

PRO-ENVIRONMENTAL BEHAVIOR OF MA'HAD AL-JAMI'AH STUDENTS AT UIN RADEN INTAN LAMPUNG: HOW IS IT RELATED TO PLACE ATTACHMENT AND ENVIRONMENTAL CONCERN

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Abstract

Background: Environmental issues have emerged as a critical global challenge, with phenomena such as global warming, air pollution, and environmental degradation severely impacting the quality of human life. In Indonesia, these challenges are becoming more complex, especially for students residing in Ma'had Al-Jami'ah, a campus-based pesantren. **Objective:** This study seeks to explore the relationship between place attachment, environmental concern, and pro-environmental behavior among students at Ma'had Al-Jami'ah, UIN Raden Intan Lampung. Pro-environmental behavior refers to actions aimed at reducing negative environmental impacts, such as energy conservation, waste management, and resource preservation. **Methodology:** This research employs a quantitative correlational approach, utilizing a sample of 150 students. Data were collected through the General Environmental Behavior (GEB) scale, the place attachment scale, and the environmental concern scale. The data were analyzed using SPSS and Jamovi software. **Results:** The findings revealed a significant positive correlation between place attachment and pro-environmental behavior ($r = 0.320$, $p < 0.001$), contributing 10.2%. Environmental concern also had a significant positive effect on pro-environmental behavior ($r = 0.257$, $p < 0.05$), contributing 6.6%. These results suggest that students who feel a strong emotional attachment to their Ma'had environment are more likely to engage in behaviors that promote environmental sustainability. Additionally, a higher level of environmental concern motivates students to participate in pro-environmental actions. **Conclusion:** This study offers valuable insights for Ma'had management in developing educational programs that foster place attachment and environmental concern among students. By doing so, these programs can empower students to become proactive agents of change, committed to ensuring environmental sustainability in the future.

Keyword: *Pro-Environment, Place attachment, Environmental Concern, Ma'had Students.*

Introduction

Environmental issues have become an increasingly alarming global concern over the past few decades. Various phenomena, such as global warming, air pollution, ozone layer depletion, and environmental degradation, have significantly escalated (Rahman et al., 2020). These conditions impact the physical health of the environment and the overall quality of human life. In Indonesia, a developing country with a large population, environmental challenges have become more complex, particularly in the context of societal behaviour toward the environment.

In the context of students living in the Ma'had Al-Jami'ah environment, understanding the factors

that influence pro-environmental behavior is critically important. The communal nature of life in Ma'had makes pro-environmental behaviour even more essential. Ma'had students live together in the same building and share various facilities, such as bathrooms, study rooms, and prayer areas. This situation magnifies the impact of individual behaviours on the environment. Intensive water usage for daily and religious needs, electricity consumption for study activities, and waste generation from communal activities require careful and sustainable management.

Ma'had students, as residents of a campus-based Islamic boarding school, have a unique responsibility to protect the environment,

rooted in Islamic values. In Islamic teachings, humans are appointed as stewards (khalifah) on Earth, entrusted with the duty to preserve and care for the environment (hablum minal alam). The Quran and Hadith frequently emphasize the importance of maintaining the balance of nature and prohibiting its destruction. For example, Surah Ar-Rum verse 41 explains that human actions cause corruption on land and sea. Therefore, pro-environmental behaviour during their time at Ma'had significantly impacts the current environmental conditions of the Ma'had community.

As young generations and agents of change, students play a strategic role in environmental preservation efforts. They must know about ecological issues and translate that knowledge into tangible pro-environmental behaviours. Kollmuss & Agyeman (2003) define pro-environmental behaviour as actions driven by an individual's awareness to minimize negative impacts on nature and development. Examples include conserving resources, reducing energy consumption, choosing non-toxic materials, and minimizing waste production.

According to Kaiser et al. (2007), actions such as recycling waste or conserving energy are examples of pro-environmental behaviour. Scannell (2008) states that pro-environmental behaviour refers to actions aimed at reducing environmental damage or enhancing and improving ecological conditions. This aligns with the perspective of Steg and Vlek (2009), who describe pro-environmental behaviour as actions intended to mitigate environmental harm and support conservation efforts. Bronfman et al. (2015) identify six aspects of pro-environmental behavior: power conservation, ecologically aware consumer behavior, biodiversity protection, water conservation, rational automobile use, and ecological waste management.

To enhance pro-environmental behaviour, several variables have been identified as being associated with such behaviour, including place attachment (Halpenny, 2010; Tonge et al., 2015). Additionally, research by Praminingsih et al. (2021) highlights environmental concern as a factor influencing pro-environmental behaviour. Environmental concern reflects an individual's awareness and care for protecting and preserving the environment, significantly affecting their pro-environmental actions.

Place attachment is a significant concept in

environmental psychology that can influence pro-environmental behaviour. According to Altman and Low (2012), place attachment is a complex phenomenon combining several aspects, such as bonds between people and places, interactions between emotions and influences, knowledge and beliefs, and behaviours and actions toward a specific place. Fried (2000) suggests that place attachment fosters behavioural freedom, exploration, self-confidence, and more robust affective responses within local communities. Place attachment can be defined as an emotional bond that individuals develop with specific environments, leading them to remain in places where they feel comfortable and safe (Hidalgo and Hernandez, 2001). According to Williams and Viske (2003), place attachment consists of two key aspects: **place dependence** and **place identity**.

In the context of Ma'had Al-Jami'ah at UIN Raden Intan Lampung, place attachment may have unique dimensions considering the pesantren environment's integration of Islamic values with academic life. Research conducted by Yulinda et al. (2024) found a significant relationship between place attachment and pro-environmental behaviour among students. Furthermore, previous studies have shown that place attachment positively correlates with pro-environmental behaviour. Sari et al. (2023) found that place attachment has a significant positive relationship with pro-environmental behaviour. Similarly, Pratiwi's (2020) research revealed a significant positive relationship between place attachment and pro-environmental behaviour. Environmental concern is another crucial variable that can influence pro-environmental behaviour. Environmental concern can be defined as an individual's awareness or understanding that the natural environment is threatened by excessive resource consumption and pollution caused by human activities (Kalafatis & Ledden, 2013). According to Said et al. (2003), environmental concern refers to an individual's attention and contributions toward ecological sustainability. Chan and Lau (2000) emphasize that environmental concern pertains to the emotional involvement of an individual with environmental issues. Diamantopoulos et al. (2003) explain that an individual's environmental concern consists of three

dimensions: knowledge about environmental issues, environmental awareness, and sensitivity toward the environment.

In the context of students at Ma'had Al-Jami'ah, environmental concern can be shaped through a complex interaction between Islamic values, environmental education, and their personal experiences while living in a pesantren environment. According to research by Ardana et al. (2024), ecological concern positively and significantly impacts pro-environmental behaviour. Furthermore, a study by Mulati & Kuswati (2022) on the influence of ecological attitudes on pro-environmental behaviour, mediated by environmental concern, revealed that environmental concern has a more direct effect on pro-environmental behaviour. This is supported by recent research conducted by Muarif et al. (2024), which found that the higher an individual's environmental concern, the stronger their pro-environmental behaviour.

Although numerous studies have examined the relationships between place attachment, environmental concern, and pro-environmental behaviour individually, there remains a gap in understanding how these three variables interact within the specific context of students living in Ma'had or pesantren environments. The unique characteristics of Ma'had Al-Jami'ah at UIN Raden Intan Lampung, which integrates Islamic values with modern academic life, make this research essential to undertake.

Additionally, a deeper understanding of how place attachment and environmental concern influence students' pro-environmental behavior can make a significant contribution to the development of environmental programs and policies within the Ma'had setting. This becomes increasingly relevant considering the strategic role of Ma'had Al-Jami'ah in shaping students' character to excel not only academically but also in fostering care for environmental sustainability. Therefore, this study aims to identify the relationship between place attachment and environmental concern and their impact on the pro-environmental behavior of students living at Ma'had Al-Jami'ah, UIN Raden Intan Lampung.

Method

This study employs a quantitative correlational research design. Data were collected using a population study approach, consisting of students from Ma'had Al-Jami'ah, UIN Raden Intan Lampung,

and a sample of 150 students.

The data collection employed several scales:

1. **Pro-environmental behavior scale:** The *General Environmental Behavior (GEB)* scale by Bronfman et al. (2015), adapted into Indonesian by Zwagery et al. (2023), with a reliability coefficient of 0.861.
2. **Place attachment scale:** Based on the theory of Williams & Vaske (2003), constructed by Yulinda et al. (2024) in their study, with a reliability coefficient of 0.863.
3. **Environmental concern scale:** Developed by Maghfiroh (2023) using Dunlap's (2000) theory, with a reliability coefficient of 0.747.

Data analysis was conducted using SPSS and Jamovi software.

Results And Discussion

Results

Based on the research conducted with 150 students of Ma'had UIN Raden Intan Lampung using three scales—the General Environmental Behavior (GEB) scale, the place attachment scale, and the environmental concern scale—the results are as follows:

Table 1. Score Anova

<i>Model Summary-Pro-Lingkungan</i>				
Model	r	r ²	F	Sig.
1	0,467	0,218	46.733	< .001

Table 2. Score Corelation

<i>Pro-Lingkungan</i>	r ²	Sig.
<i>Place attachment</i>	0,320	0,102
Kepedulian Lingkungan	0,257	0,066

Table 3. Nilai Sumbangan Efektif

	r ²	SE
<i>I</i>	0,218	21,8 %
<i>Place attachment</i>	0,102	10,2 %
Kepedulian Lingkungan	0,066	6,6 %

Based on the results in Table 1, the data analysis shows that $r=0.467$ with an F-value of 46.733 and $\text{sig.}(p<0.001)$. This indicates a positive and significant correlation among the three variables—place attachment, environmental concern, and pro-environmental behavior—with an effective contribution of 21.8%.

Furthermore, the analysis results in Table 2 indicate a positive and significant correlation between place attachment and pro-environmental behavior, with $r=0.320>0.001$ and an effective contribution of 10.2%. This implies that students with a strong attachment to their living environment tend to be more aware and proactive in maintaining cleanliness and environmental sustainability.

Additionally, a significant positive correlation was also found between environmental concern and pro-environmental behavior, with $r=0.257>0.001$ and an effective contribution of 6.6%. This suggests that students with higher levels of environmental concern demonstrate a stronger tendency to engage in pro-environmental behavior.

Discussion

The research findings indicate a significant positive relationship between place attachment and environmental concern toward pro-environmental behaviour, with a correlation of ($r=0.467$) and an effective contribution of 21.8%. Additionally, the results demonstrate a significant positive relationship between place attachment and environmental concern toward the pro-environmental behaviour of Ma'had Al-Jami'ah UIN Raden Intan Lampung students. Based on data analysis, place attachment correlates ($r=0.320$) with pro-environmental behaviour, contributing 10.2% to the variability in students' pro-environmental behaviour.

This suggests that students with a solid emotional bond with their Ma'had environment, such as a sense of comfort and ownership, are more likely to care about maintaining cleanliness, sustainability, and responsible use of resources within their surroundings.

In environmental psychology, place attachment is crucial in fostering environmentally responsible behaviour. Students who feel attached

to their Ma'had show a willingness to care for their environment, which becomes an integral part of their identity. Williams & Vaske (2003) argue that place attachment comprises two dimensions: **place dependence** (reliance on the place to meet needs) and **place identity** (identification of the place as part of an individual's identity). These aspects enhance individuals' tendencies to protect places that hold significant meaning for them, aligning with Islamic values that encourage humanity to safeguard the trust represented by nature.

Beyond place attachment, environmental concern also promotes pro-environmental behaviour, accounting for 6.6% of the variability in such behaviour, with a correlation of ($r=0.257$). The environmental concern here encompasses students' awareness and attention to ecological issues, influenced by their interaction with religious values and environmental education at the Ma'had. According to Chan & Lau (2000), ecological concern involves emotional aspects that drive individuals to actively participate in maintaining the sustainability of their surroundings. Within the Ma'had context, students perceive the environment not merely as a place to live but also as a trust that religious teachings must preserve.

Overall, these findings strengthen the strategic role of environmental education at Ma'had Al-Jami'ah. By understanding the connection between place attachment and ecological concern on pro-environmental behaviour, Ma'had administrators can develop programs that reinforce students' attachment to their living environment and enhance their environmental awareness. Programs such as energy-saving campaigns, waste management training, and greening activities can be concrete steps to leverage the synergy between place attachment and environmental concern to cultivate sustainable pro-environmental behaviour.

Through this approach, it is expected that students at Ma'had Al-Jami'ah UIN Raden Intan Lampung can become exemplary agents of change, demonstrating care and responsibility for the environment, not only on campus but also in the broader community.

Conclusion

Place attachment and environmental concern significantly influence pro-environmental behaviour among students at Ma'had Al-Jami'ah UIN Raden Intan Lampung. The analysis results show that these three variables contribute 21.8%, with place attachment contributing 10.2% to pro-environmental behaviour. Students who feel emotionally connected and comfortable with their Ma'had environment tend to be more active in maintaining cleanliness and sustainability. Furthermore, environmental concern contributes 6.6% to pro-environmental behaviour, with students with a high awareness of environmental issues being more likely to engage in pro-environmental actions.

This study highlights the importance of integrating environmental education with Islamic values at Ma'had. Programs such as waste management training, energy-saving campaigns, and greening activities can strengthen students' connection to their environment and enhance their environmental concern, encouraging them to become responsible agents of change in protecting the environment, both on and off-campus.

Suggestions

This study reveals the importance of place attachment and environmental concern in influencing pro-environmental behaviour among students at Ma'had Al-Jami'ah. Based on these findings, Ma'had administrators can develop strategies to enhance students' pro-environmental behaviour, such as providing eco-friendly facilities, organizing community-based environmental activities, and incorporating Islamic values related to environmental preservation into daily activities. Environmental education programs, such as waste management training, energy-saving campaigns, and greening initiatives, can strengthen students' awareness of ecological sustainability.

Additionally, it is important to regularly evaluate the effectiveness of these programs using clear indicators, such as waste reduction or energy efficiency. To provide deeper insights, future research should explore other factors influencing pro-environmental behaviour, such as social norms, leadership roles, or interpersonal interactions.

Reference

Adamantios Diamantopoulos, Bodo Schlegelmilch, R. S. G. M. B. (2003). Can socio-demographics

still play a role in profiling green consumers? A review of the evidence and an empirical investigation. *Journal of Bussines Reaserch*, 56(6), 465–480.

Bronfman, N. C., Cisternas, P. C., López- Vázquez, E., De la Maza, C., & Oyanedel, J. C. (2015). Understanding attitudes and pro-environmental behaviors in a Chilean community. *Sustainability (Switzerland)*, 7(10), 14133–14152. <https://doi.org/10.3390/su71014133>

Chan, R. Y., & Lau, L. B. (2000). Antecedents of green purchases: a survey in China. *Journal of Consumer Marketing*, 17(4), 338–357.

Halpenny, E. A. (2010). Pro-environmental behaviours and park visitors: The effect of place attachment. *Journal of Environmental Psychology*, 30(4), 409–421. <https://doi.org/10.1016/j.jenvp.2010.04.006>

Kollmuss, A., & Agyeman, J. (2003). Mind the gap: Why do people act environmentally and what are the barriers to pro- environmental behavior? *Environmental Education Research*, 8(3), 239–260.

Muarif, M. F., Yusif, Y., & Agipa, A. I. (2024). FTIR, XRD, and SEM-EDX Characterization of Synthesized B-Type Carbonated Hydroxyapatite (CHAp) Based on Crab Shells. *Journal of Energy, Material, and Instrumentation Technology*, 5(1), 35–42.

Mulati, I. R., & Kuswati, R. (2022). Pengaruh Sikap Lingkungan Terhadap Perilaku Pro Lingkungan Yang Dimediasi Oleh Kepedulian Lingkungan Dan Kemauan Membayar Lebih. *Jurnal Bisnis Dan Manajemen*, 18(3), 157–167.

Nova Yulfiana Sari, Nefilinda, & Momon Dt Tanamir. (2023). The Influence of Environmental Knowledge, Place Attachment, and Ecoliteracy on Pro-Environmental Behavior of Class X and XII Students at SMA N 1 Sitiung. *Formosa Journal of Applied Sciences*, 2(9), 2069–2086. <https://doi.org/10.55927/fjas.v2i9.5801>

Pratiwi, C. (2020). *Hubungan Place Attachment Dengan Perilaku Pro Lingkungan Pada Siswa Sekolah Adiwiyata (Studi Di Sman 7 Pekanbaru)*. <http://repository.uin-suska.ac.id/29297/>

Stavros Kalafatis & Lesley Ledden. (2013). Carry-over effects in perceptions of educational value. 38(10).

Tonge, J., Ryan, M. M., Moore, S. A., & Beckley,

- L. E. (2015). The Effect of Place Attachment on Pro-environment Behavioral Intentions of Visitors to coastal Natural Area Tourist Destinations. *Journal of Travel Research*, 54(6), 730–743.
<https://doi.org/10.1177/0047287514533010>
- Williams, D. R., & Vaske, J. J. (2003). The Measurement of Place Attachment: Validity and Generalizability of a Psychometric Approach. *Forest Science*, 49(6), 830–840.
<https://doi.org/10.1093/forestscience/49.6.830>
- Yulinda, V. R., Reza, F. A., & Fitriani, A. (2024). Membuat Tempat Lebih Baik: Kesadaran Lingkungan dan Place Attachment dengan Perilaku Pro Lingkungan pada Mahasiswa di Kampus. *INNOVATIVE: Journal of Social Research*, 4(3), 16058–16071.
- Zwagery, R. V., Erlyani, N., & Mayangsari, M. D. (2023). *Kontrol Diri dan Perilaku Pro Lingkungan*. 16(2), 63–69.
<https://doi.org/10.30813/psibernetika>