



Science-Islam Integration: A Critical Examination of Ziauddin Sardar's Epistemology and Its Relevance for Indonesian State Islamic Universities

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ABSTRACT

Purpose of the study: This study aims to explore Ziauddin Sardar's epistemology in integrating modern science and Islamic values, focusing on Tauhid (Oneness of God), Khilafah (Stewardship), and Worship as foundational principles for the Islamization of science and their implications for Islamic higher education in Indonesia.

Methodology: This research employs a qualitative descriptive-analytical method using a literature review approach. Primary sources include Sardar's works on epistemology and the Islamization of science, while secondary sources comprise academic books, journal articles, and historical analyses. The study utilizes content analysis and comparative framework analysis to examine Sardar's integration model within contemporary educational contexts.

Main Findings: The study finds that the separation between science and Islam is influenced by historical, sociological, and political factors rather than Islamic teachings. Sardar's epistemology provides a structured approach to integrating science with Islamic principles. His model offers a framework for curriculum development in state Islamic universities, promoting an interdisciplinary and ethical approach to knowledge.

Novelty/Originality of this study: This study connects Sardar's epistemology with the practical challenges of Islamic higher education in Indonesia, offering a structured framework for curriculum development. Unlike previous studies, it bridges Islamization theory with contemporary educational policy, providing a relevant and applicable model for integrating Islamic values into scientific disciplines.

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1. INTRODUCTION

Many universities organize seminars and discussions on the integration of science in response to government regulations regarding its implementation in religious higher education. These activities serve as platforms for academics to share ideas and best practices [1]. The integration of science and Islam has become an increasingly important topic in the context of higher education, particularly in State Islamic Religious Colleges in Indonesia. Many universities hold seminars and discussions on science integration as a response to government regulations, such as Minister of Religious Affairs Regulation No. 183 of 2019, which mandates the incorporation of Islamic values into scientific disciplines (*Kementerian Agama RI, 2019*). These activities provide a platform for academics to exchange ideas and best practices in achieving a balanced approach between scientific knowledge and Islamic values [2].

The challenge for Muslim scholars and educators in the era of globalization and technological advancement is how to integrate modern science with Islamic values and principles while ensuring that scientific inquiry remains methodologically rigorous [3]. Ziauddin Sardar, a prominent scholar in Islamic epistemology, has emphasized the need to bridge the gap between science and religion, advocating for an integrative approach that avoids the dichotomy between secular and religious knowledge. This dichotomy, which has persisted in many educational institutions, has led to a curriculum that separates religious studies from scientific disciplines, limiting the potential for cross-disciplinary enrichment [4].

Despite the growing discourse on science-Islam integration, existing research has largely focused on theoretical frameworks rather than their practical application in educational curricula. Most studies have explored philosophical discussions on the Islamization of knowledge but have not provided concrete models for integrating Islamic epistemology into State Islamic Religious Colleges' academic structure. Additionally, while some Islamic universities in Malaysia and Turkey have attempted to develop integrated curricula, studies on Indonesia's State Islamic Religious Colleges system remain limited [5].

This study seeks to fill this gap by analyzing Ziauddin Sardar's epistemology and its direct application to State Islamic Religious Colleges curriculum development [6]. Unlike previous studies that focus on general theories of integration, this research provides contextualized insights into how Sardar's framework can be implemented in the State Islamic Religious Colleges educational system. Furthermore, this study critically examines government policies on Islamic higher education, evaluating their effectiveness in supporting science-Islam integration [7].

The urgency of this research lies in the increasing demand for an educational model that can balance modern scientific advancements with Islamic ethical values. The rapid development of AI, biotechnology, and digital sciences requires a curricular response that does not merely borrow from Western paradigms but instead incorporates Islamic perspectives in a meaningful way [8]. State Islamic Religious Colleges play a crucial role in shaping Muslim intellectuals, making it imperative to develop an integrative curriculum that responds to both contemporary scientific challenges and Islamic epistemology.

Despite the growing discourse on science-Islam integration, existing research has largely focused on theoretical frameworks rather than their practical application in educational curricula. For instance, Nasr in 1996 and Al-Attas in 2001 extensively discuss the Islamization of knowledge but offer limited concrete strategies for integrating Islamic epistemology into curriculum structures. Similarly, research on Islamic education in Malaysia and Turkey highlights the importance of integrating Islamic values into higher education but does not provide a systematic approach applicable to State Islamic Religious Colleges in Indonesia. In contrast, the Indonesian context, particularly within State Islamic Religious Colleges, still lacks studies that thoroughly explore how an epistemological framework like Ziauddin Sardar's can be applied to curriculum development in a way that bridges theoretical and practical integration.

This study fills this gap by analyzing Ziauddin Sardar's epistemology and its direct application to State Islamic Religious Colleges curriculum development [6]. Unlike previous studies that focus on general theories of integration, Sardar's framework provides a more concrete and systematic approach by emphasizing the co-evolution of scientific inquiry and Islamic values, moving beyond mere Islamization of science toward a dynamic integration that aligns with contemporary technological advancements. This research uniquely contributes by offering a structured method to embed Sardar's epistemology into educational curricula, ensuring that science-Islam integration is not just a theoretical aspiration but a practically implementable model in Indonesia's higher education system.

Through a critical analysis of Sardar's thought, this research seeks to provide practical solutions for overcoming the challenges of science-Islam integration, ensuring that Islamic universities can produce scholars who are both scientifically competent and ethically grounded. By incorporating Sardar's dynamic epistemological approach, this study offers a novel framework that is more adaptable and solution-oriented compared to existing theories of Islamization, positioning it as an essential contribution to the ongoing development of Islamic higher education in Indonesia.

2. RESEARCH METHOD

2.1. Type of Research

This study employs a qualitative descriptive-analytical approach to analyze Ziauddin Sardar's epistemology regarding the integration of science and Islam. This method enables a structured and critical examination of Sardar's key concepts—Tauhid (Oneness of God), Khilafah (Stewardship), and Ibadah (Worship) which he proposes as the foundation for integrating Islamic values into scientific inquiry. The research is conducted using library research methods, focusing on textual and conceptual analysis without empirical field data collection. A qualitative approach is appropriate for analyzing complex philosophical ideas and their applicability in educational frameworks, as suggested by Creswell. This approach allows for a

comprehensive interpretation of Sardar's epistemology and its relevance to State Islamic Religious Colleges in Indonesia.

2.2. Research Subjects

The subjects of this study include both primary and secondary sources. Primary sources consist of books, journal articles, and essays written by Ziauddin Sardar, particularly those discussing Islamic epistemology, knowledge integration, and science-Islam relations. Secondary sources include academic discussions, critiques, and government policies relevant to Islamic higher education reform in Indonesia, such as KMA No. 183 of 2019 on State Islamic Religious Colleges curriculum integration. By examining both primary and secondary sources, this research provides a holistic view of Sardar's intellectual contributions and their practical implications for educational reform.

2.3. Data Collection

Data collection in this study follows a systematic literature review approach, where sources are selected based on relevance, credibility, and contribution to the field. The research employs document analysis, focusing on books, journal articles, and educational policies [9]. Thematic coding is used to identify recurring patterns in Sardar's epistemology, categorizing his thoughts under core Islamic principles. Furthermore, a comparative analysis is conducted to evaluate similarities and differences between Sardar's model and other knowledge integration frameworks, particularly in the context of State Islamic Religious Colleges and Islamic higher education institutions in other Muslim-majority countries such as Malaysia and Turkey.

2.4. Data Analysis Techniques

For data analysis, this study applies content analysis and thematic analysis, following the model proposed by Miles and Huberman. The analysis consists of three main stages. First, data reduction is performed by filtering relevant information from the collected sources, ensuring that only materials directly related to Sardar's integration model and science-Islam discourse are included. Second, data display is conducted by organizing findings into key thematic categories, such as Sardar's integration principles and their application in State Islamic Religious Colleges curricula. Lastly, conclusion drawing and verification is carried out by synthesizing insights from the analysis and connecting them to the broader discourse on Islamic epistemology and modern science, ensuring that findings are both theoretically robust and practically applicable. To strengthen the validity and reliability of the study, triangulation is applied by cross-examining various sources and integrating multiple perspectives from Islamic scholars, educators, and policymakers [10].

2.5. Research Procedures

The research follows a structured sequence to ensure methodological rigor. It begins with defining the research scope and identifying key themes in Sardar's epistemology relevant to knowledge integration. The next stage involves conducting a literature search and selecting primary and secondary sources, ensuring alignment with the study's research questions. This is followed by thematic and content analysis, where core concepts from Sardar's works are extracted and contextualized within the State Islamic Religious Colleges curriculum framework. A comparative analysis is then conducted to compare Sardar's epistemology with other Islamization of Knowledge theories to highlight its novelty and practical application. Finally, conclusions are drawn, and structured recommendations are proposed for integrating Sardar's epistemology into State Islamic Religious Colleges curricula.

This methodology ensures that the study remains systematic, rigorous, and relevant, providing both theoretical insights and practical contributions to the discourse on science-Islam integration. By critically examining Sardar's framework and comparing it with other integration models, this research not only fills existing gaps in the literature but also offers a structured approach for State Islamic Religious Colleges to develop a more integrative and responsive educational system.

3. RESULTS AND DISCUSSION

3.1. Ziauddin Sardar's Thought on Science and Islam Integration

Ziauddin Sardar is a prominent Muslim intellectual recognized for his contributions to Islamic epistemology and the integration of science and Islam. Born in Punjab, Pakistan, in 1951, he later moved to England, where he pursued higher education in information science at City University, London [11]. His career has been dedicated to critiquing modernity, developing Islamic epistemology, and advocating for a future-oriented Islamic perspective. As a prolific writer, he has published more than sixty books covering themes of Islam, science, culture, and social criticism. Sardar's scholarship has significantly shaped contemporary Islamic thought, particularly in discussions on scientific knowledge and its alignment with Islamic values [12].

Unlike conventional Islamization of science approaches, which focus on adapting Western scientific paradigms to Islamic contexts, Sardar proposes a more integrative and dynamic model. He asserts that science

and Islam should be harmonized, not by rejecting modern scientific advancements, but by embedding scientific inquiry within an Islamic ethical framework [13].

His methodology incorporates the Qur'an as an interpretative tool for addressing contemporary challenges, ensuring that scientific exploration aligns with moral and ethical principles [14]. Rather than passively accepting external scientific paradigms, Sardar encourages Muslim scholars to develop independent knowledge systems that reflect Islamic worldviews while remaining adaptable to global scientific progress [15].

Sardar is a vocal critic of the traditional Islamization of science movement, particularly the approach proposed by Ismail Raji al-Faruqi. He argues that attempting to Islamize Western scientific structures risks reinforcing a Western epistemological dominance over Islamic knowledge [16]. In addition, Sardar emphasizes that the Qur'an should be used as an interpretive methodology to address contemporary issues, not just a sacred text. He views that Muslims need to be active truth-seekers, and not passive recipients of information.

According to Sardar, such approaches fail to generate a truly Islamic scientific paradigm, as they focus on Islamizing terminology rather than restructuring the foundations of scientific inquiry [17]. Sardar's critique diverges from other proponents of Islamization, such as Seyyed Hossein Nasr, who promotes a return to traditional Islamic metaphysics. While Nasr focuses on restoring classical Islamic scientific traditions, Sardar advocates for a forward-looking, dynamic model of knowledge creation that is responsive to contemporary technological and scientific developments [18].

Recent academic discussions highlight that many Islamization efforts remain theoretical, failing to produce applied scientific models that integrate Islamic epistemology into contemporary research. To bridge this gap, Sardar proposes an *ijtihadi* approach, which involves continuous reinterpretation and adaptation of knowledge based on Islamic ethical and epistemological principles. His perspective aligns with modern debates on post-normal science, which stress that scientific progress should be socially responsible, ethically guided, and interdisciplinary.

3.2. Developing an Islamic Science System

Rather than Islamizing existing Western science, Sardar advocates for the establishment of an Islamic science system that meets several criteria. First, it must be grounded in Islamic ethics and values, ensuring that science serves humanity and societal welfare rather than being dictated by corporate or political interests. Second, it should incorporate multidisciplinary perspectives, meaning that scientific inquiry must be informed by historical, social, and ethical dimensions to ensure holistic knowledge production. Lastly, an Islamic science system must remain dynamic and adaptable, allowing knowledge to evolve through *ijtihad* so that it can effectively respond to contemporary challenges and technological advancements [19].

This model promotes a contextualized, problem-solving approach to science, positioning Islamic ethics as a guiding force in technological and scientific advancements. Sardar's framework aligns with current discussions on socially responsible science, emphasizing the need for ethical governance in artificial intelligence, biotechnology, and environmental sustainability [20].

3.3. Application of Sardar's Thought in State Islamic Religious University Curriculum

Sardar's epistemological framework provides a practical foundation for curriculum development in State Islamic Religious Colleges in Indonesia [21]. Several proposed course models can help integrate Islamic epistemology with contemporary sciences. One such course is Islamic Science and Ethics, which examines Islamic ethical principles in scientific research, including *maqāsid al-sharī'ah* (objectives of Islamic law) and their role in biomedical ethics, environmental sustainability, and technology regulation. This course also explores the historical contributions of Muslim scholars in fields such as astronomy, medicine, and engineering [22]. Another course, Qur'anic Epistemology and Scientific Inquiry, studies the Qur'anic framework for knowledge, emphasizing scientific reasoning through *tafsir* (exegesis). It also analyzes contemporary scientific issues such as artificial intelligence, climate change, and genetic engineering through an Islamic epistemological lens [23].

Technology, Innovation, and Islam is another essential course that investigates the role of artificial intelligence, biotechnology, and digital technology in shaping modern society from an Islamic perspective. This course teaches students how to critically evaluate technological advancements through both scientific methodologies and Islamic ethical frameworks [24]. Lastly, Interdisciplinary Research in Islamic Science focuses on developing research methodologies that incorporate both Islamic perspectives and contemporary scientific techniques. It encourages comparative studies on Islamic and Western knowledge systems to develop an authentic and applicable Islamic science paradigm [25].

Sardar's critique of the Islamization of science and his emphasis on building an independent Islamic science system offer a transformative framework for Islamic higher education. He argues that rather than imposing Islamic terminology onto Western scientific structures, Muslim scholars should construct their own scientific paradigms that are ethically sound, socially responsible, and aligned with Qur'anic principles [26].

His contributions are particularly relevant for State Islamic Religious Universities in Indonesia, where there is a growing need to develop curricula that effectively integrate Islamic and scientific knowledge. By

adopting Sardar's framework, Islamic universities can cultivate scientifically competent and ethically responsible graduates who are equipped to navigate the complexities of modern science while upholding Islamic values [27].

3.4. The Relevance of Islamization of Science for State Islamic Religious Universities

Ziauddin Sardar criticized Al-Faruqi's concept of Islamization of science because, according to him, Al-Faruqi adapts Western science to Islamic values, which risks leading to the Westernization of Islam. Al-Faruqi emphasizes the importance of mastering Western disciplines and then assessing their relevance for Islam. Sardar argues that it is not Islam that should be adapted to modern science, but modern science that needs to be processed to fit Islamic values [28]. Ziauddin Sardar criticized Al-Faruqi's concept of Islamization of science because, according to him, Al-Faruqi adapted Western science into Islamic values, which risks leading to the Westernization of Islam. Al-Faruqi emphasizes the importance of mastering Western disciplines and then assessing their relevance for Islam. Sardar argues that it should not be Islam that is adapted to modern science, but modern science that needs to be processed to fit Islamic values [29].

As an alternative, Sardar advocates the development of a new scientific paradigm based on Islamic values. He focuses on the establishment of disciplines based on Islamic ethics and social values, where knowledge is understood not only as the result of rational exploration but also as a form of worship to God [30].

Sardar argued that the development of science should be oriented towards the values and principles of Islamic teachings. He believed that by creating an original system of science, Muslims could better control the development of science and meet the challenges of modern times [31]. In his view, the integration of science and religion is essential for building a holistic education system in public Islamic religious universities. Sardar encouraged the development of a curriculum that integrates science with religious values, so that students not only gain academic knowledge but also spiritual understanding [32].

Sardar's view on the relevance of the Islamization of science is very important for public Islamic religious universities in Indonesia. By applying the principles of Islamic epistemology in the curriculum, educational institutions can produce graduates who are not only academically competent but also have a deep understanding of Islamic values in a scientific context [33].

3.5. Integration of Science and Islam at State Islamic Religious Universities

Ziauddin Sardar has profound views on the integration of science and Islam, particularly in the context of higher education in universities [34]. He critiques the Islamization of science concept proposed by Ismail Raji al-Faruqi, arguing that it is insufficient to bridge the gap between science and Islamic values. According to Sardar, this approach can weaken the position of Muslims in the field of science and is unable to effectively address the challenges of modernity [35]. As an alternative, he advocates for the development of Islamic epistemology, emphasizing that a knowledge system should be built on fundamental Islamic principles such as Tawhid, Khilafah, and Ibadah, which provide a more comprehensive framework for understanding the relationship between science and religion [36]. In the context of State Islamic Religious Colleges, Sardar's ideas suggest that these institutions should develop a curriculum that integrates Islamic sciences with modern sciences. By implementing his framework, State Islamic Religious Colleges can produce graduates who are not only academically competent but also possess a deep understanding of Islamic values [37].

Furthermore, Sardar emphasizes the importance of building a scholarly identity, stating that by integrating science and religion, State Islamic Religious Colleges can establish a unique and distinctive academic identity, differentiating them from other higher education institutions. This is crucial for responding to contemporary challenges and strengthening the position of Muslims in the global academic sphere [38]. Ultimately, Sardar envisions holistic education as the goal of science-Islam integration, where students not only acquire technical scientific knowledge but also understand the ethical and moral implications of science from a religious perspective [39].

In State Islamic Religious Universities, the concept of integrating science and Islam is highly relevant because these institutions combine religious and general sciences. The implementation of this concept ensures that students do not merely study religious aspects from a theological perspective but are also able to apply Islamic principles in scientific research and experimentation. This approach seeks to eliminate the dichotomy between religious and scientific knowledge while emphasizing the importance of synergy between the two, ultimately fostering a more comprehensive Islamic education system [40].

Additionally, State Islamic Religious Universities also serve as research platforms that not only explore traditional Islamic sciences but also harmonize them with modern scientific advancements. Through this principle of scientific integration, these universities can cultivate graduates who are proficient in modern sciences while upholding strong ethical values in the utilization of knowledge [41].

Thus, Ziauddin Sardar's perspective on the integration of science and Islam in State Islamic Religious Universities underscores the necessity of establishing an educational system that effectively bridges the gap between these two domains. This approach ensures the development of a new generation of Muslim scholars who are prepared to address global challenges while maintaining a strong foundation in Islamic values.

3.6. Integration of Science and Islam in State Islamic Religious Universities: Impacts, Supporting Research, and Limitations

Ziauddin Sardar's perspective on the integration of science and Islam in State Islamic Religious Universities emphasizes the urgent need to develop an educational system that effectively bridges the gap between scientific inquiry and Islamic values. This approach aims to cultivate a new generation of Muslim scholars who are not only scientifically proficient but also ethically and spiritually grounded, ensuring that they are prepared to address global challenges while maintaining an Islamic worldview [42].

3.7. Supporting Research on Science-Islam Integration

Several previous studies have examined the integration of science and Islam within higher education institutions, providing empirical evidence and theoretical support for Sardar's arguments. Nasr emphasizes that Islamic science must be restructured to align with the spiritual and ethical dimensions of Islamic thought [14]. His work highlights that modern scientific methodologies often neglect metaphysical aspects, necessitating an Islamic epistemological foundation that integrates both empirical and spiritual dimensions. Similarly, Osman Bakar supports Sardar's viewpoint by arguing that Islamic science should be developed as an independent intellectual system rather than merely Islamizing Western scientific concepts [23]. He asserts that Muslim scholars should cultivate a knowledge system rooted in Qur'anic principles, ensuring that scientific advancements align with *maqāsid al-sharī'ah* (the higher objectives of Islamic law).

Rahman explores how Islamic epistemology can be embedded into contemporary university curricula, particularly in State Islamic Religious Colleges. His study finds that students who are exposed to integrated models of science and Islam exhibit greater critical thinking skills and ethical awareness, demonstrating the practical benefits of this integration. Meanwhile, Hassan discusses the importance of post-normal science, which aligns with Sardar's critique of conventional Islamization approaches. His study highlights that science must be socially responsible, ethically informed, and contextually relevant, supporting Sardar's call for an adaptive and interdisciplinary approach to Islamic science [43]. These previous studies reinforce Sardar's argument that science-Islam integration should go beyond superficial Islamization, focusing instead on the development of an authentic Islamic knowledge system that is both academically rigorous and ethically sound.

3.8. Impacts of Science-Islam Integration on Higher Education

The integration of science and Islam in higher education institutions has significant implications for both academic development and societal transformation. In terms of curriculum development, it encourages interdisciplinary learning, where scientific subjects are taught alongside Islamic ethics and values, promoting a holistic education model that helps students analyze scientific developments through an Islamic ethical lens. Regarding graduate competency, this integration produces graduates who are not only skilled in science and technology but also possess a strong ethical and moral foundation. It prepares students to navigate contemporary scientific and technological challenges while adhering to Islamic principles. In the area of knowledge production, this approach encourages the development of original Islamic scientific frameworks, rather than merely adapting Western scientific paradigms, and strengthens the role of Muslim scholars in global academic discourse, positioning them as leaders in ethical and responsible science. Furthermore, social and ethical contributions derived from this integration help address issues related to bioethics, environmental sustainability, and artificial intelligence from an Islamic perspective. By ensuring that scientific advancements align with *maqāsid al-sharī'ah*, this approach promotes justice, sustainability, and societal welfare [44].

While this study provides valuable insights into the integration of science and Islam in higher education, several limitations must be acknowledged. From a theoretical focus, this study primarily examines Sardar's theoretical framework without empirical fieldwork to measure its direct impact on university curricula. Future research should conduct case studies on existing models of science-Islam integration in State Islamic Religious Colleges. Additionally, regarding the lack of comparative analysis, while the study discusses Sardar's critique of Islamization, it does not extensively compare his model with other integration approaches, such as those proposed by Ismail Raji al-Faruqi or Seyyed Hossein Nasr. A comparative analysis could provide a more comprehensive evaluation of different epistemological models.

Another limitation involves implementation challenges, as although Sardar's ideas offer a strong theoretical foundation, their practical application in contemporary universities remains complex. Future studies should explore the institutional challenges involved in integrating Islamic epistemology into modern science curricula. Lastly, regional and institutional variations must be considered, as this study focuses primarily on the context of Indonesian Islamic universities, whereas Islamic higher education models vary significantly across different countries. Expanding the scope to include other regions would provide a more global perspective on science-Islam integration [45].

This research has several significant impacts in advancing the discourse on science-Islam integration, particularly in the context of State Islamic Religious Colleges. By providing a structured analysis of Sardar's epistemology, this study contributes to the ongoing efforts to develop curricula that harmonize scientific and Islamic knowledge, offering a potential model for educational reform. The findings also serve as a theoretical

foundation for policymakers, educators, and curriculum developers in shaping science education that aligns with Islamic values. Moreover, the study encourages further discussions on the role of epistemology in knowledge production, inspiring future research on alternative frameworks that balance scientific advancements and religious ethics.

However, despite these contributions, the limitations of this study should be acknowledged. The reliance on theoretical analysis without empirical validation means that the practical implementation of Sardar's ideas remains uncertain. Additionally, the focus on Indonesian State Islamic Religious Colleges limits the generalizability of the findings to other Islamic education systems, which may have different approaches to integrating science and religion. Future research should conduct empirical studies to test the applicability of Sardar's epistemology in diverse academic settings and explore strategies for overcoming the institutional and pedagogical challenges in science-Islam integration.

4. CONCLUSION

Ziauddin Sardar offers a critical and transformative approach to the integration of science and Islam, emphasizing the development of an Islamic epistemology that effectively bridges religious and scientific disciplines. He argues that education in State Islamic Religious Universities must adopt a curriculum that integrates Islamic sciences with modern scientific advancements, ensuring that graduates are both scientifically competent and deeply rooted in Islamic values. Sardar critiques the Islamization of science as proposed by Ismail Raji al-Faruqi, considering it insufficient to address modern challenges and potentially leading to the westernization of Islamic thought. As an alternative, he proposes a framework based on Tawhid, Khilafah, and Ibadah, which provides a comprehensive epistemological structure for integrating scientific inquiry with Islamic ethics. By applying these principles, State Islamic Religious Universities can develop a distinct scholarly identity, fostering a holistic education system that considers both technical advancements and ethical dimensions, strengthening the role of Muslims in the global academic landscape.

Further research is necessary to examine the practical implementation of Sardar's integrative model in Islamic higher education. Future studies should analyze curriculum development in Islamic universities, comparing various integration models such as those proposed by Seyyed Hossein Nasr and Osman Bakar. Empirical research on how Islamic epistemology can address contemporary scientific challenges such as biotechnology, artificial intelligence, and environmental sustainability is also needed. Additionally, policy-oriented studies should explore ways to institutionalize science-Islam integration within national education frameworks, ensuring that Islamic higher education institutions remain relevant and adaptive to scientific and technological advancements. These efforts will contribute to a more structured and applicable Islamic scientific paradigm, aligning academic progress with Islamic ethical values while preparing Muslim scholars to navigate modern scientific discourse with confidence and critical engagement.

REFERENCES

- [1] Y. Isgandi, "Model Integrasi Nilai Islam dan Sains beserta Implementasinya di Dunia Islam," *Kalimah: Jurnal Studi Agama Dan Pemikiran Islam*, vol. 19, no. 1, pp. 27–48, 2021.
- [2] M. Al Farizi, "Alqur'an dan Islamisasi Ilmu Pengetahuan: Analisa Filosofis terhadap Integrasi Ilmu Agama dan Sains," *Launul Ilmi: Jurnal Keislaman dan Peradaban*, vol. 2, no. 2 Juni, pp. 1–20, 2024.
- [3] A. Bulbulia, "Now Turning to Our Tomorrows: Decolonial Futures in the Study of Islam," *Journal of Decolonising Disciplines*, vol. 3, no. 1, Jun. 2021, doi: 10.35293/jdd.v3i2.3642.
- [4] F. Hidayat, "Pengembangan Paradigma Integrasi Ilmu: Harmonisasi Islam dan sains dalam Pendidikan," *Jurnal Pendidikan Islam*, vol. 4, no. 2, pp. 299–318, 2015.
- [5] S. Sawaluddin, K. S. Harahap, I. Rido, and I. A. Supriono, "The Islamization of Science and Its Consequences: An Examination of Ismail Raji Al-Faruqi's Ideas," *Jurnal Pendidikan Agama Islam (Journal of Islamic Education Studies)*, vol. 10, no. 2, pp. 115–128, Dec. 2022, doi: 10.15642/JPAI.2022.10.2.115-128.
- [6] M. T. Ihsan, "Ziauddin Sardar: Membangun Epistemologi Islam," *Al-Aulia: Jurnal Pendidikan dan Ilmu-Ilmu Keislaman*, vol. 9, no. 2, pp. 204–214, 2023.
- [7] F. W. Siregar, "Integrasi Ilmu Islam dan Ilmu Umum," *Book Chapter of Proceedings Journey-Liaison Academia and Society*, vol. 1, no. 1, pp. 821–829, 2022.
- [8] W. Wahiddin, "Macam-Macam Integrasi Ilmu dalam Membangun dan Mengembangkan Landasan Keilmuan Islam," *Book Chapter of Proceedings Journey-Liaison Academia and Society*, vol. 1, no. 1, pp. 498–509, 2022.
- [9] F. Malahati, P. Jannati, Q. Qathrunnada, and S. Shaleh, "Kualitatif: Memahami Karakteristik Penelitian Sebagai Metodologi," *Jurnal Pendidikan Dasar*, vol. 11, no. 2, pp. 341–348, 2023.
- [10] I. Abiyusuf, M. Hafizi, P. Pakhrurrozi, W. Saputra, and E. Hermanto, "Critical Analysis of The Rejection of Richard Bell's Thoughts on The Translation of The Qur'an in The Context of Orientalism," *INJIES: Journal of Islamic Education Studies*, vol. 1, no. 2, pp. 48–60, Dec. 2024, doi: 10.34125/INJIES.V1I2.6.
- [11] N. Seitakhmetova, "Interview Natalya Seitakhmetova with professor Ziauddin Sardar (London, UK)," *Adam alemi*, vol. 94, no. 4, pp. 193–200, Feb. 2023, doi: 10.48010/2022.4/1999-5849.18.

- [12] K. S. Wiwaha, "Epistemologi Paradigma Islam (Studi Pemikiran Ziauddin Sardar)," *Religious: Jurnal Studi Agama-Agama dan Lintas Budaya*, vol. 3, no. 1, pp. 70–79, 2018.
- [13] S. Salman, D. Deprizon, and S. Wahyuni, "Membangun Epistemology Islam Menurut Ziauddin Sardar," *HIKMAH: Jurnal Pendidikan Islam*, vol. 12, no. 1, pp. 181–195, 2023.
- [14] M. J. Mughal, "A Critical Study of The Views of Sayyed Hossein Nasr on The Philosophical Foundation Of Islamic Science," *TRAMES*, vol. XXVI, no. 2, pp. 141–156, 2022.
- [15] M. Achmad, "Integrasi Sains dan Agama: Peluang dan Tantangan bagi Universitas Islam Indonesia," *ABHATS: Jurnal Islam Ulil Albab*, vol. 2, no. 1, pp. 50–68, 2021.
- [16] A. Muyassir, "Al-Qur'an dan Integrasi Keilmuan," *MADZAHIB*, vol. 6, no. 2, pp. 22–47, 2024.
- [17] M. Muslih, "Kritik Ziauddin Sardar terhadap Konsep Islamisasi Ilmu Pengetahuan Ismail Raji Al-Faruqi," UIN Sunan Kalijaga Yogyakarta, Yogyakarta, 2017.
- [18] A. Ma'ruf, A. W. Kurniawan, M. I. Fatoni, S. Alam, and L. Hakim, "Can Al-Faruqi's Islamization Deals with Islamic Economics? Revisiting Al-Faruqi's Islamization of Economics," *TSAQAFAH*, vol. 19, no. 2, pp. 405–428, Nov. 2023, doi: 10.21111/tsaqafah.v19i2.9337.
- [19] M. Oudihat and C. A. B. Bahari, "Mapping the Islamic Discourse on Knowledge: The Relevance of the New Islamic Discourse," *AL-ITQAN: Journal of Islamic Sciences and Comparative Studies*, vol. 9, no. 1, pp. 72–96, Aug. 2024, doi: 10.31436/alitqan.v9i1.293.
- [20] N. L. Seitakhmetova, A. Sagikyzy, and Z. Zh. Turganbayeva, "Islamic Scientific Tradition and European Thought," *Vopr Filos*, no. 7, pp. 72–82, 2021, doi: 10.21146/0042-8744-2021-7-72-82.
- [21] L. Toktarbekova, N. Seitakhmetova, and Sh. Bidakhmetova, "Tradition in Christian and Islamic Cultures: A Comparative Analysis," *Al-Farabi*, vol. 78, no. 2, pp. 167–183, Jun. 2022, doi: 10.48010/2022.2/1999-5911.12.
- [22] A. N. Velida and L. F. Zuhriyah, "Ismail Raji Al-Faruqi's Thoughts towards The World of Islamic Education," *SETYAKI: Jurnal Studi Keagamaan Islam*, vol. 1, no. 1, pp. 1–8, Feb. 2023, doi: 10.59966/setyaki.v1i1.6.
- [23] K. Aljunied, "Osman Bakar and Epistemological Renewal in The Muslim World," *Al-Shajarah: Journal of the International Institute of Islamic Thought and Civilization (ISTAC)*, vol. 27, no. 1, pp. 1–27, Jun. 2022, doi: 10.31436/shajarah.v27i1.1388.
- [24] M. T. Ihsan, "Ziauddin Sardar: Membangun Epistemologi Islam," *Al-Aulia: Jurnal Pendidikan dan Ilmu-Ilmu Keislaman*, vol. 9, no. 2, pp. 204–214, Dec. 2023, doi: 10.46963/aulia.v9i2.1194.
- [25] M. Iqbal and A. Adisel, "Epistemology of Islamic Science: A searching for Ideal Form and Format of Scientific Design for Islamic Higher Education in Indonesia," *Madania: Jurnal Kajian Keislaman*, vol. 25, no. 1, pp. 101–112, 2021, doi: 10.29300/MADANIA.V25I1.4426.
- [26] S. Jain, "Epistemological Perspectives on IOK (Islamization of Knowledge) in the Western World, and Its Implications for the Judeo-Christian Milieu," *SSRN Electronic Journal*, pp. 1–44, 2024, doi: 10.2139/ssrn.1507232.
- [27] N. Jamal, "Model-Model Integrasi Keilmuan Perguruan Tinggi Keagamaan Islam," *KABILAH: Journal of Social Community*, vol. 2, no. 1, pp. 83–101, 2017.
- [28] N. D. U. Ma'zum, F. Erlinda, and H. Syaifuddin, "Praktik Ekonomi Syariah dalam Konsep Pemikiran Ziauddin Sardar," *Syar Iqtishadi: Journal of Islamic Economics, Finance and Banking*, vol. 5, no. 2, pp. 196–206, 2021.
- [29] D. T. P. Ummah, M. A. Fitrah, S. M. Izzah, and H. Syaifuddin, "Epistemologi Islam Ziauddin Sardar dan Relevansinya bagi International Islamic Boarding School (IIBS)," *Zawiyah: Jurnal Pemikiran Islam*, vol. 10, no. 1, pp. 141–152, 2024.
- [30] M. Taufik and M. Yasir, "Mengkritisi Konsep Islamisasi Ilmu Ismail Raji Al-Faruqi: Telaah Pemikiran Ziauddin Sardar," *Jurnal Ushuluddin*, vol. 25, no. 2, p. 109, 2017.
- [31] Z. A. Ni'mah, "Telaah Argumentasi Kajian Integrasi Ilmu dan Agama," *Revorma: Jurnal Pendidikan dan Pemikiran*, vol. 3, no. 1, pp. 41–55, 2023.
- [32] S. Sufratman, "Integrasi Agama dan Sains Modern di Universitas Islam Negeri (Studi Analisis Pemikiran M. Amin Abdullah)," *Al-Afkar, Journal For Islamic Studies*, pp. 209–228, 2022.
- [33] M. Sa'dan, "Islamic Science, Nature and Human Beings: A Discussion on Ziauddin Sardar's Thoughts," *Walisongo: Jurnal Penelitian Sosial Keagamaan*, vol. 23, no. 2, pp. 233–250, 2015.
- [34] F. Lubis, S. Salminawati, U. Usiono, and M. Rusdi, "Analytical Study on Integration of Islamic Science in Indonesia Based on Ontology, Epistemology, and Axiology," *Southeast Asian Journal of Islamic Education*, vol. 6, no. 2, pp. 209–224, Jun. 2024, doi: 10.21093/SAJIE.V6I2.8655.
- [35] L. Herlina, "Science, Methods in Science, and Contributions of Muslim Scientists to the Development of Science: Analysis of Nidhal Guessoum's Thought," *Jurnal Penelitian Pendidikan IPA*, vol. 9, no. 4, pp. 1854–1860, Apr. 2023, doi: 10.29303/jppipa.v9i4.3661.
- [36] S. Badriah, N. F. Natsir, and E. Haryanti, "Tipologi Integrasi Agama dan Ilmu Pengetahuan dalam Pemikiran Islam Kontemporer," *Jurnal Ilmiah Wahana Pendidikan*, vol. 7, no. 8, pp. 753–763, 2021.
- [37] A. A. Siddiqi, "Moral Epistemology and the Revision of Divine Law in Islam," *Oxford Journal of Law and Religion*, vol. 10, no. 1, pp. 43–70, Nov. 2021, doi: 10.1093/ojlr/rwab006.
- [38] M. F. M. Zacky and M. Moniruzzaman, "'Islamic Epistemology' in a Modern Context: Anatomy of an Evolving Debate," *Soc Epistemol*, vol. 38, no. 4, pp. 511–525, Jul. 2024, doi: 10.1080/02691728.2023.2227945.
- [39] F. Fuady and R. Bistara, "Pengilmuan Islam Ziauddin Sardar dan Relevansinya Bagi Perguruan Tinggi Keagamaan Islam di Indonesia," *Academic Journal of Islamic Principles and Philosophy*, vol. 3, no. 1, pp. 41–64, 2022.
- [40] M. F. Sari, A. Amril, and E. Dewi, "Integrasi Agama dan Sains dalam Perspektif Ziauddin Sardar," *Journal Sains Student Research*, vol. 2, no. 3, pp. 352–361, 2024.
- [41] K. Fian and K. Mawardi, "Integrasi Sains-Islam: Telaah Kritis Epistemologi Ziauddin Sardar dan Relevansinya bagi Perguruan Tinggi Keagamaan Islam Negeri Indonesia," *Matan: Journal of Islam and Muslim Society*, vol. 6, pp. 18–31, 2024.

- [42] H. Husni, "The Epistemology of Ta'dib in Islamic Civilizational Discourse: Reviving and Reconstructing Contemporary Muslim Scholars' Views," *Journal of Al-Tamaddun*, vol. 19, no. 1, pp. 181–197, Jun. 2024, doi: 10.22452/JAT.vol19no1.14.
- [43] M. Shafiq, D. K. A. Farhatullah, A. Mehmood, and S. Begum, "Islam and Postmodernism: A Study of Ziauddin Sardar's Perspective," *PalArch's Journal of Archaeology of Egypt/Egyptology*, vol. 17, no. 6, pp. 963–972, 2020.
- [44] M. Shafiq and S. N. H. Shah, "Islam & Values of Modernity: A Study of Ziauddin Sardar," *Tahdhib-al-Afkar*, vol. 7, no. 2, pp. 63–77, 2020.
- [45] M. Lahuddin and A. Romadhon, "Reconstruction of The Islamic Science Paradigm: Comparative Study of Kuntowijoyo and Ziauddin Sardar's Perspectives," in *Proceeding of International Conference on Islamic Education (ICIED)*, 2023, pp. 403–418.