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STRENGTHENING ENVIRONMENTAL CARE CHARACTER THROUGH THE ECO-PESANTREN PROGRAM: A CASE STUDY OF VALUE INTERNALIZATION AT MANSYAUL ULUM BOARDING SCHOOL

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Kata Kunci:

Eco Pesantren;
karakter peduli
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pendidikan islam;
internalisasi nilai;
pesantren

ABSTRAK

(1) **Latar Belakang:** Krisis lingkungan yang semakin kompleks menuntut lembaga pendidikan tidak hanya memberikan pemahaman ekologis, tetapi juga membentuk karakter peduli lingkungan melalui pendidikan yang berkelanjutan. Dalam konteks pendidikan Islam, pesantren memiliki posisi strategis untuk mengintegrasikan nilai keagamaan dengan praktik pelestarian lingkungan melalui Program Eco Pesantren; (2) **Tujuan Penelitian:** Penelitian ini bertujuan menganalisis implementasi Program Eco Pesantren dalam penguatan karakter peduli lingkungan berbasis nilai-nilai Pendidikan Islam di Pondok Pesantren Mansyaul Ulum Ganjaran; (3) **Metode:** Penelitian menggunakan pendekatan kualitatif dengan desain studi kasus. Data diperoleh melalui observasi, wawancara semi-terstruktur, dan dokumentasi dengan melibatkan pengasuh pesantren, ustaz, pengurus Program Eco Pesantren, dan santri sebagai informan. Analisis data menggunakan model interaktif Miles, Huberman, dan Saldaña melalui kondensasi data, penyajian data, dan penarikan kesimpulan. (4) **Hasil:** Hasil penelitian menunjukkan bahwa Program Eco Pesantren berkembang dari kegiatan pengelolaan lingkungan menjadi bagian dari budaya pendidikan pesantren melalui pembiasaan, keteladanan, tata kelola kelembagaan, dan partisipasi warga pesantren. Perubahan perilaku santri ditunjukkan oleh kebiasaan membuang dan memilah sampah sesuai tempatnya, keterlibatan yang lebih konsisten dalam kerja bakti dan perawatan lingkungan, serta munculnya inisiatif menjaga kebersihan tanpa selalu menunggu instruksi. Perubahan tersebut diperkuat melalui internalisasi nilai amanah, *khalifah fi al-ardh*, kebersihan, dan tanggung jawab. (5) **Kesimpulan:** Penelitian ini menyimpulkan bahwa Program Eco Pesantren dapat menjadi model pendidikan karakter berbasis Islam yang mengintegrasikan dimensi spiritual, moral, dan ekologis dalam membangun budaya pesantren berkelanjutan.

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Keywords:

Eco-Pesantren Program; environmentally conscious character; Islamic education; value internalization; Islamic boarding school

ABSTRACTS

(1) **Background:** The increasingly complex environmental crisis requires educational institutions not only to impart ecological understanding but also to cultivate environmentally conscious character through education for sustainability. Within the context of Islamic education, Islamic boarding schools occupy a strategic position to integrate religious values with environmental conservation practices through the Eco-Pesantren Program. (2) **Purpose of the Study:** This study aims to analyze the implementation of the Eco Pesantren Program in strengthening environmentally conscious character based on Islamic educational values at Pondok Pesantren Mansyaul Ulum Ganjaran. This study aims to analyze the implementation of the Eco Pesantren Program in strengthening environmentally conscious character based on Islamic educational values at Pondok Pesantren Mansyaul Ulum Ganjaran; (3) **Methods:** This study employs a qualitative approach with a case study design. Data were collected through observation, semi-structured interviews, and documentation, involving Islamic boarding school caregivers, religious teachers, Eco-Pesantren Program administrators, and students as informants. Data analysis utilized the interactive model developed by Miles, Huberman, and Saldaña, comprising data condensation, data display, and conclusion drawing.; (4) **Results:** Research findings indicate that the Eco-Pesantren Program has evolved from mere environmental management activities into an integral part of the pesantren educational culture, fostered through habituation, leading by example, institutional governance, and the participation of the pesantren community. Behavioral changes among the students are evidenced by habits of properly disposing of and sorting waste, more consistent involvement in communal cleanup and environmental maintenance, and the emergence of initiatives to maintain cleanliness without waiting for instructions. These changes are reinforced through the internalization of values such as trustworthiness, stewardship of the earth, cleanliness, and responsibility.; and (5) **Conclusions:** This study concludes that the Eco-Pesantren Program can serve as a model of Islamic-based character education that integrates spiritual, moral, and ecological dimensions in fostering a sustainable culture within Islamic boarding schools.

A. INTRODUCTION

The environmental crisis has emerged as a critical challenge facing society in the 21st century. Climate change, water and air pollution, biodiversity loss, and rising waste generation demonstrate that environmental degradation is not merely a matter of nature; it is also linked to human mindsets, values, and behaviors that are not yet fully oriented towards sustainability. (Judijanto, L., Kusumastuti, S. Y., & Mudjiyanti, 2025). Therefore, resolving environmental issues cannot rely solely on policies, technology, or regulations; it also requires an educational process capable of fostering ecological awareness and responsibility in a sustainable manner. (Hadijah, S., & Sartika, 2026).

In the Indonesian context, waste management and environmental quality remain ecological challenges requiring serious attention. SIPSN data indicates that national waste generation remains high, while a portion of the waste is not yet being managed optimally. (Dewi et al., 2025). This situation indicates that environmental issues are not merely a matter of the availability of management systems, but also stem from the lack of ingrained habits and character traits among the public regarding environmentally responsible behavior. In this context, educational institutions hold a strategic position, as fostering environmental awareness requires focusing not only on the acquisition of ecological knowledge but also on the internalization of values and their application in daily actions.

The development of environmentally conscious character can be understood as a process involving the dimensions of knowledge, internalization, and action—based on Thomas Lickona, (1991), character education framework. It explains that character develops through the interplay of moral knowing, moral feeling, and moral action. It is not enough for an individual merely to know what is good; one must also possess an awareness of and commitment to that value, as well as the ability to translate it into tangible behavior. In the context of environmental concern, these three dimensions provide a foundation for understanding that knowledge regarding the importance of preserving nature must evolve into moral awareness and subsequently be manifested through consistent action.

Various empirical studies reinforce the importance of the relationship between values, experiences, and practices in the formation of environmentally conscious character. Begum et al., (2021) demonstrates that environmental moral education integrated with religiosity can strengthen pro-environmental behavior. Putri & Setyowati, (2023) found that student involvement in environmental management activities contributes to the development of knowledge, awareness, and moral action. In the context of Islamic education, Ma'arif & Mawardi, (2024) It emphasizes that an environmentally conscious character can be fostered through the integration of religious values into culture and daily life practices. The findings demonstrate that environmental education becomes more meaningful when ecological knowledge, the internalization of values, and practical experience are developed in an integrated manner.

Islamic boarding schools offer an educational context relevant to this process. As residential Islamic educational institutions, they provide a space for intensive interaction among senior religious scholars, religious teachers, administrators, and students. The educational process unfolds not only through formal instruction but also through the cultivation of habits, the power of example, established rules, and the culture of daily life. (Firyal Rafidah Lesmana, Hanun Salsabilah, 2021). This characteristic

allows Islamic educational values to be internalized in a way that closely aligns with the students' lived experiences.

From an Islamic perspective, the relationship between humans and the environment rests on a strong foundation of values. The concept of vicegerent on earth positions humans as having the responsibility to preserve and manage the earth conscientiously. The value of trust/stewardship affirms that this duty must be carried out as a matter of moral and spiritual accountability, while excellence/virtue encourages individuals to perform good deeds with sincerity and dedication, including in their treatment of the environment. Together, these three values provide an ecological foundation for Islamic education and can be put into practice through the daily life of the Islamic boarding school.

One form of integrating Islamic education with environmental awareness is the Eco-Pesantren program. This program is not merely oriented toward technical activities such as waste management, greening initiatives, and maintaining cleanliness but also holds potential as an educational space for linking religious values with ecological actions. Various studies indicate that the implementation of the Eco-Pesantren program can foster environmental awareness through activities integrated with Islamic culture and values. Ainiyah & Awakachi (2025) and Makrufah & Abror (2026) demonstrate that waste management activities, greening initiatives, and the cultivation of clean living habits can strengthen the environmental awareness of Islamic boarding school students when implemented sustainably. Similar findings are reported by (Maslani et al., 2023), (Anabarja & Mubah, 2021), (Aulia et al., 2024), and (Syukri et al., 2024). This indicates that institutional culture, role modeling, habituation, and the integration of Islamic values are crucial elements of environmental education within Islamic educational institutions. However, these findings also reveal areas requiring further study. Previous research has largely focused on Eco Pesantren in terms of environmental management, ecological culture, or the general success of program implementation. While such studies have demonstrated that Islamic values contribute to fostering ecological awareness, the mechanisms linking Islamic educational values to the process of character formation have not yet been explored in depth. Specifically, there is limited research analyzing how the values of stewardship of the earth, trust/responsibility, and excellence/spiritual mindfulness are internalized through Eco Pesantren activities, and how this process relates to the development of moral knowledge, moral internalization, and moral action among the students .

This gap is particularly significant because the formation of an environmentally conscious character cannot be measured solely by the existence of programs or the execution of environmental activities. It requires an understanding of the educational processes underlying behavioral changes specifically, how Islamic boarding school students comprehend ecological responsibilities, internalize the values driving these actions, and cultivate habits of environmentally conscious behavior in their daily lives. Consequently, the implementation of the Eco-Pesantren Program must be viewed not merely as the execution of environmental activities, but as an educational process involving value internalization, awareness-building, and the habituation of actions.

Mansyaul Ulum Ganjaran Islamic Boarding School was selected as the research site because, since mid-2024, it has been developing an Eco-Pesantren Program as part of an effort to integrate environmental conservation with Islamic educational values. Preliminary observations and interviews with the school's leadership and program

administrators indicate that the initiative encompasses waste management practices, cleanliness maintenance, greening efforts, and student participation in conservation activities. Program implementation has also demonstrated a shift in student engagement regarding cleanliness and environmental management. However, these changes do not yet fully explain how Islamic educational values are internalized within the program's activities or how this process contributes to shaping an environmentally conscious character. This context makes Mansyaul Ulum Ganjaran an ideal setting for examining the interplay between program implementation, value internalization, and character formation within the pesantren educational framework.

Based on this background and research gap, the study aims to address four key questions: (1) how the Eco-Pesantren Program is implemented at Mansyaul Ulum Ganjaran Islamic Boarding School; (2) how Islamic educational values specifically stewardship of the earth, trust/responsibility, and excellence/virtue are internalized within the program's activities; (3) how this process of value internalization contributes to strengthening the students' environmentally conscious character; and (4) what factors facilitate or hinder the implementation of the Eco-Pesantren Program. These four questions aim to foster a more comprehensive understanding of the Eco-Pesantren as an educational process, rather than merely as an environmental management program.

The study's novelty lies in the development of an analytical perspective that directly integrates Thomas Lickona's three dimensions of character education moral knowing, moral feeling, and moral action with Islamic educational ecological values: stewardship of the earth, trust/responsibility, and excellence/virtue. Unlike previous studies that tended to address Eco-Pesantren implementation, ecological culture, or the internalization of Islamic values in isolation, this study positions the Eco-Pesantren Program as a medium and process for value internalization that elucidates the relationships between the three stages of character formation. The value of *khalifah fi al-ardh* is analyzed as the foundation for understanding human responsibility toward the environment (moral knowing); *amanah* is viewed as reinforcing moral-spiritual awareness and responsibility in environmental stewardship (moral feeling); and *ihsan* is understood as the impetus to translate that concern into tangible, sustainable ecological actions (moral action). This integration is examined through the lenses of habituation, role modeling, institutional governance, and the participation of the pesantren community. Thus, the study offers a more integrative framework for explaining how the Eco-Pesantren Program transforms Islamic ecological values moving from knowledge and internal conviction to action and a culture of environmental care within the pesantren environment.

B. METHOD

This study employs a qualitative approach with a case study design to gain an in-depth understanding of the implementation of the Eco-Pesantren Program in fostering an environmentally conscious character grounded in Islamic educational values at the Mansyaul Ulum Ganjaran Islamic Boarding School in Malang Regency. The case study design was selected because it enables the researcher to examine a phenomenon in depth within the real-life context in which it occurs.(Yin, 2018)(Creswell, J. W., & Poth, 2018). Through this approach, the research focuses not only on the outcomes of the Eco-Pesantren Program's implementation but also on the process, interactions among actors, the internalization of Islamic educational values,

and the factors facilitating or hindering its implementation in the daily life of the pesantren. In this study, the researcher serves as the primary instrument involved in data collection, analysis, and interpretation to understand the meaning of the phenomenon from the informants' perspectives.

The study was conducted at the Mansyaul Ulum Ganjaran Islamic Boarding School, selected purposively due to its consistent development of the Eco-Pesantren Program as part of an effort to foster environmental awareness grounded in Islamic educational values. Informants were selected using a purposive sampling technique based on their involvement, experience, and knowledge regarding the program's planning, implementation, guidance, and evaluation. The research informants comprised one boarding school leader, one female religious teacher, two Eco-Pesantren Program coordinators or administrators, and five students actively involved in program activities, bringing the total number of informants to nine. This composition was chosen because it represents actors involved at various levels of program implementation and is considered capable of providing information-rich and relevant data regarding the phenomenon under study.(Patton, 2015). Data collection was conducted in stages until the information obtained showed recurring patterns and no longer yielded new categories or themes relevant to the research focus.

Data were collected through participant observation, semi-structured interviews, and document analysis. Participant observation involved the researcher's presence during routine daily activities associated with the Eco-Pesantren Program. The researcher directly observed waste sorting and disposal practices, the execution of cleaning schedules and communal work sessions, the maintenance of plants and green spaces, and the interactions among caregivers, female religious teachers, administrators, and students during these activities. Throughout the observation process, the researcher documented the nature of student involvement, patterns of rule compliance, spontaneously emerging habits, examples of role-modeling, and instances where values such as responsibility, trustworthiness, and environmental concern were translated into action. This observational approach enabled the researcher to assess the alignment between the information provided by informants during interviews and the actual practices observed in the daily life of the pesantren. Semi-structured interviews were employed to explore informants' experiences and perspectives regarding the Eco-Pesantren Program's implementation, the internalization of Islamic educational values, changes in environmentally conscious behavior, and the factors facilitating or hindering the program's execution. The semi-structured format ensured that key questions remained aligned with the research focus while allowing informants the flexibility to elaborate on their experiences more openly and in greater depth. Document analysis was conducted on institutional records, policies or regulations concerning cleanliness and the environment, activity reports, program schedules, photographs of activities, and other relevant archives. These documents served to complement and corroborate the data obtained through observation and interviews.(Creswell, J. W., & Poth, 2018).

Data analysis draws on the interactive model of Miles, Huberman, & Saldaña, (2014) and was conducted continuously from the moment data collection began. Interview data were first transcribed verbatim and integrated with field notes and relevant documents. Subsequently, the researcher engaged in repeated readings to gain a comprehensive understanding of the data. During the data condensation stage, the

researcher identified units of meaning through initial coding and then grouped related codes into categories. These categories were further developed into themes concerning the implementation of the Eco-Pesantren Program, the internalization of Islamic educational values, the strengthening of environmentally conscious character, and the factors supporting or hindering the program's execution. The organized data were then presented in narrative descriptions and thematic matrices to facilitate the identification of patterns, relationships, and differences within the data. The final stage involved drawing and verifying conclusions iteratively by comparing findings from various sources and data collection techniques. Through this approach, the analysis process unfolded interactively, involving data condensation, data presentation, and the drawing and verification of conclusions.

Data credibility and validity were maintained through source triangulation, technique triangulation, time triangulation, member checking, an audit trail, and researcher reflexivity. Source triangulation involved comparing information from caregivers, female religious teachers, Eco-Pesantren Program coordinators or administrators, and students. Technique triangulation entailed comparing data derived from observations, interviews, and documentation, while time triangulation was achieved by collecting and verifying information at different times to assess data consistency. Member checking was conducted by re-confirming information summaries and specific interpretations with informants to ensure the researcher's understanding aligned with the experiences they shared. Furthermore, an audit trail was established by documenting the stages of data collection, coding, categorization, theme development, and conclusion drawing, thereby ensuring the research process remained traceable. The researcher also practiced reflexivity by consciously evaluating their position, assumptions, and potential subjectivity throughout the data collection and interpretation processes. The entire research process was conducted in adherence to ethical research principles. Prior to data collection, the researcher explained the research objectives and procedures to each informant and obtained voluntary participation (informed consent). Informant identities were kept confidential, and the information obtained was used solely for research purposes and scientific publication. These principles were applied to safeguard the rights, safety, and comfort of the informants throughout the research process. (Barrow, J. M., Brannan, G. D., & Khandhar, 2017).

Gambar 1.1



C. RESULT AND DISCUSSION

Findings

1. Implementation of the Eco Pesantren Program at the Mansyaul Ulum Ganjaran Islamic Boarding School

The implementation of the Eco-Pesantren Program at the Mansyaul Ulum Ganjaran Islamic Boarding School reflects the institution's commitment to fostering a clean, healthy, and sustainable educational environment. Findings from observations, interviews, and documentation indicate that the program goes beyond mere cleanliness maintenance; it has been fully integrated into the daily life and educational system of the boarding school. Various activities such as cleaning rosters, communal cleanup drives, waste sorting, waste bank management, composting, greening initiatives, and the maintenance of facilities and infrastructure are carried out on a scheduled basis, involving the entire boarding school community according to their respective roles.

Statements from the school's leadership indicate that the Eco-Pesantren Program is viewed as a means of character building for the students through the consistent cultivation of habits. Maintaining cleanliness and environmental sustainability is not treated as an extracurricular add-on but rather as an integral part of the educational process. Consequently, environmental activities are consistently linked to Islamic

educational values. Students are guided to understand that caring for the environment is both a way to practice religious teachings and an expression of human responsibility as stewards of the earth.

The program's implementation is supported by a clear division of roles. The school leadership determines policy direction and provides guidance. Teachers provide mentorship and set an example through their own active participation in environmental activities. The Eco-Pesantren committee is responsible for coordinating the program, scheduling, monitoring activity implementation, overseeing student participation, and documenting activities. Meanwhile, the students serve as the primary implementers, directly involved in various environmental conservation activities. Student participation is evident in both daily and weekly routines. Each dormitory room follows a rotating cleaning schedule. Students also participate in regular communal work sessions to clean the grounds, tend to gardens, clear drainage channels, and organize dormitory and classroom areas. During these activities, students are accustomed to sorting waste by type, depositing reusable waste at the waste bank, and processing some organic waste into compost to support plant maintenance.

Qualitatively, behavioral changes are evident in the students' growing habit of disposing of waste in designated bins, sorting waste prior to collection, maintaining the cleanliness of their rooms and shared spaces, and participating in plant care without waiting for direct instructions from administrators. Adherence to cleaning schedules has also evolved from an activity performed primarily due to rules into a habit deeply ingrained in daily life. These findings indicate that behavioral change is fostered through the repetition of activities, supervision, and continuous guidance. Research documentation also highlights the availability of supporting infrastructure, such as segregated waste bins, green spaces, composting facilities, cleaning equipment, and information boards emphasizing environmental stewardship. These facilities serve not only a technical function but also act as part of an educational environment that constantly reminds students to adopt eco-friendly behaviors.

The program's implementation is further reinforced through regular evaluations. According to the administrators, evaluations are conducted via periodic meetings to review activity progress, identify obstacles, and determine corrective measures. When activities do not proceed as planned, administrators and the Islamic boarding school's leadership provide guidance and make adjustments to ensure the program continues. Overall, the research results demonstrate that the success of the Eco-Pesantren Program relies on the involvement of the entire pesantren community. The school leader provides direction and policy support, educators reinforce the program by setting a good example, administrators handle coordination, and the students serve as the primary participants. This collaboration has allowed the Eco-Pesantren Program to evolve into part of the institutional culture, integrating environmental awareness with character education grounded in Islamic values.

Gambar 2.2

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> Matriks Implementasi Aktivitas Eco Pesantren dalam Penguatan Karakter Peduli Lingkungan Berbasis Nilai-Nilai Pendidikan Islam </div> </div>				
No.	Aktivitas Eco Pesantren	Nilai Pendidikan Islam yang Dioperasionalkan	Bentuk Perilaku/Karakter yang Diamati	Karakter Peduli Lingkungan yang Terbentuk
1	Piket kebersihan	Kebersihan, amanah, dan tanggung jawab	<ul style="list-style-type: none"> Menjaga kebersihan kamar dan lingkungan sesuai jadwal Melaksanakan piket tanpa harus diingatkan 	Disiplin, tanggung jawab, dan kepedulian terhadap kebersihan lingkungan
2	Pemilahan sampah	Amanah, tanggung jawab, dan tidak berlebihan	<ul style="list-style-type: none"> Memisahkan sampah berdasarkan jenis sebelum dibuang atau dikumpulkan Membuang sampah sesuai kategorinya 	Kesadaran ekologis, tanggung jawab, dan kebiasaan hidup tertib
3	Kerja bakti	Ta'awun (tolong-menolong), tanggung jawab sosial	<ul style="list-style-type: none"> Bekerja sama membersihkan dan menata lingkungan Membantu teman dan menyelesaikan pekerjaan secara bersama-sama 	Kerja sama, kepedulian sosial, dan kepedulian terhadap lingkungan bersama
4	Penghijauan dan perawatan tanaman	<i>Khalifah fi al-ardh</i> (penjaga bumi), dan <i>ihsan</i> (berbuat baik)	<ul style="list-style-type: none"> Merawat dan menjaga tanaman serta ruang hijau Tidak merusak tanaman dan lingkungan 	Kepedulian terhadap alam, rasa tanggung jawab, dan kesadaran sebagai penjaga lingkungan
5	Pembuatan kompos	Tidak berlebih-lebihan (israf), dan tanggung jawab terhadap alam	<ul style="list-style-type: none"> Mengumpulkan limbah organik untuk diolah menjadi kompos Memanfaatkan kompos untuk penghijauan 	Sikap hemat, kreatif dalam pemanfaatan sumber daya, dan tanggung jawab ekologis
6	Bank sampah	Amanah dan tanggung jawab	<ul style="list-style-type: none"> Mengumpulkan dan memilah sampah yang masih memiliki nilai guna Mengelola hasil sampah sesuai prosedur 	Tanggung jawab, kepedulian lingkungan, dan kesadaran terhadap nilai guna sumber daya
7	Perawatan fasilitas	Amanah dan kepedulian	<ul style="list-style-type: none"> Menjaga kebersihan dan kelayakan fasilitas bersama Menggunakan fasilitas dengan bijak dan tidak merusak 	Rasa memiliki, amanah, tanggung jawab, dan kepedulian terhadap lingkungan bersama

2. Internalization of Islamic Educational Values in the Eco Pesantren Program

Research findings indicate that the Eco-Pesantren Program functions not only as an environmental conservation initiative but also as a medium for internalizing Islamic educational values within the lives of the students. Based on field data, environmental activities are linked to Islamic teachings through guidance, counsel, habituation, and the examples set by the caretakers/leaders and educators. Through this approach, environmental stewardship is understood not merely as an institutional obligation but as an expression of religious values. The caretakers frame environmental concern as a form of human stewardship a sacred trust in preserving Allah SWT's creation. This understanding aligns with the concept of humans as stewards of the earth, bearing the responsibility to protect the planet rather than destroy it. Furthermore, the value of excellence/virtue introduces a moral dimension, emphasizing that every action including how one treats the environment should be performed to the highest standard.

These values are internalized through a gradual process. Students gain an understanding of the importance of environmental stewardship through guidance and mentoring. This understanding is subsequently reinforced through repetitive activities such as cleaning rosters, communal work, waste sorting, plant care, and composting. Thus, the educational process extends beyond the mere transmission of knowledge; it creates opportunities for students to put the values they have learned into practice. Leading by example is also a crucial element of this internalization process. Caretakers, religious teachers, and administrators do not simply issue instructions; they actively participate in environmental conservation activities. This involvement provides

students with a direct model of how values are translated into action. Consequently, students learn both through explicit guidance and through the behaviors they observe in their daily lives.

The experiences of the Islamic boarding school students reveal an evolution in how they perceive environmental activities. Tasks such as cleaning the surroundings, tending to plants, and maintaining facilities are no longer viewed merely as routine obligations; some students have begun to regard these activities as matters of moral and religious responsibility. This shift in perspective is significant, as it indicates a transition from external compliance to the emergence of a more personal sense of awareness. These findings align with the views of Kibtiyah, (2025). The character formation of Islamic boarding school students occurs through a process of value internalization supported by the educational environment, habituation, role modeling, and social interaction.

In the context of this study, the Eco-Pesantren Program serves as a tangible platform for linking religious values with ecological practices. Overall, the internalization of Islamic educational values unfolds through the interplay of understanding, experience, habituation, and role modeling. Values such as stewardship, trustworthiness, and excellence/spiritual mindfulness are not merely conveyed conceptually but are put into practice through activities aimed at maintaining cleanliness and environmental sustainability. Consequently, environmental awareness develops as an integral part of the students' character formation and the practice of their religious values.

3. Contribution of the Eco Pesantren Program to Strengthening the Environmentally Caring Character of Students

Research findings indicate that the Eco-Pesantren Program contributes to strengthening the environmentally conscious character of the Islamic boarding school students. This shift is evident in the students' growing awareness, concern, and active involvement in maintaining the boarding school environment. Behaviors that were initially driven largely by rules and schedules gradually evolved through a process of continuous habituation.

Empirically, this behavioral change is demonstrated through several qualitative indicators. Students have become increasingly accustomed to sorting waste by type, maintaining the cleanliness of both private and communal spaces, caring for plants, using facilities responsibly, and helping to look after the environment without always waiting for direct instructions. Furthermore, a culture of mutual reminders has emerged, where students prompt peers who have not yet practiced cleanliness habits. These indicators reflect a progression from mere rule compliance to active participation and heightened awareness. School administrators and religious teachers explain that this transformation did not happen overnight. Initially, some students participated in activities only due to schedules and supervision. However, through habituation, guidance, role modeling, and the reinforcement of religious values, these activities gradually became part of their daily routine. In various situations, students now

demonstrate initiative by cleaning specific areas, tidying up equipment after use, or reminding their peers to maintain cleanliness.

This program also fosters the development of other character traits, such as discipline, responsibility, cooperation, and social concern. Activities such as communal cleanup drives, greening initiatives, waste banks, and composting require collective involvement and the division of tasks. These experiences help cultivate a sense of ownership regarding the pesantren environment while strengthening the culture of mutual cooperation. These findings align with those of Ardoin et al., (2020). demonstrating that environmental education can bring about various changes in knowledge, attitudes, skills, and behavior. Research findings (Wetering et al., 2022) also indicate that environmental education has the potential to yield positive environmental outcomes for children and adolescents. In this study, this contribution is evident through the direct and repetitive learning experiences inherent in pesantren life.

The research findings align with Aulia et al., (2024), demonstrating that the Eco-Pesantren model fosters environmentally friendly behavior through engagement in daily life practices. Meanwhile, Maslani et al., (2023) highlight the importance of ecopedagogy within Islamic boarding schools through environmental conservation strategies linked to the context and culture of Islamic education. Syukri et al., (2024) further indicate that integrating Islamic values with environmental ethics can strengthen environmental education in these institutions. In contrast to those three studies, this research specifically illustrates the interconnectedness between Eco-Pesantren activities, the internalization of values such as stewardship, trust/responsibility, and excellence/spiritual sincerity, and the development of three character dimensions: moral understanding, moral appreciation, and moral action. Thus, the contribution of the Eco-Pesantren program is evident not only in increased environmental preservation activities but also in a character-building process that links ecological awareness with moral and spiritual responsibility. In this context, an environmentally conscious character develops through sustained practice, reinforced by the culture and values of pesantren life.

4. Supporting and Inhibiting Factors in the Implementation of the Eco Pesantren Program

Research findings indicate that the implementation of the Eco-Pesantren Program is influenced by a number of interrelated factors. Key supporting factors include the commitment of the Islamic boarding school leadership, the exemplary role of educators, the active involvement of administrators, student participation, the availability of supporting facilities, and continuous program evaluation.

The commitment of the school head serves as a crucial foundation, as environmental awareness is integrated into the pesantren's educational system. This support is manifested through guidance, mentoring, policy-making, and the provision of facilities. Educators also play a vital role by setting an example and providing direct supervision during activities. Active student participation further supports the program's sustainability; involvement in tasks such as cleaning rosters, community service, waste sorting, greening initiatives, and composting allows students to directly practice environmentally conscious behavior (Liu & Green, 2024), who note that

experience and engagement in environmental activities are essential to the development of pro-environmental behavior in children

Facilities such as segregated waste bins, green spaces, composting areas, cleaning equipment, and information displays also facilitate the execution of activities. The presence of these facilities creates conditions that enable environmentally friendly behaviors to be practiced more consistently. On the other hand, the study identified several obstacles. The adaptation of new students poses a challenge, as they require time to understand and adjust to the established environmental habits. Additionally, weather conditions and the demanding academic schedule of the Islamic boarding school sometimes necessitate adjustments to activity schedules.

These obstacles can generally be overcome through guidance and regular evaluation. Evaluations serve to identify constraints, determine corrective measures, and adapt program implementation to the prevailing circumstances. Consequently, the obstacles that arise do not necessarily halt the program; instead, they become part of a reflective process aimed at improving implementation.

Gambar 3.3

MATRIKS FAKTOR PENDUKUNG DAN PENGHAMBAT IMPLEMENTASI PROGRAM ECO PESANTREN				
	FAKTOR PENDUKUNG	KONTRIBUSI TERHADAP PROGRAM	FAKTOR PENGHAMBAT	BENTUK PENANGANAN
1	 Komitmen pengasuh	<ul style="list-style-type: none">Memberikan arah, kebijakan, dan pembinaan	<ul style="list-style-type: none">Adaptasi santri baru 	<ul style="list-style-type: none">Pendampingan dan pembiasaan bertahap 
2	 Keteladanan pendidik	<ul style="list-style-type: none">Memperkuat pembelajaran melalui contoh nyata	<ul style="list-style-type: none">Pemahaman awal yang beragam 	<ul style="list-style-type: none">Pengarahan dan penguatan secara berulang 
3	 Pengurus Eco Pesantren	<ul style="list-style-type: none">Mengatur jadwal dan koordinasi kegiatan	<ul style="list-style-type: none">Padatnya agenda pesantren 	<ul style="list-style-type: none">Penyesuaian jadwal kegiatan 
4	 Partisipasi santri	<ul style="list-style-type: none">Menjamin keberlangsungan aktivitas	<ul style="list-style-type: none">Kondisi cuaca 	<ul style="list-style-type: none">Penyesuaian pelaksanaan kegiatan 
5	 Sarana dan prasarana	<ul style="list-style-type: none">Memudahkan praktik perilaku ramah lingkungan	<ul style="list-style-type: none">-	<ul style="list-style-type: none">Optimalisasi fasilitas yang tersedia 
6	 Evaluasi berkala	<ul style="list-style-type: none">Mengidentifikasi kendala dan memperbaiki program	<ul style="list-style-type: none">-	<ul style="list-style-type: none">Tindak lanjut dan refleksi bersama 

Program at the Mansyaul Ulum Ganjaran Islamic Boarding School has evolved beyond mere environmental management activities. The program has become embedded in the educational culture through habituation, role modeling, governance, the active involvement of the boarding school community, and continuous evaluation. These findings demonstrate that the effectiveness of environmental education depends not only on the number of activities conducted but also on the extent to which values of environmental stewardship are integrated into the institution's daily life.

Conceptually, this situation can be understood through the lens of the "Whole Institution Approach." This approach emphasizes the need to integrate sustainability

education into various institutional dimensions, including leadership, governance, organizational culture, the learning environment, and daily activities. In the context of the studied boarding school, the involvement of the school leader, educators, administrators, and students illustrates that environmental stewardship is a collective responsibility. These findings reinforce Holst, (2023) study, which highlights the importance of coherence and the integration of sustainability across the entire educational institution, while also demonstrating that a whole-institution approach can empower both learners and educators in sustainability education. However, this research reveals specific characteristics unique to the Islamic boarding school context: sustainability is supported not only by institutional structures but also reinforced by intensive guidance systems and the religious values that underpin communal life.

This distinctiveness is evident in the process of internalizing Islamic values within ecological activities. The concept of stewardship of the earth fosters an understanding of human responsibility toward the planet. The value of trust/accountability emphasizes that the environment is a responsibility requiring protection, while the value of excellence/virtue encourages the fulfillment of this responsibility with conscientiousness and care. Together, these three values provide a religious foundation for environmental activities, ensuring that ecological behavior is understood not merely through technical or social considerations, but also through moral and spiritual significance. The research findings can be further explained using Thomas Lickona, (1991) character education framework. Within the dimension of Islamic boarding school students acquire knowledge and understanding regarding the importance of environmental preservation and its underlying religious values. This understanding subsequently connects to "moral feeling" the development of awareness, concern, and a sense of responsibility toward the environment. These two dimensions are then translated into "moral action" through tangible practices, such as maintaining cleanliness, sorting waste, tending to plants, and participating in various "Eco-Pesantren" activities.

Thus, the research findings demonstrate a connection between Lickona's three dimensions of character and Islamic ecological values. "Moral knowing" is reinforced through the understanding that humans are stewards responsible for safeguarding the earth. "Moral feeling" gains an ethical foundation through the value of trust/responsibility and the awareness that the environment must be preserved as a religious duty. Meanwhile, "moral action" is manifested through tangible behaviors that reflect excellence/virtue in how the environment is treated. This integration represents a conceptual contribution of the study, as it illustrates how character education theory can be contextually operationalized through Islamic values and the practices of Islamic boarding school life. These findings also extend the results of previous empirical research. Maslani et al., (2023) demonstrated the importance of ecopedagogy practices in transforming environmental conservation strategies within pesantren. Aulia et al., (2024) highlighted the potential of the "Eco-Pesantren" model in shaping environmentally friendly behavior. Meanwhile, Syukri et al., (2024) showed the importance of integrating Islamic values and environmental ethics into pesantren education. While this study shares the perspective of positioning the pesantren as a strategic space for environmental education, it places greater emphasis on the character-building process through the systematic integration of program activities,

institutional culture, Lickona's three character dimensions, and Islamic ecological values specifically stewardship, trust/responsibility, and excellence/virtue.

The comparison demonstrates that the practice of ecopedagogy in Islamic boarding schools holds broader potential when not confined merely to environmental education. In this study, activities such as waste sorting, greening initiatives, and communal service serve as learning experiences that bridge knowledge, values, and action. This reveals that the cultivation of environmentally conscious character occurs through a process that is both contextual and iterative. Program sustainability is also linked to mechanisms of habituation and evaluation. Habituation enables specific behaviors to be consistently practiced in daily life, while evaluation provides space for reflection and improvement. The combination of these two elements ensures that the Eco Pesantren Program does not remain a fleeting activity. In this context, the program's success is measured not only by the execution of activities but also by observable behavioral changes within the students' daily routines.

Based on the overall results and discussion, this study establishes that strengthening environmental consciousness in pesantren relies on the interplay of four key components: an institutional culture that supports sustainability; character education encompassing moral knowing, moral feeling, and moral action; the internalization of Islamic values specifically stewardship, trust/responsibility, and excellence/virtue; and continuous habituation and evaluation. These components do not operate in isolation but reinforce one another to foster ecological behavior grounded in moral and spiritual principles. Practically, the findings imply that developing environmental programs in Islamic educational institutions must transcend purely technical approaches. The provision of facilities and the implementation of activities must be accompanied by the integration of values, role modeling, habituation, and supportive institutional governance. Such an approach allows environmental concern to develop not merely as compliance with rules, but as an integral part of the students' character and consciousness.

Conceptually, the study also implies that the Eco Pesantren Program can be understood as an Islamic-based character education model that interlinks ecological, moral, and spiritual dimensions. Future research could build upon these findings through comparative studies across various Islamic boarding school or by employing quantitative and mixed-methods approaches to examine the relationships among institutional culture, the internalization of religious values, and the development of environmentally conscious behavior among students. In doing so, the understanding of the effectiveness and sustainability of Islamic boarding school based environmental education could be expanded in both breadth and depth.

CONCLUSION

This study demonstrates that the Eco-Pesantren Program at the Mansyaul Ulum Ganjaran Islamic Boarding School has evolved into an integral part of the Islamic boarding school educational culture, playing a pivotal role in strengthening students' environmental consciousness through habituation, role modeling, active participation, institutional governance support, and continuous evaluation. Activities such as cleaning rosters, waste sorting and management, composting, greening initiatives, and communal work not only shape ecological behavior but also serve as a medium for internalizing Islamic educational values specifically stewardship of the earth, trustworthiness/responsibility, and excellence/virtue. Theoretically, the study reveals

that these three values can be integrated with Thomas Lickona's dimensions of character education moral knowing, moral feeling, and moral action allowing environmental concern to evolve from an understanding of human responsibility toward nature into moral and spiritual awareness, ultimately manifesting as consistent, tangible action. These findings underscore that the effectiveness of environmental education in Islamic boarding school is not determined merely by the volume of ecological activities, but by the institution's ability to integrate values, culture, role modeling, and direct experience into daily life. Consequently, Islamic boarding school administrators need to develop environmental programs as an integral component of character education through consistent policies, the active involvement of the entire institutional community, the provision of supporting facilities, the reinforcement of religious values, and continuous evaluation. Future research could expand the scope of inquiry by conducting comparative studies across various Islamic educational institutions or by examining the relationships between institutional culture, the internalization of religious values, and environmentally conscious behavior using quantitative or mixed-methods approaches.

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