Educational Studies*, 15(2), 45–58.
- Organisation for Economic Co-operation and Development. (2021). *Teachers and school leaders as lifelong learners*. OECD Publishing.
- Organisation for Economic Co-operation and Development. (2023). *Digital environments and children's well-being*. OECD Publishing.
- Pellegrino, J. W. (2020). *Assessment of complex learning outcomes*. National Academies Press.
- Rogoff, B. (2021). *Learning by observing and pitching in to family and community endeavors (Expanded ed.)*. Oxford University Press.
- Rothman, A., & Coyle, A. (2018). Toward a framework for Islamic psychology and psychotherapy: An Islamic model of the soul. *Journal of Religion and Health*, 57(5), 1731–1744. <https://doi.org/10.1007/s10943-018-0651-x>
- Sahin, A. (2018). *New directions in Islamic education: Pedagogy and identity formation*. Kube Publishing.
- Saracho, K. E. (2023). *Contemporary perspectives on early childhood education*. Early Child Development and Care.
- Schleicher, A. (2020). *World class: How to build a 21st-century school system*. OECD Publishing.
- Shonkoff, J. P., & Garner, A. S. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, 129(1), e232–e246. <https://doi.org/10.1542/peds.2011-2663>
- Shonkoff, J. P., & Phillips, D. A. (2000). *From neurons to neighborhoods: The science of early childhood development*. National Academy Press.
- Tan, C. (2020). *Islamic education and indoctrination: The case in Indonesia*. Routledge.
- Thorkildsen, T. A. (2021). *Developmental psychology and education: Bridging theory and practice*. Cambridge University Press.
- Tokuhama-Espinosa, T. (2019). *Neuromyths: Debunking false ideas about the brain*. W. W. Norton & Company.
- Yoshikawa, H., Weiland, C., Brooks-Gunn, J. (2020). *Investing in our future: The evidence base on preschool education*. Society for Research in Child Development.