

Integrating Islamic Ecotheological Values into Practical Life Skills Education for Ecological Responsibility in Islamic Schools

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Abstract: Environmental crises increasingly challenge Islamic schools to develop educational approaches that connect sustainability knowledge with practical competencies, moral values, and everyday behavior. This study examines the integration of Islamic ecotheological values into practical life skills education and its contribution to students' ecological responsibility. Employing a qualitative case study design, the study draws on semi-structured interviews, participant observation, and document analysis involving school leaders, teachers, and students in Islamic educational settings. Data were analyzed thematically through coding, theme development, and cross-source triangulation, with attention to credibility, dependability, transferability, and confirmability. The findings show that the concepts of khalifah, amanah, mīzān, and rahmah were integrated into curriculum, school routines, teacher modeling, and environmental activities. Sustainable practical life skills were developed through waste management, gardening, water and energy conservation, food management, self-management, and environmental projects. Repeated participation transformed these activities into ecological habits and strengthened students' awareness, responsibility, empathy toward nature, and collective participation. Religious motivation provided moral meaning for sustainable behavior, while practical experience enabled students to embody ecological values in everyday actions. The study proposes the Relational Ecological Responsibility Model, which conceptualizes ecological responsibility as an outcome of the interaction among ecotheological meaning, practical competence, repeated habits, relational attitudes toward nature, and collective action. The study contributes a practical and relational framework for strengthening sustainable character formation within Islamic education contexts.

Keywords: Islamic Ecotheology, Practical Life Skills, Ecological Responsibility, Sustainable Character, Islamic Education, Environmental Education

INTRODUCTION

The accelerating environmental crisis has transformed ecological sustainability from a technical and policy concern into a fundamental educational challenge. Climate change, biodiversity loss, pollution, waste accumulation, and the unsustainable consumption of natural resources indicate that environmental problems are closely related to human values, lifestyles, and patterns of decision-making. Consequently, education is expected not merely to transmit environmental knowledge but also to cultivate the competencies, values, and behaviors required to respond to sustainability challenges. The *Education for Sustainable Development (ESD) for 2030* framework emphasizes that education should contribute to individual and societal transformation by equipping learners with knowledge, skills, values, and the capacity to act for a

sustainable future (UNESCO, 2020). However, environmental education in many educational contexts remains predominantly cognitive, emphasizing information about environmental problems without sufficiently connecting knowledge with everyday practices and moral responsibility. UNESCO's review of education policies and curricula similarly indicates that environmental issues are often addressed only superficially, demonstrating the need for educational approaches that translate sustainability principles into meaningful learning experiences and action (UNESCO, 2021).

In this context, *practical life skills* provide an important pedagogical pathway for connecting learning with students' everyday lives. Life skills encompass a broad range of personal, social, cognitive, and behavioral competencies that enable learners to manage everyday challenges, make informed decisions, regulate their behavior, solve problems, and interact constructively with others (Mangrulkar et al., 2001; WHO, 1997). Recent systematic research has emphasized that life skills education can support students' personal development and their ability to deal effectively with everyday demands, particularly when learning is connected to authentic contexts and repeated practice (Gorghiu et al., 2021). From a sustainability perspective, practical skills such as waste management, gardening, water conservation, energy conservation, food management, and responsible consumption can transform environmental education from an abstract subject into an experiential process. Such practices allow students to learn sustainability through direct participation, habituation, problem-solving, and collective action. Thus, practical life skills can become a bridge between what students know about the environment and what they actually do in their daily lives.

The development of sustainable practical life skills, however, requires more than technical instruction. Students may understand the importance of conserving water or reducing waste but may not consistently translate such knowledge into behavior unless ecological practices are supported by values and meaningful motivations. Character education therefore becomes essential because sustainable behavior involves responsibility, self-discipline, empathy, care, and commitment to the common good. Environmental responsibility can be understood as a dimension of character that develops when individuals recognize their relationship with the natural world and perceive environmental protection as an ethical obligation rather than merely an external rule. In

this regard, Islamic education provides a distinctive normative and spiritual foundation for connecting environmental responsibility with students' religious identity.

Islamic ecotheology offers several concepts that can provide such a foundation. The concept of *khalifah* positions human beings as trustees or stewards with responsibility for managing the earth, while *amanah* frames the natural environment as a trust that must be maintained responsibly. The principle of *mīzān* emphasizes balance and harmony, whereas *rahmah* encourages compassion and care toward creation. These concepts establish an ethical relationship between human beings and nature in which environmental protection is connected to religious responsibility. Contemporary studies have demonstrated that Islamic ecotheological principles can be incorporated into Islamic education to strengthen students' environmental awareness and behavior. For example, Taufikin (2025) found that the principles of *khalifah*, *amanah*, and *mīzān* could be operationalized through classroom learning, schoolyard activities, and environmental programs in Islamic elementary schools. Similarly, recent studies have argued that Islamic ecological values have potential to support sustainable education when integrated into curriculum, pedagogy, and school culture rather than treated as isolated theological concepts.

Nevertheless, an important gap remains. Existing studies on Islamic ecotheology and education have primarily emphasized environmental awareness, ecological ethics, curriculum integration, or green-school practices, while research on *practical life skills* has generally focused on personal, social, psychosocial, or developmental competencies. These two bodies of scholarship have rarely been systematically connected to explain how theological values are translated into concrete everyday skills and subsequently internalized as ecological responsibility. Recent research also suggests that Islamic environmental values may remain normative when they are not accompanied by reflective and experience-based pedagogy. Therefore, the central problem is not simply whether Islamic schools teach environmental values, but how those values are transformed into practical competencies, repeated practices, and sustainable character formation.

This study addresses this gap by proposing an integrated perspective that connects Islamic ecotheology, practical life skills, and ecological responsibility. Its novelty lies in conceptualizing ecotheological values not merely as religious content but as a pedagogical foundation for developing practical competencies through everyday environmental practices. The study argues

that *khalifah*, *amanah*, *mīzān*, and *rahmah* can provide the moral orientation; practical life skills can provide the behavioral mechanism; and repeated ecological practices can facilitate the development of ecological habits and responsibility. In this process, sustainable character formation emerges through a relational pathway of ecotheological values → practical life skills → ecological practices → ecological habits → ecological responsibility. This perspective extends existing discussions of Islamic environmental education by emphasizing the transformation of religious values into embodied and observable practices.

Accordingly, this study aims to examine how ecotheological values are integrated into practical life skills education and how such integration contributes to sustainable character formation in Islamic schools. Specifically, the study addresses three research questions: (1) How are ecotheological values integrated into practical life skills education in Islamic schools? (2) How do teachers develop students' sustainable practical life skills through Islamic educational practices? and (3) How does the integration of ecotheology and practical life skills contribute to students' ecological responsibility? By answering these questions, the study seeks to contribute to Islamic education scholarship by developing a more practical and relational understanding of ecological character formation and by offering implications for curriculum development, teacher practice, and sustainable school culture.

METHOD

Research Design

This study employed a qualitative case study design to explore how Islamic ecotheological values are integrated into practical life skills education and how this integration contributes to students' ecological responsibility. A qualitative approach was considered appropriate because the study focused on understanding educational practices, meanings, experiences, interactions, and behavioral processes within their natural context. Rather than measuring ecological responsibility through predetermined quantitative indicators, the study sought to understand how teachers and students interpret and enact ecological values in everyday school practices. Case study methodology is particularly suitable for investigating contemporary educational phenomena within their real-life contexts, especially when the boundaries between the phenomenon and its

context are not clearly separated (Yin, 2018). The study was also informed by the interpretive orientation of qualitative inquiry, which emphasizes understanding participants' experiences and meanings within their social and institutional settings (Creswell & Poth, 2018).

Research Setting and Participants

The research was conducted in selected Islamic schools/madrasahs that implemented environmental activities and practical life skills within their educational programs. The selection of the research setting followed purposive criteria: (1) the school explicitly incorporated Islamic values into educational activities; (2) students participated in practical environmental activities; (3) the school had programs related to environmental sustainability, such as waste management, gardening, water conservation, or energy conservation; and (4) school leaders and teachers were willing to facilitate access to relevant data. Participants consisted of school principals or madrasah leaders, teachers involved in practical life skills or environmental education, and students who actively participated in the relevant programs. Purposive sampling was used because qualitative research requires information-rich participants who can provide detailed insights into the phenomenon under investigation (Patton, 2015).

Data Collection

Data were collected through semi-structured interviews, participant observation, and document analysis. Semi-structured interviews were conducted with school leaders, teachers, and students to investigate their understanding of *khalifah*, *amanah*, *mīzān*, and *rahmah*, the implementation of practical life skills, teachers' pedagogical strategies, and perceived changes in students' ecological behavior. Interviews provided opportunities for participants to explain their experiences and interpretations in their own words (Creswell & Poth, 2018).

Participant observation was used to examine how ecological values were translated into everyday practices. Observations focused on activities such as waste sorting, gardening, water and energy conservation, food management, school cleanliness, and environmental projects. Field notes documented students' actions, teacher modeling, interactions, routines, and school culture.

In addition, relevant documents—including curriculum documents, lesson plans, school environmental programs, student activity records, regulations, and documentation of environmental projects—were analyzed to corroborate interview and observational findings.

Using multiple data sources enabled methodological triangulation and strengthened the contextual understanding of the case (Yin, 2018).

Data Analysis

Data were analyzed using thematic analysis following the procedures proposed by Braun and Clarke (2006, 2021). The analysis involved six interconnected stages: familiarizing with the data, generating initial codes, constructing potential themes, reviewing themes, defining and naming themes, and producing the final report. Initial coding was inductive while remaining theoretically informed by the study's focus on ecotheology, practical life skills, and ecological responsibility. Codes were subsequently organized into broader themes corresponding to the three research questions: (1) integration of ecotheological values, (2) development of sustainable practical life skills, and (3) formation of ecological responsibility. Relationships among these themes were then examined to develop the Relational Ecological Responsibility Model.

Trustworthiness

The trustworthiness of the findings was established through credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). Credibility was enhanced through source and method triangulation, repeated engagement with participants, and member checking. Transferability was supported by providing sufficiently detailed descriptions of the research setting, participants, activities, and educational context. Dependability was strengthened through systematic documentation of the research procedures and analytical decisions, while confirmability was supported by maintaining field notes, interview records, documentary evidence, and an audit trail. These procedures were used to ensure that the findings reflected participants' experiences and the observed educational context rather than researchers' assumptions.

RESULTS AND DISCUSSION

Integration of Ecotheological Values into Practical Life Skills Education

Islamic ecotheological principles were integrated into practical life skills education through curriculum, school routines, teacher practices, and environmental activities that connected religious meanings with everyday ecological responsibilities. Rather than presenting *khalifah*,

amanah, *mīzān*, and *rahmah* as abstract theological concepts, the schools translated these principles into observable practices involving environmental care, responsible resource use, and collective participation. This pattern indicates that Islamic ecological education can function as a practical pedagogical framework when religious values are continuously connected with students' lived experiences.

The concept of *khalifah* provided an important foundation for developing students' understanding of their responsibility toward the natural environment and shared school spaces. Students were encouraged to understand themselves as responsible agents who must maintain cleanliness, care for plants, manage waste, and preserve school facilities. Such practices transformed the meaning of *khalifah* from a theological concept concerning human responsibility into an everyday educational principle. The findings support the argument that Islamic environmental ethics can position human beings as stewards whose authority over nature is accompanied by moral responsibility (Foltz, 2006). Within the school context, this responsibility became visible through students' participation in activities that required care, discipline, and accountability.

The principle of *amanah* strengthened ecological responsibility by framing natural resources and the school environment as trusts requiring careful and responsible management. Water, electricity, food, plants, and school facilities were treated as resources that should be used appropriately rather than wasted through careless behavior. Students were therefore encouraged to close water taps, switch off unused electrical equipment, maintain plants, avoid unnecessary food waste, and take responsibility for shared facilities. The concept of *amanah* provided a religious rationale for these practices, allowing students to interpret environmental responsibility as an ethical obligation rather than simply an institutional requirement. Saniotis (2012) similarly argues that Islamic environmental ethics can encourage responsible relationships with nature through religious concepts emphasizing human accountability and stewardship.

The Islamic principle of *mīzān* was reflected in students' understanding of balance, moderation, and responsible consumption of environmental resources. Activities involving waste reduction, water conservation, energy efficiency, and appropriate food consumption provided concrete opportunities for students to understand how excessive consumption can contribute to

environmental degradation. The principle encouraged students to recognize that sustainability requires moderation in everyday behavior and responsible consideration of the consequences of human actions. This interpretation corresponds with Islamic environmental thought that emphasizes harmony between human activities and the natural order (Özdemir, 2003). The educational significance of *mīzān* therefore lies in its capacity to connect theological reflection with practical decisions concerning consumption and resource management.

The value of rahmah expanded ecological responsibility beyond resource conservation by encouraging compassion toward living beings and care for the surrounding environment. Students were encouraged to maintain plants, avoid harming animals, preserve cleanliness, and treat living organisms as part of God's creation deserving appropriate care. This value introduced an affective dimension into practical environmental education because students were not only expected to follow procedures but also to develop sensitivity toward other forms of life. Such an orientation contributes to a relational understanding of environmental responsibility in which nature is encountered through ethical relationships rather than being viewed exclusively as an economic or utilitarian resource.

Curricular integration enabled ecotheological principles to become connected with learning activities across subjects and educational experiences within the school environment. Ecological themes could be incorporated into Islamic Religious Education, science, social studies, project activities, and practical assignments, allowing students to encounter ecological responsibility from different disciplinary perspectives. This interdisciplinary orientation is consistent with the broader principles of sustainable education, which emphasize the integration of knowledge, values, competencies, and action across educational processes (Sterling, 2001). The integration of ecological values into curriculum also reduces the possibility that environmental education will be treated as an isolated topic addressed only during particular campaigns or special events.

School routines provided an additional mechanism through which Islamic ecological values became embedded within students' everyday educational experiences and behavioral expectations. Activities such as classroom cleaning, waste sorting, gardening, conserving water, reducing electricity consumption, and maintaining school facilities created repeated opportunities for students to practice ecological responsibility. Repetition was particularly important because

practical skills require consistent application before they can develop into stable behavioral patterns. The school environment consequently functioned as a living learning environment in which students could observe, practice, evaluate, and refine sustainable behaviors through everyday participation.

Teacher behavior played a central role in reinforcing the relationship between ecotheological values and students' practical environmental activities within the school setting. Teachers demonstrated environmental responsibility through their own practices, including maintaining cleanliness, conserving resources, participating in school environmental activities, and encouraging students to take responsibility for shared spaces. Teacher modeling made ecological values visible and provided students with behavioral examples that complemented formal instruction. Schelly et al. (2016) demonstrated that education, communication, and behavioral modeling can contribute to the development of a conservation-oriented school culture. The present findings indicate that teacher modeling becomes particularly meaningful within Islamic schools because ecological practices can simultaneously communicate religious values and practical expectations.

Development of Sustainable Practical Life Skills

Sustainable practical life skills developed through direct participation in environmental activities that required students to apply knowledge, demonstrate responsibility, and repeatedly perform environmentally appropriate actions. The findings show that students were not positioned merely as recipients of environmental information but as active participants who learned sustainability through everyday tasks. This experiential orientation allowed environmental learning to become connected with self-management, cooperation, problem-solving, discipline, and responsibility.

Waste management constituted one of the most visible areas for developing practical sustainability competencies among students in the school environment. Students participated in activities such as separating waste, reducing unnecessary consumption, reusing materials, recycling, and managing organic waste. These activities required students to make practical decisions concerning materials they encountered in everyday school life. Waste management consequently developed both ecological awareness and personal responsibility because students

had to recognize the consequences of their actions and assume responsibility for the waste they generated.

Gardening activities provided students with opportunities to develop practical knowledge through direct interaction with plants, soil, water, and other elements of the school ecosystem. Students learned to prepare planting areas, sow seeds, water plants, remove weeds, maintain growing areas, and observe plant development. These activities encouraged patience and consistency because successful cultivation required sustained attention rather than one-time participation. Gardening also strengthened students' understanding of ecological interdependence by allowing them to observe relationships among water, soil, plants, human care, and food production.

Water and energy conservation were developed through simple routines that encouraged students to use environmental resources carefully and efficiently during their daily activities. Students learned to close water taps, avoid excessive water consumption, switch off lights, and reduce unnecessary use of electrical equipment. These practices illustrate how sustainability competencies can be developed through ordinary behavioral routines rather than depending exclusively on formal environmental projects. Repeated engagement with these activities provided opportunities for students to transform environmental principles into practical habits that could extend beyond the classroom.

Food management connected sustainability education with students' everyday consumption practices and provided an accessible context for discussing waste, responsibility, and resource use. Students were encouraged to avoid unnecessary food waste, maintain food cleanliness, consume food appropriately, and recognize the relationship between food consumption and environmental resources. These practices demonstrate that sustainable practical life skills extend across multiple aspects of everyday life rather than being limited to activities explicitly labeled as environmental education.

Self-management and environmental projects strengthened students' capacity to organize their actions, fulfill assigned responsibilities, cooperate with peers, and contribute to shared environmental goals. Students who were assigned responsibility for particular activities or areas of the school had opportunities to develop independence while simultaneously learning that

environmental sustainability requires collective participation. Such activities can strengthen students' perceived agency because they provide tangible experiences of how individual actions contribute to broader environmental outcomes.

Teacher modeling reinforced the development of sustainable practical life skills by demonstrating how environmental responsibility could be incorporated into ordinary educational practices and institutional routines. Teachers served as behavioral references through their treatment of waste, use of resources, care for school facilities, and participation in environmental activities. Research by Liang et al. (2022) demonstrates that role models can influence children's pro-environmental behaviors, particularly when environmentally responsible actions are clearly observable. In Islamic educational settings, such modeling carries an additional dimension because teachers simultaneously communicate behavioral expectations and demonstrate how religious values can be embodied through everyday actions.

The relationship between ecotheological values and practical skills can be understood as a process in which religious principles provide meaning while repeated environmental activities provide opportunities for behavioral development. *Khalifah* establishes responsibility, *amanah* establishes accountability, *mīzān* establishes moderation, and *rahmah* establishes care, while practical activities transform these values into observable competencies. The resulting educational process can be conceptualized as a progression from ecotheological values to practical environmental activities, repeated practice, sustainable practical skills, and ecological habits. This pathway provides the conceptual foundation for examining how practical skills subsequently contribute to the formation of students' ecological responsibility.

Formation of Ecological Responsibility

The integration of Islamic ecotheology with practical life skills contributed to ecological responsibility by connecting environmental awareness, repeated habits, moral motivation, and collective action. The findings indicate that students' ecological responsibility developed through an interconnected process in which religious values provided meaning, practical activities provided experience, and repeated participation strengthened sustainable behavioral patterns. Ecological responsibility was therefore not understood merely as students' ability to identify

environmental problems, but as their willingness and capacity to care for nature through consistent everyday actions.

Environmental awareness emerged as an important foundation for students' ecological responsibility. Students increasingly recognized the consequences of waste, excessive consumption, water misuse, and environmental neglect through direct participation in school activities. Practical experiences enabled students to understand environmental issues through situations that were immediately relevant to their lives. This finding corresponds with the argument that environmental education becomes more meaningful when learners are provided with opportunities to engage directly with environmental issues and reflect on their consequences (Ardoin et al., 2020). Awareness in this context was therefore connected with experience rather than developed exclusively through classroom instruction.

Repeated participation in environmental activities contributed to the formation of ecological habits. Waste sorting, maintaining gardens, conserving water, saving energy, and avoiding food waste gradually became incorporated into students' daily routines. The repetitive nature of these activities allowed environmentally responsible behavior to become increasingly familiar and less dependent on external instruction. This finding is consistent with research demonstrating that habitual processes play a substantial role in shaping pro-environmental behavior, particularly when environmentally responsible actions are repeatedly performed within stable social contexts (Gardner & Stern, 2002).

The development of responsibility and empathy toward nature represented a deeper dimension of ecological character formation. Students were encouraged to perceive environmental care as a personal responsibility and to recognize plants, animals, and other elements of nature as deserving protection. Such experiences potentially shift students' relationship with nature from an instrumental orientation toward a more relational understanding. Research on connectedness to nature indicates that individuals who experience stronger psychological connections with the natural environment tend to demonstrate greater concern for environmental protection and stronger pro-environmental orientations (Mackay & Schmitt, 2019).

Religious motivation strengthened this process by providing students with an internal moral justification for ecological behavior. Concepts such as *khalifah*, *amanah*, *mīzān*, and *rahmah*

enabled students to interpret environmental care as part of their religious responsibility. Ecological practices consequently acquired spiritual significance, making environmental behavior more than compliance with school regulations. This finding supports Islamic environmental scholarship emphasizing that religious ethics can provide motivational resources for developing environmentally responsible relationships between humans and nature (Saniotis, 2012).

Collective participation further transformed ecological responsibility from an individual practice into collective action. Environmental projects, group gardening, waste management, and shared school-cleaning activities required students to cooperate and assume responsibility for common environmental spaces. Such participation reinforced the understanding that sustainability depends on shared commitments rather than isolated individual behaviors. School-based environmental initiatives can contribute to conservation-oriented cultures when education, communication, participation, and behavioral modeling operate together (Schelly et al., 2016).

These findings suggest that behavioral transformation occurs when ecological knowledge is repeatedly reinforced by practical experience, religious meaning, social participation, and personal responsibility. The process culminates in what this study conceptualizes as the Relational Ecological Responsibility Model (RERM). The model explains ecological responsibility as a developmental process involving five interconnected dimensions: ecotheological meaning, practical environmental experience, ecological habit formation, relational attitudes toward nature, and collective responsibility. The model provides a conceptual contribution by explaining how Islamic ecological values can move beyond doctrinal understanding and become embodied within students' everyday practices.

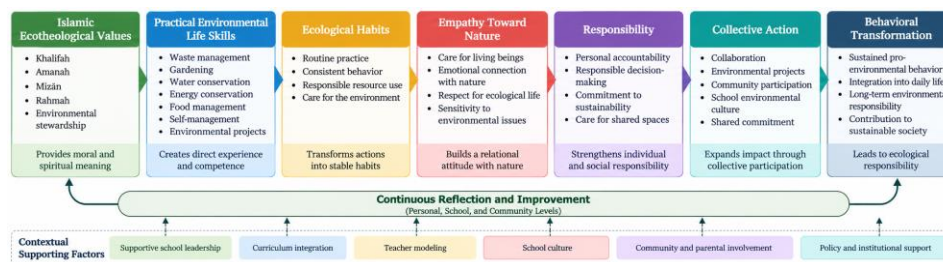


Figure 1. Relational Ecological Responsibility Model

The model illustrates the process through which Islamic ecotheological values provide moral and spiritual meaning for practical environmental activities. Repeated engagement in these activities contributes to ecological habits, empathy toward nature, and personal responsibility.

Social participation subsequently extends individual ecological practices into collective action, supporting sustained behavioral transformation. The model positions ecological responsibility as a relational outcome emerging from the interaction between religious values, practical competencies, personal habits, and the social environment.

The Relational Ecological Responsibility Model consequently offers a broader interpretation of character education within Islamic schools. Ecological character is not formed solely through environmental knowledge or religious instruction but through the continuous interaction of religious motivation, practical competence, habitual action, emotional connection, and collective participation. This perspective strengthens the role of Islamic education in sustainable development by demonstrating how religious education can contribute to observable ecological practices and long-term responsibility toward the natural environment.

CONCLUSION

This study demonstrates that Islamic ecotheological values can be translated into practical educational experiences that strengthen students' ecological responsibility. *Khalifah*, *amanah*, *mīzān*, and *rahmah* provided moral foundations for understanding environmental care as responsibility toward God, living beings, and shared spaces. Their integration into curriculum, school routines, teacher practices, and environmental activities enabled students to experience ecological ethics as lived values rather than theological knowledge. Religious meaning became significant when students repeatedly practiced these values.

Sustainable practical life skills developed through waste management, gardening, water conservation, energy conservation, food management, self-management, and environmental projects. These activities enabled students to acquire practical competencies while developing discipline, responsibility, cooperation, and resource awareness. Teacher modeling reinforced the process by providing visible examples of sustainable behavior. Repeated practice helped environmentally responsible actions become familiar routines and strengthened ecological habits. Practical life skills served as a behavioral mechanism for translating ecotheological principles into observable actions.

Ecological responsibility developed through environmental awareness, ecological habits, empathy toward nature, personal accountability, religious motivation, and collective action. Direct experiences strengthened students' understanding of environmental problems, while repeated practices supported behavioral consistency. Engagement with living beings and shared spaces encouraged relational attitudes toward nature. Religious motivation gave environmental practices ethical significance, while collaborative projects extended responsibility from individual conduct to collective participation. These processes constitute the foundation of the Relational Ecological Responsibility Model.

The study contributes a relational perspective to Islamic ecological education by positioning practical life skills as a mechanism for sustainable character formation. The Relational Ecological Responsibility Model explains how theological values become embodied through practical competencies, repeated habits, relational attitudes, and collective action. Schools can strengthen sustainability by integrating these dimensions across curriculum, teacher modeling, school culture, and daily routines. The study is limited by its qualitative research scope. Future research should examine the model in Islamic schools.

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