

## HUMAN CAPITAL DEVELOPMENT IN ISLAMIC EDUCATION HISTORY: ENVIRONMENTAL VALUE AND CHARACTER FORMATION IN PESANTREN

Kodrattulloh Sidiq<sup>1</sup>, Hussein Alkhozah<sup>2</sup>, Yenita Sandra Sari<sup>3</sup>

<sup>1</sup>Department of Islamic Family Law, Institut Agama Islam Darul A'mal Lampung, Lampung, Indonesia

<sup>2</sup>Department of Applied Sociology, Princess Alia University College, Al-Balqa Applied University, Jordan

<sup>3</sup>Department of Biology Science, Institut Agama Islam Darul A'mal Lampung, Lampung, Indonesia

Corresponding author: Kodrattulloh Sidiq

E-mail: [kodrattullohsidiqkhusnan@gmail.com](mailto:kodrattullohsidiqkhusnan@gmail.com)

Volume: 7

Number: 3

Page: 891 - 898

### Article History:

Received: 2026-01-29

Revised: 2026-03-27

Accepted: 2026-05-13

### Abstract:

The growing emphasis on sustainable human resource management (HRM) underscores the importance of integrating environmental values into human capital development. However, existing studies predominantly focus on contemporary managerial frameworks, with limited attention to historically rooted and value-based educational systems. This study addresses this gap by examining the role of Islamic educational history in shaping environmentally responsible human capital, with particular reference to pesantren as indigenous Islamic institutions. This research employs a qualitative historical design, utilizing a systematic literature review and thematic content analysis of classical Islamic texts, historical records, and contemporary scholarly works on pesantren. The analytical framework is grounded in Human Capital Theory and Sustainable HRM perspectives. The findings reveal that pesantren have long institutionalized environmental ethics through processes of value internalization, disciplined practices, and communal living, which foster behavioral competencies aligned with sustainability principles. These institutions function as early models of integrated human capital development, incorporating ethical, social, and environmental dimensions. This study contributes to the HRM literature by offering a non-Western, historically grounded perspective on sustainable human capital development. It also provides practical insights for integrating ethical and sustainability-oriented values into contemporary human resource development strategies, particularly in supporting responsible governance practices.

**Keywords:** Human Capital Development, Environmental Ethics, Education History, Behavior Competency, Green HRM.

## INTRODUCTION

The increasing global emphasis on sustainability has significantly reshaped the discourse on governance, accountability, and human resource development across sectors (Singh et al., 2025; Syed et al., 2026). In particular, environmental sustainability is no longer confined to corporate practices such as taxation, auditing, and financial disclosure, but has expanded into broader societal domains, including education and community-based institutions (Agarwal & Yadav, 2026; Khalilov, 2026). Within this context, the development of human capital that embodies environmental responsibility has become a strategic priority, as organizations increasingly rely on individuals who possess not only technical competencies but also ethical and sustainability-oriented values (Algethami & Campbell, 2026; Tian et al., 2026; Sumi et al., 2025). Existing studies in governance, taxation, and auditing have largely focused on formal institutions, emphasizing regulatory compliance,



transparency, and environmental accountability through mechanisms such as sustainability reporting and green auditing practices. However, these approaches tend to overlook the foundational processes through which environmentally responsible behavior is cultivated at the individual level (Yasmeen et al., 2024; Khimmataliev et al., 2025). It indicates a critical gap in the literature, particularly in understanding how value-based educational systems contribute to the formation of sustainable human resources that ultimately influence governance quality and accountability in broader socio-economic contexts. In this regard, Islamic educational institutions, particularly pesantren, represent an underexplored domain (Zainiyati & Niam, 2026; Harjawati et al., 2026; Ahmadi et al., 2026). Historically, pesantren have functioned not only as centers of religious learning but also as community-based institutions that shape moral values, discipline, and social responsibility (Huda et al., 2025). Despite their long-standing role in character formation, limited research has examined how pesantren contribute to the development of human capital aligned with environmental sustainability and how these values may support broader governance frameworks, including ethical accountability relevant to taxation and auditing practices (AlQashouti & Shah, 2025; Yasmeen, 2024).

Recent scholarship has begun to acknowledge the importance of integrating ethical and sustainability dimensions into human resource management, particularly through concepts such as sustainable HRM and green HRM (Siddique et al., 2026; Al-Swidi et al., 2026; Liu, 2024). Nevertheless, these studies are predominantly grounded in contemporary and corporate settings, with minimal attention to historical and non-Western educational traditions (Itani & Green, 2025; Bellibaş et al., 2026; Okpanum & Omeihe, 2026). Consequently, there is a lack of comprehensive understanding regarding the historical roots of sustainability-oriented human capital development, especially within Islamic educational contexts (Valliere, 2017; Alrubaishi et al., 2021).

Based on this gap, this study aims to examine how environmental values embedded in Islamic educational history, particularly within pesantren traditions, contribute to the formation of sustainable human capital. Furthermore, this research seeks to explore the relevance of these values in supporting governance practices, especially in fostering ethical behavior, accountability, and social responsibility that are essential in areas such as auditing and taxation within community contexts. Accordingly, the research addresses the following questions: (1) How are environmental values conceptualized and transmitted within the historical tradition of pesantren education? (2) In what ways do these values contribute to the development of human capital from a sustainable HRM perspective? Moreover, (3) How can these historically grounded values be contextualized to support governance, auditing, and taxation practices in contemporary community settings? This study contributes to the existing literature by offering a state-of-the-art perspective that bridges Islamic educational history, human resource management, and sustainability governance. It provides a novel insight into how value-based education systems can serve as foundational mechanisms for developing environmentally responsible human capital, thereby reinforcing ethical governance and accountability in wider societal practices.

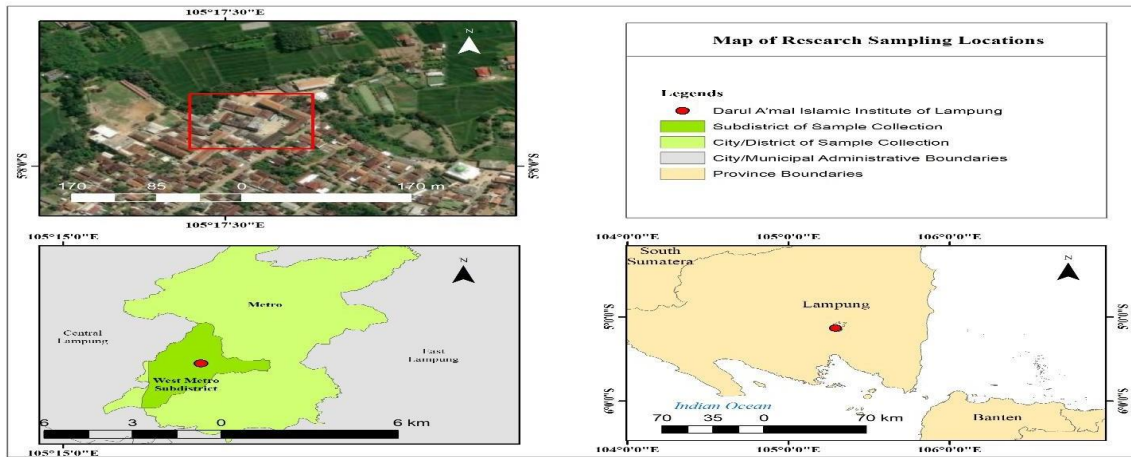
## METHODS

This study employs a qualitative research design using a historical and conceptual approach to examine the role of Islamic educational traditions in shaping sustainable human capital (Tran, 2026; Rai et al., 2026; Mu'alimin et al., 2026). The research aims to explore value formation processes within pesantren and their relevance to contemporary human resource management (HRM), particularly in the context of sustainability, governance, auditing, and taxation in community-based settings (Banga & Gobind, 2025). The research sample consists of selected classical Islamic texts,



institutional documents, and contemporary scholarly publications related to Islamic education, pesantren traditions, environmental ethics, and sustainable HRM. In addition, primary data are obtained from observations and relevant institutional insights within the pesantren environment. The sampling technique applied is purposive sampling, focusing on sources and contexts that explicitly reflect value-based education, character formation, and environmental responsibility (Karahroodi et al., 2020; Cardona Triana & Trejos Parra, 2020; Huda et al., 2025).

The research was conducted at Pesantren Darul A'mal Lampung in 2025, chosen due to its active role as an Islamic educational institution that integrates religious learning with character development and community engagement. This location provides a relevant setting to observe how environmental values are internalized and practiced within daily educational activities, contributing to human capital formation.



**Figure 1.** Location Pesantren Darul A'mal Lampung

The research was conducted at Pesantren Darul A'mal Lampung, an Islamic boarding school located in Lampung Province, Indonesia. This institution is situated in a strategic area that is accessible from both urban and rural surroundings, making it a relevant setting for educational and social research. The Islamic boarding school provides a unique environment that integrates religious education with formal academic learning, supported by adequate facilities and a structured community life. Its location also reflects the socio-cultural characteristics of the surrounding community, which contributes to the richness of data and context in this study. The analytical tools used in this study include thematic content analysis and historical interpretation. Thematic content analysis is employed to identify and categorize key themes related to environmental values, behavioral competencies, and human capital development. Meanwhile, historical analysis is used to trace the continuity and transformation of these values within Islamic educational traditions. The findings are interpreted using an analytical framework based on Human Capital Theory, Sustainable HRM, and Green HRM, enabling the study to connect historical insights with contemporary governance practices, particularly in fostering ethical behavior, accountability, and sustainability-oriented competencies relevant to auditing and taxation in community contexts.

**RESULT AND DISCUSSION**

**Environmental Values in Islamic Educational Traditions.** The findings indicate that environmental values in Islamic educational traditions are deeply rooted in theological and ethical principles, particularly the concepts of khalifah (stewardship) and amanah (trust). These values



emphasize human responsibility in maintaining environmental balance and sustainability (Sumi et al., 2024; Yasmeeen, 2024). Within the educational process, such principles are not merely taught as theoretical knowledge but are embedded in daily practices and moral guidance. At the institutional level, these values are translated into behavioral norms that encourage responsibility, discipline, and awareness of environmental cleanliness. It indicates that environmental ethics function as a foundational element in shaping individual behavior, aligning with the principles of sustainable human resource development.

**Character Formation and Behavior Competency in Pesantren.** Observations at Pesantren Darul A'mal Lampung show that character formation is a central component of the educational system. The pesantren emphasizes discipline, simplicity, collective responsibility, and ethical conduct as part of its daily routines. These practices contribute to the development of behavioral competencies, such as responsibility, integrity, and social awareness. From an HRM perspective, these competencies represent essential elements of human capital, particularly in fostering individuals who are capable of adapting to sustainability-oriented organizational values. The internalization of discipline and ethical behavior reflects a structured process of informal human resource development embedded within the educational environment (Anwar, 2025; Firmansah et al., 2025).

**Pesantren as a Model of Sustainable Human Capital Development.** The study finds that pesantren function as an integrated system for human capital development, combining cognitive, affective, and behavioral dimensions. Unlike conventional education systems that often prioritize technical skills, pesantren emphasize value-based education that shapes long-term behavior. This model aligns with the concept of Sustainable HRM, where human resources are developed not only for productivity but also for ethical responsibility and long-term societal impact (Kaur, 2026; Sagandykova & Tayauova, 2026; Gomes & Jones, 2026). The integration of environmental values into daily life creates a form of sustainability-oriented mindset, which is critical for addressing contemporary environmental challenges. The findings further reveal that the values cultivated within pesantren have broader implications for governance practices, particularly in community-based contexts. Behavioral traits such as honesty, accountability, and responsibility are essential components in supporting transparent governance, ethical auditing, and responsible taxation behavior. Individuals shaped by pesantren education tend to demonstrate a higher level of ethical awareness, which can contribute to reducing misconduct and improving accountability in public and organizational settings. In this regard, pesantren-based education can be seen as a foundational mechanism for strengthening governance systems through the development of ethically grounded human resources.

The study identifies that the integration of environmental and ethical values within pesantren education reflects an early form of Green HRM practices. Although not formally structured as modern HR systems, the processes of value internalization, behavioral control, and community-based learning function similarly to contemporary HRM mechanisms aimed at promoting sustainability. It demonstrates that traditional Islamic educational institutions provide a relevant and contextual model for developing environmentally responsible human capital, which can be adapted to modern organizational and governance frameworks.

This study demonstrates that pesantren, as exemplified by Pesantren Darul A'mal Lampung, represents a value-based educational system that contributes significantly to the development of sustainable human capital. The findings extend the current discourse on Sustainable Human Resource Management (HRM) by highlighting that the formation of environmentally responsible behavior is not solely the result of formal organizational practices but can be traced back to



historically rooted educational traditions. From a theoretical perspective, this study reinforces Human Capital Theory by emphasizing that human capital is not limited to technical skills and knowledge but also includes ethical values and behavioral competencies. The integration of environmental ethics within pesantren education illustrates that sustainability-oriented competencies can be developed through long-term value internalization processes. It challenges the dominant HRM perspective, which often focuses on short-term training and performance outcomes, by proposing a more holistic and value-driven approach to human capital development.

Furthermore, the findings contribute to the growing literature on Green HRM by providing a non-Western and historically grounded perspective. While existing studies on Green HRM predominantly focus on corporate policies and formal environmental management systems, this research shows that similar outcomes, such as environmentally responsible behavior, can emerge from informal, community-based educational systems. It indicates that sustainability in HRM can be effectively fostered through cultural and ethical frameworks, rather than relying exclusively on regulatory or managerial mechanisms. In relation to governance, auditing, and taxation, the study highlights that the behavioral competencies developed within pesantren—such as integrity, accountability, and social responsibility—are directly relevant to strengthening ethical governance practices. These attributes are essential in promoting transparency, reducing opportunistic behavior, and enhancing compliance in auditing and taxation processes, particularly within community and public sector contexts. Thus, this study suggests that governance quality is closely linked to the ethical foundation of human resources, which can be cultivated through education systems like pesantren.

The novelty of this study lies in its ability to bridge three distinct yet interconnected domains: Islamic educational history, sustainable HRM, and governance practices. By positioning pesantren as a model of sustainable human capital development, this research offers an alternative framework that integrates ethical, environmental, and social dimensions into HRM discourse. It contributes to expanding the theoretical boundaries of HRM by incorporating insights from traditional and religious educational systems that have been largely overlooked in mainstream literature. From a practical perspective, the findings imply that organizations and policymakers should consider integrating value-based and sustainability-oriented approaches into human resource development strategies. It includes embedding environmental ethics, character education, and social responsibility into training and development programs, as well as promoting organizational cultures that reflect these values. Such approaches are particularly relevant in enhancing governance systems and ensuring ethical conduct in areas such as auditing and taxation. However, this study is not without limitations. The reliance on qualitative and context-specific analysis limits the generalizability of the findings. Future research is therefore encouraged to employ empirical and quantitative approaches to test the relationship between value-based education and sustainable HRM outcomes across different institutional and cultural settings.

## CONCLUSION

This study concludes that Islamic educational traditions, particularly those practiced in Pesantren Darul A'mal Lampung, play a significant role in shaping sustainable human capital through the internalization of environmental and ethical values. The findings demonstrate that pesantren function not only as religious learning institutions but also as systems of human resource development that integrate moral, social, and environmental dimensions. These value-based educational processes contribute to the formation of behavioral competencies such as integrity,



responsibility, and environmental awareness, which are essential for sustainable human resource management (HRM). Furthermore, this study highlights that the development of environmentally responsible human resources can serve as a foundational element in strengthening governance practices. The ethical values cultivated within pesantren are highly relevant to promoting transparency, accountability, and compliance in areas such as auditing and taxation, particularly within community-based and public sector contexts.

## REFERENCES

- Agarwal, M., & Yadav, D. (2026). Innovations in CSR Practices: Conceptual Insights into Ethical, Social and Environmental Responsibility. *International Journal of Innovations & Scientific Research Review*. <https://doi.org/10.52458/29962404.2026.v4.iss1.ijisrr.p4>
- Ahmadi, A., Aziz, A., Ajahari, A., Syuhud, S., & Wasehudin, W. (2026). Integrating Mangenta Local Wisdom into Pesantren Leadership: An Empirical Model of Educational Transformation. *Jurnal Ilmiah Peuradeun*, 14(1), 393–412. <https://doi.org/10.26811/peuradeun.v14i1.2382>
- Al-Swidi, A. K., Al-Hakimi, M. A., Almaweri, A. M., & Al Koliby, I. S. (2026). Ethical leadership and organizational attractiveness: the sequential role of green HRM and job satisfaction among public sector employees. *Humanities and Social Sciences Communications*, 13(1). <https://doi.org/10.1057/s41599-025-06429-9>
- Algethami, M., & Campbell, N. (2026). Unlocking Proenvironmental Behavior: A Scoping Review of Green Human Resource Management and Organizational Citizenship Behavior for the Environment Through the Ability–Motivation–Opportunity Lens. *Business Strategy and the Environment*. <https://doi.org/10.1002/bse.70622>
- AlQashouti, B. M., & Shah, M. (2025). Conceptual framework of Islamicity sustainable development index. *Journal of Islamic Accounting and Business Research*, 1–41. <https://doi.org/10.1108/JIABR-06-2024-0232>
- Alrubaishi, D., McAdam, M., & Harrison, R. (2021). Culture, Islamic capital and the entrepreneurial behavior of family firms in Saudi Arabia. *International Journal of Entrepreneurial Behavior & Research*, 27(6), 1476–1501. <https://doi.org/10.1108/IJEBr-09-2020-0575>
- Anwar, M. M. (2025). Investigating the influence of Islamic values, environmental knowledge and environmental concerns on attitudes and electric vehicle adoption intentions. *International Journal of Ethics and Systems*. <https://doi.org/10.1108/IJOES-09-2024-0300>
- Banga, C. M., & Gobind, J. (2025). Implementation of sustainability in human resource management: A literature review. *SA Journal of Human Resource Management*, 23. <https://doi.org/10.4102/sajhrm.v23i0.2741>
- Bellibaş, M. Ş., Ninković, S., & Polatcan, M. (2026). Educational leadership and teacher instructional practices: a meta-analytic comparison of leadership models. *International Journal of Educational Management*, 1–21. <https://doi.org/10.1108/IJEM-12-2025-1081>
- Cardona Triana, C. P., & Trejos Parra, J. J. (2020). Qualitative study of experiential learning for organizational work teams. *Revista de Ciencias Sociales*, 26(3), 71–82. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85091136001&partnerID=40&md5=b30c4f8013cb9f82ba8cdabc0ac7aa27c>
- Firmansah, Y., Muqorobin, A., & Pramadhan, G. (2025). Integration of Maqasid Sharia in human resource development practices: a case study in a waqf-based organization. *Journal of Islamic Accounting and Business Research*. <https://doi.org/10.1108/JIABR-09-2024-0329>



- Gomes, J. F. S., & Jones, L.-A. (2026). The purpose effect: connecting hearts, minds and management. *Strategy & Leadership*, 1–21. <https://doi.org/10.1108/SL-11-2025-0406>
- Harjawati, T., Aisjah, S., & Ratnawati, K. (2026). Integrated business strategies in Islamic boarding School-based businesses: a qualitative phenomenological study on human resource management, cooperation, marketing, production, and finance. *Cogent Business and Management*, 13(1). <https://doi.org/10.1080/23311975.2025.2607801>
- Huda, M. N., Supratno, H., & Hariyati, N. (2025). Strategic Institutional Reform in Islamic Higher Education: The Case of Two Pesantren-Based Universities. *Munaddhomah*, 6(3), 465–482. <https://doi.org/10.31538/munaddhomah.v6i3.1863>
- Huda, S., Maksum, I., Masud, A., & Ikhwan, A. (2025). The Sufi Spirit: Unveiling The Dynamics of Social Altruism in the Global Influence of the Hizmet Movement. *Cogito*, 17(1), 169–195. <https://www.proquest.com/scholarly-journals/sufi-spirit-unveiling-dynamics-social-altruism/docview/3193415582/se-2?accountid=49069>
- Itani, M., & Green, W. (2025). The impact of “motherhood” on Women’s technology entrepreneurship: extending the 5M framework through reciprocity. *International Journal of Gender and Entrepreneurship*, 1–23. <https://doi.org/10.1108/IJGE-10-2024-0365>
- Karahroodi, S. R., Shams, G., Shamizanjani, M., & Abolghasemi, M. (2020). A Qualitative Meta-analysis of the digital leader's role. *Iranian Journal of Information Processing & Management*, 36, 1–32. <https://api.semanticscholar.org/CorpusID:237161232>
- Kaur, J. (Ed.). (2026). *Eco-HR: Integrating Sustainability into Workforce Management*. Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83708-660-3>
- Khalilov, A. P. T. (2026). The Impact of Strategic Planning and Management Mechanisms on the Development of Sport in Educational Institutions. *MSW Management*, 36, 290–293. <https://doi.org/10.7492/9gcw8446>
- Khimmatiliev, D. O., Rahmonova, M. Q., Choriev, R. K., Abduvaliyevna, X. N., Omonova, N. P. Q., Badalova, B. T., & Berdalieva, G. A. (2025). Integrating Islamic Pedagogy and the Sustainable Development Goals in Preparing Future Educators in Uzbekistan. *Jurnal Pendidikan Islam*, 11(2), 216–231. <https://doi.org/10.15575/jpi.v11i2.48413>
- Liu, C. (2024). The Role of Human Resource Management in Sustainable Development. 14(3).
- Mu’alimin, M., Muhith, A. M., & Hepni, H. (2026). School principals’ and teachers’ perspectives on school quality management in Islamic schools: insights from Indonesia. *International Journal of Educational Management*, 1–15. <https://doi.org/10.1108/IJEM-05-2025-0387>
- Okpanum, I. J., & Omeihe, K. O. (2026). Trust, religion and responsible leadership: how employees judge leaders in fragile institutional contexts. *Strategy & Leadership*, 1–21. <https://doi.org/10.1108/SL-09-2025-0288>
- Rai, H., Malik, N., & Varma, A. (2026). Generative AI and management education: a knowledge management perspective. *Journal of Knowledge Management*, 1–28. <https://doi.org/10.1108/JKM-01-2025-0102>
- Sagandykova, L., & Tayauova, G. (2026). Enhancing employee productivity through sustainable HRM: a moderation analysis of employee engagement. *Evidence-Based HRM: A Global Forum for Empirical Scholarship*, 1–23. <https://doi.org/10.1108/EBHRM-04-2025-0162>
- Siddique, N., Naveed, S., & Hanif, M. S. (2026). Unveiling the potential of sustainable HRM in achieving organizational sustainability: conceptual insights and research gaps. *Journal of Organizational Effectiveness*, 13(2), 344–365. <https://doi.org/10.1108/JOEPP-09-2024-0449>



- Singh, S., Kaur, R., Rani, A., & Singh, S. (2025). Sustainable Human Resource Management: A Review and Future Agenda. In *Green Technologies and Sustainable Development: Coherent Strategies for Developing Countries* (pp. 17–30). <https://doi.org/10.1108/978-1-80592-186-820251002>
- Sumi, A. A., Ahmed, S., & Alam, S. S. (2024). Islamic teachings and environmental corporate social responsibility in Bangladesh: a mixed-methods research approach. *Journal of Islamic Marketing*, 15(4), 1155–1182. <https://doi.org/10.1108/JIMA-09-2023-0271>
- Sumi, A. A., Awang, J. Bin, Haque, R., Qazi, S., Rahman, N. F. A., & Senathirajah, A. R. B. S. (2025). Investigating the function of religion and social capital in shaping sustainable social development. *Discover Sustainability*, 6(1), 748. <https://doi.org/https://doi.org/10.1007/s43621-025-01622-x>
- Syed, R. F., Rahman, M., & Karim, R. (2026). Interlinking corporate social responsibility, human resource management, and digital governance in Bangladesh's ready-made garment sector. *Discover Sustainability*, 7. <https://doi.org/10.1007/s43621-025-02515-9>
- Tian, T., Faraz, A. Z., Sarfraz, M., & Arshad, S. (2026). The Nexus of Green Transformational Leadership and Social Responsibility: Strategic Pathways via Green HRM, Environmental Strategy, and Eco-Spiritual Orientation Toward Sustainable Development. *Business Strategy and the Environment*, n/a(n/a) <https://doi.org/https://doi.org.proxy.undip.ac.id/10.1002/bse.70665>
- Tran, L. T. T. (2026). Research setting criticality: clichés and propositions. *International Journal of Contemporary Hospitality Management*, 1–17. <https://doi.org/10.1108/IJCHM-06-2025-0958>
- Valliere, D. (2017). Belief patterns of entrepreneurship: exploring cross-cultural logics. *International Journal of Entrepreneurial Behavior & Research*, 23(2), 245–266. <https://doi.org/10.1108/IJEER-12-2015-0297>
- Yasmeen, K. (2024). Framework for Islamic social entrepreneurship. *Journal of Islamic Accounting and Business Research*, 17(2), 445–474. <https://doi.org/10.1108/JIABR-08-2023-0256>
- Yasmeen, K., Yasmin, K., & Al Abri, S. (2024). Islamic Framework for Sustainable Development. *International Journal of Islamic Finance and Sustainable Development*, 16(4), 136–160. <https://doi.org/10.55188/ijifsd.v16i4.978>
- Zainiyati, H. S., & Niam, K. (2026). Living under the gaze: an ethnographic study of authority, embodied learning, and social reproduction in Indonesian pesantren educational practices. *Ethnography and Education*. <https://doi.org/10.1080/17457823.2026.2614516>