

# Integration of Islamic Values with Environmental Ethics in Pesantren Education: A Case Study at Darularafah Raya Pesantren

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## ABSTRACT

**Purpose** – This study aims to discuss the paradigm of environmental ethics education in pesantren, focusing on the integration of Islamic values and environmental awareness. The importance of this research lies in understanding how pesantren, as Islamic educational institutions, contribute to environmental sustainability through their teachings and practices, while addressing the empirical evidence gap regarding the effectiveness of such education.

**Design/methods/approach** – Utilizing a qualitative case study approach, this research explores the Darularafah Raya Pesantren in Deli Serdang, North Sumatra. Data were collected through participatory observations, in-depth interviews with key stakeholders (including teachers, students, and pesantren administrators), and document analysis of curriculum materials and official records. Thematic analysis was employed to identify and analyze key themes related to the integration of Islamic values and environmental ethics.

**Findings** – The study reveals a holistic approach at Darularafah Raya Pesantren, where Islamic teachings are closely integrated with environmental ethics. Key findings include specialized training for teachers to impart environmental values in daily lessons, extracurricular programs supporting environmental awareness, and the adoption of sustainable practices such as waste management and renewable energy use. The pesantren curriculum emphasizes concepts such as khalifah (stewardship) and amanah (responsibility), which are taught alongside practical environmental conservation activities.

**Research implications** – These findings highlight the potential of pesantren as models for other Islamic educational institutions in promoting environmental sustainability. By integrating Islamic values with environmental ethics, pesantren can shape individuals who are both spiritually and environmentally conscious. Future research should focus on comparative studies across different pesantren and longitudinal studies to assess long-term impacts.

## ARTICLE HISTORY

Received 21 January 2024

Revised 3 March 2024

Accepted 30 June 2024

## KEYWORD:

Environmental Ethics, Islamic Education, Pesantren, Sustainability, Case Study



Jurnal Pendidikan Islam

## 1. Introduction

The paradigm of environmental ethics education in pesantren refers to the understanding and application of Islamic values in the context of sustainability and environmental empowerment (Faizah, 2020; Kamran et al., 2023; Samsudin, 2019). Pesantren, as Islamic educational institutions, teach the importance of recognizing that nature is not a separate entity but part of God's creation that must be preserved and respected. This concept of tauhid can encourage pesantren to teach principles of natural conservation and justice in resource management. Engagement in environmental preservation can be seen as the implementation of tauhid principles in daily life (Anwar & Rosyad, 2021; Masturin et al., 2022).



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*How to Cite:* Syukri, S., Sulaiman, M. A., Fitriani, & Pane, S. (2024) Integration of Islamic Values with Environmental Ethics in Pesantren Education: A Case Study at Darularafah Raya Pesantren, 13(1), 1-12. <https://doi.org/10.14421/jpi.2024.131.1-12>

The paradigm of Islamic environmental ethics education in pesantren reflects the conceptual framework and values underlying educational approaches within the pesantren environment (Muqit, 2019; Rohayana & Sofi, 2021). This paradigm has developed in response to the complexity of global environmental challenges and as an embodiment of Islamic teachings that promote sustainability and balance in human interaction with nature. In the context of environmental ethics education, khalifah is interpreted as a leader or representative of God responsible for maintaining and caring for His creation (Raini, 2018). Pesantren, as Islamic educational institutions, serve as a philosophical foundation in shaping understanding and attitudes toward the environment (Fauzi et al., 2023). The paradigm of Islamic environmental ethics education in pesantren emphasizes the importance of maintaining the balance of nature as an implementation of Islamic teachings (Riyawi & Febriansyah, 2023; Syukron, 2017). This education views nature as a manifestation of God's greatness that must be respected and preserved. This concept teaches values such as *tawakkal* (full trust in Allah), *amanah* (responsibility), and *ihsan* (benevolence), all of which are relevant in the context of environmental ethics (Cholili & Haris, 2022).

Education in pesantren not only focuses on religious aspects but also encompasses moral and ethical values (Anam et al., 2019). Pesantren play a crucial role in shaping students' character to become responsible individuals toward the environment and society (Ramdani et al., 2021). Pesantren often emphasize the importance of building strong and responsible character, including teaching values such as honesty, justice, patience, and responsibility towards oneself, fellow humans, and the environment. Students in pesantren are taught ethics in a religious context and in everyday life, encompassing ethics in interactions, work, and daily behavior that reflect Islamic values and morals (Gumilang & Nurcholis, 2018).

Despite the numerous studies exploring environmental ethics education in pesantren, several limitations remain. Previous research has tended to focus more on describing concepts rather than empirically evaluating the effectiveness of environmental ethics education. Additionally, existing studies often lack a comprehensive evaluation of the long-term impacts of environmental ethics education on students' behavior in real life. The lack of research using mixed methodologies to combine quantitative and qualitative data is also a significant gap in the current literature.

Based on previous research, the most notable literature gap is the evidence gap. This gap relates to the lack of empirical data on the effectiveness of environmental ethics education in pesantren. Many studies emphasize concepts and philosophy without conducting in-depth evaluations of the implementation results in the field.

This study aims to address the identified gaps by answering the following research questions: What is the paradigm of environmental ethics education at Pesantren Darularafah Raya in Deli Serdang, North Sumatra? How does the pesantren understand environmental values in Islamic teachings? To what extent is the effectiveness of the implementation of environmental ethics education in the pesantren? What recommendations can be made to improve environmental ethics education in pesantren?

This study aims to: (1) Explore and analyze the paradigm of environmental ethics education in the Islamic context in pesantren; (2) Evaluate the pesantren's understanding of environmental values in Islamic teachings; (3) Assess the effectiveness of the implementation of environmental ethics education in pesantren; and (4) Provide recommendations for enhancing environmental ethics education in pesantren.

This research is expected to contribute positively to the development of environmental ethics education practices aligned with Islamic values at Pesantren Darularafah Raya in Deli Serdang, North Sumatra. Additionally, this study aims to enrich the literature on environmental ethics education in

pesantren and offer practical recommendations for curriculum enhancement and pedagogical approaches in other pesantren.

## 2. Methods

This study employs a qualitative research design with a case study approach to deepen the understanding of the environmental ethics education paradigm at Pesantren Darularafah Raya, located in Deli Serdang, North Sumatra. A case study approach was chosen as it allows for an in-depth and holistic exploration of the specific context under investigation (Yin, 2018). This approach also enables researchers to identify and understand various dimensions of environmental ethics education within the pesantren setting.

### 2.1. Sample/Participants

Pesantren Darularafah Raya was selected as the case study subject due to its unique approach to environmental ethics education. The research participants include key figures in the pesantren, such as the head of the pesantren, teachers, and students actively involved in environmental ethics education programs. Participants were chosen through purposive sampling to ensure that the data obtained were relevant and comprehensive (Patton, 2002).

**Table 1. Profile of Respondents**

Respondent Code	Position/Role	Description
R1	Pesantren Head	Head of the pesantren responsible for the program
R2	Teacher	Educator involved in environmental ethics education
R3	Senior Student	Student actively participating in environmental activities
R4	Teacher	Another educator supporting the education program
R5	Student	Student participating in environmental ethics education program

### 2.2. Data Collection

The data collection methods used in this study include observation, in-depth interviews, and document analysis. Participatory observation was conducted to gain a direct understanding of daily activities in the pesantren related to environmental ethics education (Creswell, 2013). In-depth interviews were conducted with key figures, teachers, and students to obtain their perspectives on the environmental ethics values taught and practiced in the pesantren. Document analysis involved reviewing various official pesantren documents, such as curricula, teaching modules, and activity records, to complement the data obtained from observations and interviews (Bowen, 2009).

### 2.3. Data Analysis

The data analysis technique used is thematic analysis, which allows researchers to identify major themes emerging from the collected data (Braun & Clarke, 2006). The data analysis process was iterative, starting with the transcription of interviews and observation notes, followed by coding and identification of relevant themes. Each theme was further analyzed to understand its meaning and implications in the context of environmental ethics education in the pesantren.

### 2.4. Ethics

This study adheres to strict research ethics standards. Before commencing the research, permission was obtained from the pesantren authorities, and consent was acquired from all participants involved. Each participant was provided with comprehensive information about the study's purpose, the methods used, and their rights as participants, including the right to withdraw

at any time without consequences. The collected data were kept confidential and used solely for the purposes of this research (Israel & Hay, 2006).

With this systematic and comprehensive methodological approach, the study aims to provide significant contributions to the understanding and development of environmental ethics education in pesantren.

### 3. Results

#### 3.1. *Integration of Islamic Values and Environmental Ethics*

Pesantren Darularafah Raya integrates Islamic values with environmental ethics through a holistic approach that aligns Islamic teachings with environmental concern. This approach aims to create an educational environment that deepens the understanding of Islamic values and enhances awareness and responsibility towards nature. Teachers at this pesantren are specially trained to integrate environmental values into their daily teachings and are expected to serve as role models in practicing environmental ethics.

- R2 (Teacher): "We strive to teach Islamic values relevant to environmental conservation. Students are taught that caring for nature is part of their worship to Allah."

To broaden the impact, the pesantren develops extracurricular programs that support environmental awareness, such as tree planting, waste reduction campaigns, and nature conservation. Technology and innovation are also utilized to enrich the learning experience, including digital applications or platforms focused on environmental issues, as well as the implementation of environmentally friendly technologies like renewable energy and sustainable resource management practices.

#### 3.2. *Environmental Awareness Education*

Pesantren Darularafah Raya in Deli Serdang, North Sumatra, emphasizes environmental awareness education as an integral part of the environmental ethics education paradigm. This program aims to shape students with a deep understanding of their role in maintaining environmental sustainability. Environmental awareness education empowers students to understand the impact of human activities on nature and their moral responsibilities.

- R5 (Student): "We learn about the importance of preserving biodiversity and how our actions can positively impact nature. Activities like tree planting make us feel more connected to the environment."

This education is integrated into daily activities, such as tree planting, recycling programs, and field trips to conservation sites. Additionally, the pesantren encourages students to participate in various practical activities aimed at enhancing environmental awareness and action, such as cleaning the environment, recycling waste, and responsibly managing natural resources.

#### 3.3. *Implementation of Environmentally Friendly Principles*

The implementation of environmentally friendly principles at Pesantren Darularafah Raya involves holistic actions aimed at integrating sustainable practices into daily activities. The pesantren establishes environmental policies that reflect a commitment to sustainability, including action plans to reduce environmental impact, manage waste, and promote the use of renewable energy. These policies encompass all aspects of pesantren life, from academic activities to daily routines.

- R1 (Pesantren Head): "We have established strict policies to reduce environmental impact. One of them is the use of renewable energy and better waste management."

The implementation of these policies includes organized waste management, recycling programs, and initiatives to use alternative energy sources such as solar panels and clean water management. This demonstrates that the pesantren is not only focused on religious education but also cares about environmental sustainability. The pesantren teaches that caring for the environment is a moral responsibility of every individual and a manifestation of practicing Islamic teachings.

### **3.4. Development of Environment-Based Curriculum**

The development of an environment-based curriculum at this pesantren shows a strong commitment to integrating Islamic values with environmental awareness and responsibility. This curriculum includes a deep understanding of Islamic teachings related to the environment, such as the concepts of *khalifah* (stewardship), *amanah* (responsibility), and *tawakkal* (trust). These concepts are integrated into various subjects such as religion, science, and language.

- R2 (Teacher): "We teach the concepts of *khalifah* and *amanah* in the context of the environment. Students are encouraged to understand that they are guardians of the earth and responsible for its preservation."

The curriculum also includes critical thinking skills, problem-solving, and leadership, encouraging students to become agents of change in their environment. Additionally, the learning materials cover important concepts such as recycling, natural resource management, and the use of environmentally friendly technologies. The pesantren ensures that the developed curriculum not only teaches theory but also provides practical skills that students can apply in their daily lives to care for and preserve the environment.

### **3.5. Islamic Environmental Ethics System at Pesantren Darularafah Raya**

The Islamic environmental ethics system at Pesantren Darularafah Raya is based on the Qur'an, Hadith, and Fiqh. The concept of *tauhid* is closely related to *khalifah*, which positions humans as representatives of God on earth with the responsibility to care for nature. In fostering environmental awareness among students, teachers provide role models and teach Islamic doctrines related to the environment.

- R4 (Teacher): "We teach students that caring for the environment is a form of practicing Islamic teachings. We set real-life examples by maintaining cleanliness and managing the surrounding environment of the pesantren."

The pesantren also conducts greening programs and develops students' awareness of the importance of environmental conservation. This eco-pesantren program aims to instill conservation values in students' daily lives through various practical activities and positive habits. The pesantren also teaches the importance of individual and collective responsibility in environmental care, emphasizing that every small action by students can significantly impact environmental sustainability.

### **3.6. Actualization of the Islamic Environmental Ethics Paradigm**

#### **a. Urgency of Actualizing Islamic Environmental Ethics**

Pesantren Darularafah Raya emphasizes the importance of integrating Islamic teachings in the context of nature conservation, given the increasingly complex global environmental challenges. This pesantren plays a central role in shaping students' character with a deep understanding of their responsibilities as *khalifah* on earth, making environmental preservation an integral part of worship.

- R5 (Student): "We are taught that caring for the environment is part of our responsibility as Muslims. This makes us more aware of our surroundings."

The actualization of Islamic environmental ethics aims to make students agents of change capable of addressing various environmental issues in the future based on Islamic values. Pesantren Darularafah Raya aims to build awareness that caring for the environment is not only a moral responsibility but also a religious obligation. By deeply understanding Islamic teachings on nature conservation, students are expected to contribute meaningfully to addressing global environmental issues.

b. Methods of Managing Islamic Environmental Ethics

The methods of managing Islamic environmental ethics in this pesantren include developing a curriculum that emphasizes environmental ethics values in every subject, training teachers, implementing sustainable policies, and extracurricular activities involving active student participation. Additionally, the communication and socialization of environmental ethics values are an essential part of this method.

- R3 (Senior Student): "We design a curriculum that integrates Islamic values and environmental ethics and train teachers to teach this effectively."

Management also includes regular monitoring and evaluation to ensure that environmental ethics values are continuously applied and improved within the pesantren environment. Through these methods, the pesantren strives to create an environment that supports and promotes environmental awareness, ensuring that every individual in the pesantren plays a role in environmental preservation.

c. Roles of Students, Teachers, Dyah, and Administrators in Islamic Environmental Ethics

Each individual in the pesantren has a role in implementing Islamic environmental ethics. Students actively participate in environmental activities, teachers integrate environmental values into their teachings, dyah (cleaners) maintain cleanliness and manage waste in an environmentally friendly manner, and administrators formulate policies and provide facilities and infrastructure that support sustainable practices.

- R6 (Dyah): "We are responsible for maintaining cleanliness and ensuring the pesantren environment remains green. This is part of our duty."

Administrators also ensure that all programs and policies implemented always favor environmental sustainability, making the pesantren a model eco-pesantren that can be emulated by other educational institutions. Thus, Pesantren Darularafah Raya is not just a place to learn religious knowledge but also an educational institution that actively shapes individuals with awareness and commitment to environmental preservation, in line with Islamic teachings.

## 4. Discussion

This study aims to explore and analyze how Pesantren Darularafah Raya integrates Islamic values with environmental ethics in its education system. The primary focus is on understanding the application of these values in the curriculum, daily activities, and environmental policies implemented at the pesantren. This research is relevant given the increasing attention to environmental issues and the need for holistic approaches that include spiritual values in efforts toward environmental conservation.

The study found that Pesantren Darularafah Raya adopts a holistic approach in integrating Islamic values with environmental ethics. This is reflected in specialized training for teachers to incorporate environmental values in daily teachings, the development of extracurricular programs that support environmental awareness, and the implementation of environmentally friendly technologies.

Students are taught that caring for nature is part of their worship to Allah, strengthening their spiritual connection to the environment.

This study reinforces and confirms the findings of previous research. For example, Faizah, Kamran et al., and Samsudin indicate that environmental ethics education in pesantren includes understanding and applying Islamic values in the context of sustainability and environmental preservation. This study supports these findings by showing that Pesantren Darularafah Raya teaches the importance of preserving and respecting nature as part of God's creation (Faizah, 2020; Kamran et al., 2023; Samsudin, 2019).

Anwar & Rosyad and Masturin et al. emphasize that involvement in environmental conservation is an implementation of tauhid principles in daily life. This aligns with Pesantren Darularafah Raya's approach, which teaches principles of natural conservation and justice in resource management to students (Anwar & Rosyad, 2021; Masturin et al., 2022).

Research by Muqit and Rohayana & Sofi shows that the paradigm of Islamic environmental ethics education in pesantren reflects the conceptual framework and values underlying educational approaches in pesantren. This study supports this view by emphasizing the importance of maintaining the balance of nature as an implementation of Islamic teachings at Pesantren Darularafah Raya (Muqit, 2019; Rohayana & Sofi, 2021).

Raini explains that the concept of khalifah as a leader or representative of God responsible for maintaining and caring for His creation forms a philosophical foundation in shaping understanding and attitudes toward the environment in pesantren. This is also found in this study, where Pesantren Darularafah Raya teaches the concepts of khalifah and amanah in the context of the environment (Raini, 2018).

Furthermore, Fauzi et al. found that pesantren develop an environment-based curriculum as an integral part of environmental ethics education. This study is consistent with those findings, showing that Pesantren Darularafah Raya develops a curriculum that includes a deep understanding of Islamic teachings related to the environment (Fauzi et al., 2023).

Research by Riyawi & Febriansyah, Syukron, and Cholili & Haris emphasizes the importance of maintaining the balance of nature as an implementation of Islamic teachings, teaching values such as tawakkal, amanah, and ihsan in the context of environmental ethics. The same approach is applied at Pesantren Darularafah Raya, aligning with these findings (Cholili & Haris, 2022; Riyawi & Febriansyah, 2023; Syukron, 2017).

Additionally, research by Anam et al. and Ramdani et al. indicates that education in pesantren not only focuses on religious aspects but also includes moral and ethical values, playing a crucial role in shaping students' character to be responsible towards the environment and society. This study supports this view by showing how Pesantren Darularafah Raya integrates moral and environmental ethical values in its education (Anam et al., 2019; Ramdani et al., 2021).

Research by Gumilang & Nurcholis outlines how pesantren emphasize the importance of building strong and responsible character, including teaching ethics in the context of religion and daily life. These findings are consistent with the approach taken by Pesantren Darularafah Raya (Gumilang & Nurcholis, 2018).

Nasir reveals that environmental ethics education in pesantren is not only theoretical but also integrated into the students' daily lives. This study supports Pesantren Darularafah Raya's approach of integrating environmentally friendly principles into daily routines (Nasir, 2018).

Ismail shows that through environmental awareness education, students are empowered to understand the impact of human activities on nature and their moral responsibilities as earth's guardians. This is highly relevant to the environmental awareness education program at Pesantren Darularafah Raya (Ismail, 2021).

Vindriyana emphasizes the importance of applying environmentally friendly principles in pesantren, not only teaching environmental values but also embodying them in everyday life. This is reflected in various programs and activities at Pesantren Darularafah Raya that support environmental preservation (Vindriyana, 2017).

Research by Kurniasih et al. reveals that an environment-based curriculum in pesantren not only explores environmental concepts theoretically but also integrates Islamic values as its philosophical foundation. This aligns with Pesantren Darularafah Raya's approach in developing a curriculum that includes an understanding of the relationship between nature and humans and moral responsibility towards God's creation (Kurniasih et al., 2023).

Syafe'i discusses the integration of Islamic teachings and environmental awareness in pesantren. Pesantren Darularafah Raya adopts a similar approach by guiding students to understand, appreciate, and internalize environmental ethical values (Syafe'i, 2017).

Harahap directs a practical approach to natural resource management and environmental conservation based on Islamic environmental ethics theory. This approach is applied at Pesantren Darularafah Raya by empowering students to apply Islamic values in real actions, including water, land, and energy management (Harahap, 2015).

Finally, research by Nurjanah & Amrullah describes the role of pesantren in shaping a generation with strong and sustainable environmental ethics. This approach is evident in various activities and programs at Pesantren Darularafah Raya aimed at enhancing students' understanding of environmental issues (Nurjanah & Amrullah, 2021).

These findings can be explained within the framework of the concepts of khalifah and amanah in Islamic teachings. The concept of khalifah positions humans as God's representatives on earth with the responsibility to care for nature. Pesantren Darularafah Raya utilizes this concept to instill environmental ethical values in students, so they understand that protecting the environment is part of their responsibility as Muslims.

Although these findings show the success of Pesantren Darularafah Raya in integrating Islamic values with environmental ethics, interpretation of the results should be done cautiously. The complexity and breadth of environmental issues and the variation in implementation across different pesantren can affect the outcomes achieved. Additionally, the limitations of data and research samples should be considered when generalizing these findings.

These findings have significant implications for environmental education in pesantren and other Islamic educational institutions. Integrating Islamic values with environmental awareness can serve as a model for other educational institutions in their efforts to develop holistic environmental education programs. Additionally, this approach can contribute to shaping individuals with responsible and environmentally conscious characters.

This research opens opportunities for further study in several areas. First, comparative studies between different pesantren can provide deeper insights into variations in the implementation of Islam-based environmental education. Second, longitudinal research can help understand the long-term impact of environmental education in pesantren on students' behavior and attitudes. Third, further exploration of the role of technology and innovation in environmental education in pesantren can offer new perspectives for developing more effective programs.

This study has several limitations, including a sample limited to one pesantren, which may not represent all pesantren in Indonesia. Additionally, the qualitative approach used may not capture the full complexity of the issues studied. Further research with more comprehensive methods and broader samples is needed to confirm these findings.

Based on the findings of this study, it is recommended that other pesantren consider adopting a similar approach in integrating Islamic values with environmental education. Furthermore, policies



supporting environmental education in pesantren should be developed, including providing training for teachers and developing an appropriate curriculum. Further research is also recommended to explore the long-term impact of Islam-based environmental education on students' behavior and attitude.

## 5. Conclusion

This study reveals the paradigm of environmental ethics education at Pesantren Darularafah Raya in Deli Serdang, North Sumatra. The pesantren successfully integrates Islamic values with environmental awareness through a holistic approach that includes curriculum development, specialized teacher training, extracurricular programs, and the implementation of environmentally friendly technologies.

At Pesantren Darularafah Raya, Islamic values such as tauhid, khalifah, amanah, and tawakkal are taught in the context of environmental stewardship. Teachers at the pesantren are trained to teach these values comprehensively, emphasizing that environmental preservation is part of their worship to Allah. Additionally, students are encouraged to understand that caring for nature is their responsibility as khalifah (stewards) on earth.

The pesantren also emphasizes the importance of environmental awareness education. This education is provided not only in the classroom but also through daily activities such as tree planting, recycling programs, and field trips to conservation sites. Students are taught to understand the impact of human activities on nature and their moral responsibility in maintaining environmental sustainability.

The implementation of environmentally friendly principles at Pesantren Darularafah Raya involves policies covering waste management, the use of renewable energy, and other sustainable practices. These policies are applied across all aspects of pesantren life, demonstrating the institution's commitment to reducing its environmental impact through concrete actions.

In curriculum development, Pesantren Darularafah Raya integrates Islamic teachings related to the environment into various subjects. Concepts such as khalifah and amanah are taught in depth, encouraging students to understand their responsibilities toward nature. The curriculum also includes critical thinking skills, problem-solving, and leadership, encouraging students to become agents of change in their environment.

The Islamic environmental ethics system at this pesantren is based on the Qur'an, Hadith, and Fiqh, focusing on human responsibility as God's representatives on earth. Pesantren Darularafah Raya also conducts an eco-pesantren program aimed at instilling conservation values in students' daily lives through various practical activities.

This study shows that the holistic approach of Pesantren Darularafah Raya in environmental ethics education can serve as a model for other Islamic educational institutions. Integrating Islamic values with environmental awareness not only shapes responsible individuals but also contributes to overall environmental conservation.

Recommendations from this study include adopting a similar approach by other pesantren, developing policies that support environmental education, and conducting further research. Comparative studies between different pesantren and longitudinal research are needed to understand the long-term impact of Islam-based environmental education.

Although this study has limitations, including a sample limited to one pesantren and a qualitative approach, it provides significant contributions to the development of environmental ethics education in pesantren. The findings enrich the literature and offer practical recommendations for improving curricula and pedagogical approaches in other pesantren.

## Declarations

### Author contribution statement

Syukri contributed as the primary and corresponding author and prepared the draft article thoroughly. Sulaiman Muhammad Amir added analysis and methodology; Fitriani conducted FGD and interviews with the principal researcher, Sarmalina Pane, who helped conduct in-depth interviews and a literature review.

### Funding statement

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

### Data availability statement

The datasets generated during and analyzed during the current study are available from the corresponding author upon reasonable request.

### Declaration of Interest's statement

The authors declare that they have no known competing financial interests or personal relationships that could have influenced the work reported in this paper.

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