

EXPLORING STUDENT ENVIRONMENTAL AWARENESS IN OVERCOMING LITTERING BEHAVIOUR IN THE CAMPUS ENVIRONMENT

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ABSTRACT

This study aims in exploring how individuals environmental awareness of littering affects their behaviour. This research uses a qualitative method with a phenomenological approach to reveal the meaning of littering behavior in the campus environment. The sampling technique used was purposive sampling. Data were collected through direct interviews, situation observation, and document collection from research subjects who are students from University X. The characteristics studied were students who littered. Where the characteristics studied are students who carry out littering behavior in the campus area intentionally or unintentionally due to low self-awareness, lack of social awareness, and habitual forms of behavior. Based on the results of interviews with the two research subjects, both agreed that the lack of awareness and the availability of trash can facilities were the main factors for this behavior. This study suggests raising awareness through the addition of trash bin facilities in strategic locations on campus.

Keywords: Environmental Awareness, Littering behavior, Students.

ABSTRAK

Penelitian ini bertujuan untuk mengeksplorasi bagaimana kesadaran lingkungan individu terhadap membuang sampah sembarangan mempengaruhi perilaku mereka. Penelitian ini menggunakan metode kualitatif dengan pendekatan fenomenologis untuk mengungkap makna perilaku membuang sampah sembarangan di lingkungan kampus. Teknik pengambilan sampel yang digunakan adalah purposive sampling. Data dikumpulkan melalui wawancara langsung, observasi situasi, dan pengumpulan dokumen dari subjek penelitian yaitu mahasiswa Universitas X. Karakteristik yang diteliti adalah mahasiswa yang membuang sampah sembarangan. Dimana ciri-ciri yang diteliti adalah mahasiswa yang melakukan perilaku membuang sampah sembarangan di lingkungan kampus baik disengaja maupun tidak disengaja karena rendahnya kesadaran diri, kurangnya kesadaran sosial, dan bentuk kebiasaan perilaku tersebut. Berdasarkan hasil wawancara terhadap kedua subjek penelitian, keduanya sepakat bahwa kurangnya kesadaran dan ketersediaan fasilitas tempat sampah menjadi faktor utama terjadinya perilaku tersebut. Penelitian ini menyarankan peningkatan kesadaran melalui penambahan fasilitas tempat sampah di lokasi-lokasi strategis di kampus.

Kata Kunci : Kesadaran Lingkungan, Perilaku Buang Sampah, Siswa.

INTRODUCTION

Waste is something that is not used, liked or something that must be disposed of which generally comes from activities carried out by humans, but is not biological because the human waste in it is solid (Encep et al., 2022). Littering behaviour is often influenced by a number of factors including low self-awareness, lack of concern for the social environment, and lack of responsibility for one's actions. This problem is closely related to individuals' littering habits, which can essentially lead to bigger problems. Therefore, it is important to take steps in effective waste management to reduce the negative impacts it causes. Good waste management is expected to reduce the tendency of littering behaviour and encourage positive changes in the behaviour of each individual.

Littering behaviour is the act of disposing of waste inappropriately or throwing waste out of place (Almosa et al., 2017; Schultz, 2011). Littering can be said to be a dangerous social behaviour, not only destroying the beauty and dirtying public places, but also having an

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impact on health because it can pollute water, killing wild animals, blocking drains that can cause flooding, and threatening human health (Grangxabe et al., 2024; Hartley, Holland, et al., 2015). Littering behaviour is caused by various factors, the results of a study of adolescents found that an environment that has been dirty and a lot of garbage around it can influence adolescents to litter in the environment (Hartley, Thompson, et al., 2015).

Research shows that littering behaviour among university students is influenced by various factors. For example, low environmental awareness, lack of knowledge, and social norms contribute to improper waste disposal on campus (Eflania Jedina et al., 2024; Patimah et al., 2021). Some common reasons for littering are laziness, rushing, thinking it is someone else's responsibility, not being used to disposing of waste in its place, and forgetting (Megariza & Sekarasih, 2018). In addition, the habit of littering in the canteen is also a particular problem that affects the cleanliness and comfort of other users in the campus environment (Megariza & Sekarasih, 2018). Strategies that can be carried out to overcome this problem are educational programmes, infrastructure improvements, and promotion of environmentally friendly waste management practices . (Eflania Jedina et al., 2024; Patimah et al., 2021). Implementing bussing station facilities in canteens is considered a potential solution to reduce littering (Megariza & Sekarasih, 2018). Overall, inappropriate littering habits have a significant impact on environmental quality and require targeted interventions (Farida et al., 2023; Singh & Kaur, 2021).

Research has shown that increasing community awareness and participation in waste management is critical to addressing environmental issues. Community-based approaches, such as waste banks and educational programmes have shown significant results in improving waste management practices (Fathiyah et al., 2023; Rachman & Matsumoto, 2017). Other studies have also shown that educational interventions can significantly improve understanding of waste management concepts, with one study reporting an increase from 40% to 85% in participants' (Missouri et al., 2023).

Waste is a complex environmental problem faced by various countries around the world, affecting both developed and developing countries (Addahlawi et al., 2020; Widodo et al., 2021). Increased waste production, driven by population growth and changing consumption patterns, poses significant challenges for local governments (Widodo et al., 2021). Improper waste management can cause environmental, health, economic, and social problems (Mulyati et al., 2023). To solve this problem requires collaboration between government, private institutions, and the general public (Addahlawi et al., 2020). Applying the principles of good environmental governance in waste management is very important (Addahlawi et al., 2020). Community awareness and participation are essential for effective waste management, with education and socialization playing a key role in aligning perceptions and encouraging community involvement (Firoh, 2021; Mulyati et al., 2023).

The complexity of the waste problem in Indonesia often goes unnoticed by some parties, besides to the lack of public attention to the impacts caused (Julia Lingga et al., 2024; Sholihah, 2020). Human life with all its activities is inseparable from the production of waste, since daily human activities lead to an increase in the accumulation of waste (Marpaung et al., 2022; Qodriyatun, 2014). In dealing with these problems, various approaches and strategies are needed that can increase awareness, especially among students. One approach that can be done is an individual approach, where each individual becomes an agent of change for himself. Students are expected to be able to socialize and influence others in maintaining environmental sustainability and cleanliness, so that there can be an increase in environmental awareness. Through these efforts, it is also expected that a broader sustainability movement can be formed in maintaining cleanliness and environmental sustainability.

One of the major gaps identified is the lack of integration of environmental education in the curriculum as a whole (Hikmawati & Luluk Farida, 2021; Idris et al., 2020; Marpaung et al., 2022). Environmental responsibility in various courses, it is expected that all students can gain a deeper understanding of the urgency of keeping the environment clean, as well as the negative consequences of littering behaviour. In addition, the researcher also highlighted the shortcomings in the provision of adequate waste disposal facilities on

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campus. Researchers propose increasing the number of waste bins and more strategic placement, as well as providing better facilities to facilitate students in disposing of waste in its place and encourage more environmentally responsible behaviour (Suaedi & Tantu, 2016).

This study should be addressed immediately because of the increasing environmental damage caused by littering behavior. The focus of this study is the lack of environmental awareness among students regarding students littering. When studied in depth, littering has a strong correlation with the psychological well-being of individuals, and the impact of litter has a strong correlation with has a strong correlation the imbalance of their lives. Through this study, the subjects involved are expected to provide valuable insights on environmental awareness that will be the cornerstone of efforts to overcome littering behavior. This study aimed to explore and gain a deeper understanding of littering behavior. This includes identifying the causes, impacts, and implementation strategies that can be undertaken. In addition, this study also aims to find effective solutions to overcome the problem of littering behavior. Thus, the effort is expected to contribute to the maintenance of a clean environment that can create healthy conditions and support the quality of life for all parties. So the question in this study is How environmental awareness of students in overcoming the behavior of littering on campus.

LITERATURE REVIEW

Environmental awareness refers to an individual's understanding and concern for environmental issues, as well as the desire to participate in preserving the environment (Kollmus & Agyeman, 2015; Zsóka et al., 2013). Environmental Awareness includes an individual's understanding of the importance of keeping the environment clean and sustainable (Frey & Fontana, 1991). Environmental awareness also relates to an individual's level of understanding and awareness of environmental issues, including the impact of their behaviour and decisions on the environment (Steg et al., 2014). A person's environmental awareness is closely related to an individual's insight into the environment, how individuals are able to read, understand, and understand environmental issues, in this case referred to as environmental literacy.

Several previous studies have shown that littering behaviour in the community often arises from a lack of environmental awareness and adequate environmental literacy. Research shows that people's awareness of waste management is strongly influenced by their level of education and understanding of the environmental impacts of such behaviour. Research conducted by Marpaung et al., (2022) shows that low education levels contribute to low public awareness in managing waste, and support from the government in providing waste disposal sites can help overcome this problem. In addition, research from (Eflania Jedina et al., 2024) showed that knowledge and social norms also play an important role in influencing students' behaviour in disposing of waste in its proper place.

Research shows that knowledge, attitude and environmental awareness are significantly correlated (Firmanshah & Abdullah, 2023; Hernanda et al., 2023; Madero, 2020; Santos & Ramirez, 2023; Sasea et al., 2023). In the area of solid waste management, behavioural approaches have been widely applied, with recycling behaviour as the main focus. The Theory of Planned Behaviour is often used to examine the psychological factors that influence littering behaviour (Fenitra et al., 2023; Huang et al., 2023; Sumana & Rodrigues, 2020). The Theory of Planned Behaviour is often used to assess the psychological factors influencing littering behaviour (Hu et al., 2018; Paudel et al., 2022). While environmental education has a fundamental role to play in fostering awareness, it may not be sufficient to consistently generate environmentally friendly behaviour (Madero, 2020). Findings highlight the complex relationship between environmental awareness and actual behaviour, emphasising the need for a multifaceted approach to promote sustainable practices and reduce littering.

METHODS

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This research uses qualitative methods. According to Lexy (2010) qualitative research is a research procedure that produces descriptive data in the form of written or spoken words from the behaviour of the people observed. The approach used is a phenomenological approach. The phenomenological approach is a study that tries to explain or reveal the meaning of a concept or phenomenon of experience based on awareness that occurs in several individuals (Eberle, 2014). The sampling technique is Purposive Sampling. According to Sugiyono (2016), Purposive sampling is sampling using certain considerations in accordance with the desired criteria to determine the number of samples to be studied. The data collection process is carried out through a series of methods including direct interviews with the subject, observation of related situations, and document collection in the form of recording evidence and photographic evidence with the research subject. The data analysis technique uses IPA (Interpretative Phenomenological Analysis). In Eatough & Smith (2017), IPA aims to reveal in detail how participants use their personal and social worlds by emphasising on individuals' personal perceptions or opinions about objects or events.

The research location was carried out at one of the X Universities. Researchers chose this location because there are still many students who are less concerned about environmental awareness, which is reflected in the habit of littering. This shows the potential to explore and increase environmental awareness among students, so the location is considered relevant and significant for research on this topic. The first subject was FDD (20) and the second subject was MVS (20). These subjects are potentially valuable sources for the researcher, given the habits they have that may be highly relevant to the topic of this research. The first informant is DRO (21) and the second informant is AY (23). The informants in this study are close relatives of the subject who have valuable knowledge to validate the subject's preferences and activities and habits.

RESULTS

After conducting interviews with the two subjects FDD and MVS, along with the two informants DRO and AY who are close to the subjects in this study, the first result is FDD, who is a close friend of DRO. DRO revealed that FDD is a very clean individual who rarely engages in littering behaviour. On the other hand, AY's assessment of MVS, who is a close friend, shows that MVS has shown a good commitment in managing waste by often reminding her friends to throw garbage in its place. This action reflects MVS's awareness and concern for the cleanliness of the surrounding environment, and provides a positive example in changing littering behaviour for the better.

Based on the results of interviews with the two subjects, a number of important findings were obtained. These findings are in the for:

Definition of Littering behaviour

Based on the information obtained from the interviews with subjects FDD and MVS regarding littering behaviour, as defined through the views of each subject, it can be found in these interviews.

The problem of littering around me has become a major concern, I often see many places that should be clean instead filled with rubbish, rich in the streets on vacant land and other places that should be clean from garbage. Littering is an act that makes the environment dirty, and causes unpleasant odours. This problem of littering is also caused by the lack of awareness of the surrounding people about the importance of maintaining cleanliness in the environment around us. (FDD 1.1.240524)

Littering is irresponsible behaviour that harms the environment and society as a whole. Littering can cause environmental pollution, create health problems and damage facilities that have been well maintained by the community. The problem of littering is often done because of the habit of the community itself because of its daily behaviour that becomes

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cultivated, usually this habit is formed because of a lack of awareness of the cleanliness of their own environment. (MVS 1.2, 050624)

Based on the above statements, both subjects stated that the definition of littering is irresponsible and has a negative impact on the environment, as well as the general public. This behaviour results in various environmental pollution problems, health problems, and damage to public facilities. Both subjects defined this problem as being caused by a lack of awareness among students and the public about the importance of keeping the environment clean.

However, FDD emphasised that the definition of littering is a lack of awareness regarding the cleanliness of the environment around us. Meanwhile, MVS highlighted that the definition of littering is the behaviour of the results of habits formed continuously in daily life that can affect their behaviour in littering.

The Impact of Littering

Based on the results of the interviews conducted, information was obtained from each subject regarding the impact of littering. As expressed by both subjects.

In my opinion, the impact is very bad, the accumulated garbage can pollute the campus environment and can also damage facilities that have been made well due to the accumulation of garbage. (FDD 1.1.240524)

The impact is very bad, because it can trigger various diseases that exist and also affect the comfort of the campus environment. Waste that is not managed properly can cause various diseases, such as the risk of disease that we know. Also, the cleanliness of the campus environment is a benchmark as a reference for the accreditation of each campus. Because there must be some campuses whose cleanliness is very well maintained. (MVS 1.2, 050624)

Based on the statement above, it can be concluded from the statements of the two subjects regarding the impact of littering. FDD emphasised that the impact of littering is very dangerous. Firstly, the accumulated rubbish can pollute the surrounding environment, including important areas such as roads and vacant land that should be clean from rubbish. Such pollution can not only damage the aesthetics of the environment but can also disrupt the ecosystem. Secondly, according to FDD, the impact of littering can also damage well-built facilities in the campus area.

Meanwhile, MVS highlighted the impact of littering in terms of health. MVS underlined that waste that is not managed properly can cause various diseases. This condition can increase the health risks for students and campus staff, considering that rubbish is often a breeding ground for bacteria. Thus, these two views show that littering not only affects health, but also the cleanliness of the environment.

Environmental Awareness of students in disposing of litter

Based on the information obtained from the two subjects, each subject has awareness in maintaining environmental cleanliness in the results of this study.

As a student, I also realise how important it is to dispose of garbage in its place, because by disposing of garbage in its place it can help reduce the amount of garbage that is scattered. Of course, as students, we must also have a high awareness of our concern for environmental cleanliness. I also try to always dispose of waste in the right place and also not repeat my behaviour of littering. I will try to apply the behaviour of littering in my daily life, both on campus and off campus. (FDD 1.1.240524)

As a student, I am aware of the importance of disposing of garbage in its place, because seeing the bad effects that occur in the surrounding environment, such as smelling bad smells, I now prefer to store it first, such as in a bag or other place that can be a place to store my own garbage. I realise the importance of putting rubbish in its proper place. Because, all of that is for the good of myself and the surrounding environment including the campus environment or any environment. (MVS 1.2, 050624)

From the above statement, it can be concluded that FDD and MVS are aware of the importance of keeping the environment clean as students, namely that both of them realise

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the importance of throwing garbage in its place to reduce littering. They are committed not to litter and are active in steps to maintain cleanliness both on campus and outside the campus environment. This awareness reflects their personal responsibility towards the environment and awareness of the importance of individual involvement in maintaining environmental cleanliness for the common good and comfort.

Factors that cause Littering behaviour

Based on the results of the interviews obtained, the researcher obtained findings regarding the factors that can cause littering behaviour to arise from each individual.

The primary factor is the lack of student awareness to maintain the campus environment, and the second factor is the lack of trash can facilities in some areas so students have difficulty finding trash cans and also usually this behaviour has become a habit in each individual so there are many students who practice littering behaviour. (FDD 1.1.240524).

The factor that causes someone to litter is usually due to laziness in disposing of waste, which may be for them by littering is the right and fast way to do it without thinking about the impact. Another factor in my opinion may also be the lack of availability of rubbish bins in various areas of campus. Including maybe in the parking lot in the corner, in the sidelines that are not reached by some OBs, so students have difficulty finding a trash can and they throw it secretly or out of place. (MVS 1.2, 050624).

Based on the above statements, conclusions can be drawn about the factors that cause littering behaviour from each subject. FDD highlighted students' lack of awareness in keeping the campus environment clean as the main factor causing littering behaviour. According to him, students often choose to dispose of waste in an inappropriate way because they consider it an easier and faster way. FDD also highlighted the lack of trash bin facilities in some areas of campus which is a major obstacle for students to dispose of waste properly.

While on the other hand MVS emphasised the aspect of the lack of availability of adequate bins in some areas of campus which is a major factor in the behaviour, according to MVS students have difficulty in finding affordable bins. Especially in parking areas or corners that are not maintained. This makes students encouraged to throw garbage inappropriately for the sake of convenience.

Raising students' environmental awareness

Based on the information obtained, the researcher obtained findings on how to increase students' awareness in maintaining cleanliness.

How to increase students' awareness to dispose of garbage in its place is by increasing the facilities for garbage bins in the campus area so that students also easily dispose of garbage in its place and nowadays social media is very influential in our lives, so we can use social media as a place to educate the importance of disposing of garbage in its place to protect the environment and our personal health. (FDD 1.1.240524)

In my opinion, to increase student awareness about the importance of disposing of garbage in its place, by increasing the number of bins in the campus area, especially in the corners that I have said earlier that are difficult to reach by students who may not be bargained for, such as parking lots, garden areas or near the field, sometimes there are still places that are empty or not reached by bins. The point is that the bins are not widely distributed. And we can also disseminate information on various social media, including campus social media which might be a reminder for students to keep the campus environment clean. (MVS 1.2, 050624)

Based on the findings above, conclusions can be drawn on how to increase student awareness in maintaining environmental cleanliness. FDD suggests two main approaches. Firstly, improving the facilities of waste bins in the campus area, especially in strategic places such as corners that are difficult to reach by students. Second, by utilising social media as a tool for education. Through social media, FDD argues that information about

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the importance of keeping the environment clean can be widely disseminated, and it is mandatory to warn students to be responsible for littering.

Meanwhile, MVS emphasises the expansion of trash bin facilities in campus areas, especially in corners that are rarely maintained, according to MVS, this method aims to reduce students' difficulty in finding suitable trash bins, so that this method can encourage students to change their littering behaviour into individuals who are responsible for their waste.

The role of students in resolving littering behaviour

Based on the information that researchers obtained from the interview process regarding the role of students in overcoming littering behaviour.

If our role as students in overcoming littering behaviour is to keep the campus environment clean by providing encouragement or a good example by throwing garbage in its place and encouraging other fellow students to do the same. The value of noble local wisdom as Adiluhung as a characteristic of a cultured nation. (FDD 1.1.240524)

Our role as students in overcoming littering behaviour, in my opinion, must be more caring, because the environment can be, like the environment is very important in my opinion. So, we can remind each other to maintain the good name of the campus and a better campus environment, so as to avoid unwanted things such as the emergence of impacts that disturb comfort, the emergence of diseases that we don't want to hear about, and also like environmental damage that is increasingly spreading, so littering is increasingly spreading and cultivating on this campus. (MVS 1.2, 050624)

Based on the findings that researchers get regarding the role of students in maintaining environmental cleanliness. FDD emphasised the importance of setting a good example by keeping the campus environment clean. As students, FDD believes that we can set an example by consistently throwing rubbish in its place and encouraging fellow students to do the same. With this action, we not only keep the campus environment clean but also encourage a sustainable culture of environmental care among students.

In conclusion, MVS also added that the role of students in overcoming littering behaviour should be more caring and proactive. We need to realise that the campus environment has a very important role in our well-being. By reminding each other and giving positive encouragement to fellow students to maintain cleanliness, we can prevent negative impacts such as disturbance of comfort, spread of disease, and environmental damage that can threaten campus life. It also reinforces the awareness of our shared responsibility in maintaining the good name of the campus.

DISCUSSION

Based on interviews with the first subject FDD (20) and the second subject MVS (20), both stated that littering behaviour is a major significant problem within the campus environment. They pointed out the negative impacts of littering behaviour, including environmental pollution, damage to facilities, and health risks. In addition, they highlighted the importance of students' awareness and active role in keeping the campus clean. This research is in line with previous findings, that littering behaviour is often caused by a lack of awareness and bad habits that have been formed in the community.

Research by (Ibrahim et al., 2021; Torky, 2017) showed that high environmental awareness among university students significantly reduced littering behaviour. This study shows that when students have better knowledge about the environmental impact of waste and the importance of maintaining cleanliness, they tend to be more responsible in managing their waste. Meanwhile, according to (Hnatyuk et al., 2024; Ntim, 2023) emphasised that higher education can increase awareness and pro-environmental behaviour among students. This research emphasises that environmental education integrated in the college curriculum can play an important role in shaping students' attitudes and behaviours towards the environment.

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This research is highly relevant to the finding that improved waste bin facilities and educational campaigns can be effective in reducing littering behaviour. (Scholtz et al., 2016; Tlebere et al., 2016) showed that the addition of bins in strategic locations and educational campaigns through social media can increase environmental awareness among university students. However, research also shows the need for a comprehensive approach. (Dhahir, 2020; Johannes et al., 2021; Ningrum et al., 2021) highlighted the importance of communities and programs to permanently change behaviour. They suggest that programs such as campus cleanliness groups and rewards for positive behaviour can be effective in the long term.

This study was to measure the effectiveness of proposed interventions, such as the addition of waste bins and social media campaigns in reducing littering behaviour. The practical implication of the findings is that the University should consider increasing litter bin facilities in campus areas and conducting educational campaigns through social media to increase students' awareness of the importance of littering. In addition, the University may consider forming a campus cleanliness group and giving awards to students who are active in maintaining the cleanliness of the campus environment.

CONCLUSION

The results of this study show that littering behaviour on campus is caused by a lack of awareness and bad habits among students. Interviews with the subjects showed that environmental pollution, damage to facilities, and health risks are the main impacts of littering behaviour. This study makes an important contribution to the development of Psychology, especially in understanding the psychological factors that influence such behaviour among university students. The findings support the theory of planned behaviour and show that educational interventions and the provision of adequate facilities can significantly change bad habits into more environmentally responsible behaviours. The study also highlights the importance of a comprehensive approach that involves the campus community in efforts to keep the environment clean and healthy. As such, this study not only enriches the literature on littering behaviour, but can also provide guidance for effective interventions across the University.

The suggestions that can be given to overcome littering behaviour in the campus environment by increasing the number of trash can facilities in strategic locations, such as parking lots, gardens, fields, making it easier for students to dispose of waste in its place. In addition, educational campaigns through social media and campus platforms are very important to spread information about the negative impact of this behaviour. Environmental education needs to be integrated into the campus curriculum to increase students' awareness and responsibility towards environmental cleanliness and sustainability. Collaboration with student organisations, faculty and campus staff is also needed to create joint initiatives that can encourage responsible behaviour towards campus cleanliness.

REFERENCES

- Addahlawi, H. A., Mustaghfiroh, U., Ni'mah, L. K., Sundusiyah, A., & Hidayatullah, A. F. (2020). Implementasi Prinsip Good Environmental Governance Dalam Pengelolaan Sampah Di Indonesia. *Jurnal Green Growth Dan Manajemen Lingkungan*, 8(2), 106–118. <https://doi.org/10.21009/jgg.082.04>
- Almosa, Y., Parkinson, J., & Rundle-Thiele, S. (2017). Littering Reduction: A Systematic Review of Research 1995–2015. *Social Marketing Quarterly*, 23(3), 203–222. <https://doi.org/10.1177/1524500417697654>
- Dhahir, D. F. (2020). Shaping and maintaining anti-littering behavior of the community in Indonesia. *IOP Conference Series: Earth and Environmental Science*, 575(1). <https://doi.org/10.1088/1755-1315/575/1/012212>
- Eatough, V., & Smith, J. A. (2017). Interpretative phenomenological analysis. In: Willig, C. and Stainton-Rogers, W. (eds.) *Handbook of Qualitative Psychology*. In *Handbook of*

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Qualitative Psychology.

Eberle, T. S. (2014). Phenomenology as a Research Method. In *The SAGE Handbook of Qualitative Data Analysis*. <https://doi.org/10.4135/9781446282243.n13>

Eflania Jedina, Sukmawati, Maria Fransiska De Cantal Peni, Maria Stefania Deran Migo, Maria Marselina Sabu Sanga, Yustina Da Cruz, & Yohanes Pemandi Lian. (2024). Kesadaran Mahasiswa Universitas Katolik Widya Mandira Kupang Kampus Merdeka dalam Membuang Sampah pada Tempatnya. *JPGENUS: Jurnal Pendidikan Generasi Nusantara*, 1(2), 135–140. <https://doi.org/10.61787/cs2pye35>

Encep, E., Anwar, H., & Febriani, N. A. (2022). Ekospiritual: Relasi Alam dan Manusia dalam Pandangan berbagai Agama. *SALAM: Jurnal Sosial Dan Budaya Syar-I*, 9(3), 921–950. <https://doi.org/10.15408/sjsbs.v9i3.26465>

Farida, A., Habsari, M. K., Fikri, M. H., Afifah, L., & Madarina, N. (2023). Pencemaran Lingkungan Akibat Membua

KTOR: Jurnal Pendidikan IPA. <https://api.semanticscholarng> Sampah Sembarangan dan Upaya Pengelolaan Sampah di Kebon Rojo Kota Blitar. *Jurnal Terapan Pendidikan Dasar Dan Menengah*, 3(4), 357. <https://doi.org/10.28926/jtpdm.v3i4.1326>

Fathiyah, I., Yanuari, N. F., Rayhan, N. C., Mefiana, S. A., Ambarwati, D., Juandi, D., & Prabawanto, S. (2023). Upaya Meningkatkan Kesadaran Lingkungan Masyarakat Melalui Edukasi Pemilahan dan Pengelolaan Sampah. *Abdimasku: Jurnal Pengabdian Masyarakat*, 6(3), 888. <https://doi.org/10.62411/ja.v6i3.1437>

Fenitra, R. M., Laila, N., Premananto, G. C., Abbas, A., & Sedera, R. M. H. (2023). Explaining littering prevention among park visitors using the Theory of Planned Behavior and Norm Activation Model. *International Journal of Geoheritage and Parks*, 11(1), 39–53. <https://doi.org/10.1016/j.ijgeop.2022.11.002>

Firmanshah, M. I., & Abdullah, N. (2023). *The Relationship of School Students ' Environmental Knowledge , Attitude , Behavior , and Awareness toward the Environment : A Systematic Review*. 12(1), 432–449. <https://doi.org/10.6007/IJARPED/v12-i1/15707>

Firoh, A. I. (2021). Kreatifitas Aksi Penetral Sampah Guna Menetralisasi Kadar Sampah Pada TPA Pakusari Jember. *VE.org/CorpusID:246463834*

Frey, J. H., & Fontana, A. (1991). *The group interview in social research*. [https://doi.org/10.1016/0362-3319\(91\)90003-M](https://doi.org/10.1016/0362-3319(91)90003-M)

Grangxabe, X. S., Madonsela, B. S., Maphanga, T., Gqomfa, B., Phungela, T. T., & Malakane, K. C. (2024). An overview of waste management practices of street vendors in sub-saharan africa: A meta-analysis. *Journal of Environmental Management*, 364(April), 121464. <https://doi.org/10.1016/j.jenvman.2024.121464>

Hartley, B. L., Holland, M., Pahl, S., & Thompson, R. C. (2015). How to Communicate with Stakeholders about Marine Litter - A Short Guide to Influencing Behavioural Change. In *Reflections from the MARLISCO project*. <http://www.marlisco.eu/how-to-communicate-with-stakeholders-guide.en.html>

Hartley, B. L., Thompson, R. C., & Pahl, S. (2015). Marine litter education boosts children's understanding and self-reported actions. *Marine Pollution Bulletin*, 90(1–2), 209–217. <https://doi.org/10.1016/j.marpolbul.2014.10.049>

Hernanda, T., Absori, Azhari, A. F., Wardiono, K., & Arlinwibowo, J. (2023). Relationship Between Knowledge and Affection for the Environment: A Meta-Analysis. *European Journal of Educational Research*, 12(2), 1071–1084. <https://doi.org/10.12973/eu-er.12.2.1069>

Hikmawati, S. A., & Luluk Farida. (2021). Pemanfaatan media Tik-Tok sebagai media dakwah. *Al-Ittishol, Jurnal Komunikasi Dan Penyiaran Islam*, 2, 1–11.

Hnatyuk, V., Pshenychna, N., Kara, S., Kolodii, V., & Yaroshchuk, L. (2024). Education's role in fostering environmental awareness and advancing sustainable development within a holistic framework. *Multidisciplinary Reviews*, 7(Special Issue). <https://doi.org/10.31893/multirev.2024spe012>

Hu, H., Zhang, J., Chu, G., Yang, J., & Yu, P. (2018). Factors influencing tourists' litter management behavior in mountainous tourism areas in China. *Waste Management*, 79, 273–286. <https://doi.org/10.1016/j.wasman.2018.07.047>

Rijal Abdillah, Raisah Zettira Hermawan: EXPLORING STUDENT ENVIRONMENTAL AWARENESS IN OVERCOMING LITTERING BEHAVIOUR IN THE CAMPUS ENVIRONMENT

- Huang, J., Jing, Y., Zhang, L., Huang, Z., & Chen, Q. (2023). Integrating Theory of Planned Behavior and Value-Belief-Norm Theory to Explain Residents' Intention on Garbage Classification. *Journal of Education, Humanities and Social Sciences*, 24, 9–17. <https://doi.org/10.54097/pnjyk833>
- Ibrahim, H., Mariapan, M., Lin, E. L. A., & Bidin, S. (2021). Environmental concern, attitude and intention in understanding student's anti-littering behavior using structural equation modeling. *Sustainability (Switzerland)*, 13(8). <https://doi.org/10.3390/su13084301>
- Idris, M., Mokodenseho, S., Wilya, E., & Otta, Y. A. (2020). Mengintegrasikan Pendidikan, Lingkungan, dan Nilai-Nilai Islam Sebagai Upaya Meningkatkan Etika dan Literasi Lingkungan. *Journal of Islamic Education Policy*, 7(2), 102–114. <https://doi.org/10.1088/1757-899X/750/1/012021>
- Johannes, H. P., Maulana, R., & Herdiansyah, H. (2021). Prevention of Littering through Improved Visual Design. *Environmental Research, Engineering and Management*, 77(4), 86–98. <https://doi.org/10.5755/J01.EREM.77.4.25043>
- Julia Lingga, L., Yuana, M., Aulia Sari, N., Nur Syahida, H., & Sitorus, C. (2024). Sampah di Indonesia: Tantangan dan Solusi Menuju Perubahan Positif. *INNOVATIVE: Journal Of Social Science Research*, 4, 12235–12247.
- Kollmus, A., & Agyeman, J. (2015). Mind the Gap : Why Do People Act Environmentally and What Are the Barriers Mind the Gap : why do people act environmentally and what are the barriers to. *Environmental Education Research*, August 2002, 37–41. <https://doi.org/10.1080/1350462022014540>
- Lexy, J. (2010). Moleong. *Metodologi Penelitian Kualitatif*.
- Madero, B. A. M. (2020). *Relación entre la conciencia ambiental y el comportamiento ecológico*. <https://api.semanticscholar.org/CorpusID:229067404>
- Marpaung, D. N., Iriyanti, Y. N., & Prayoga, D. (2022). Analisis Faktor Penyebab Perilaku Buang Sampah Sembarangan Pada Masyarakat Desa Kluncing, Banyuwangi. *Preventif : Jurnal Kesehatan Masyarakat*, 13(1), 47–57. <https://doi.org/10.22487/preventif.v13i1.240>
- Megariza, M., & Sekarasih, L. (2018). Gambaran Penyebab Table-Littering Di Kantin Pada Lingkungan Universitas. *Jurnal Ecopsy*, 5(2), 57. <https://doi.org/10.20527/ecopsy.v5i2.5042>
- Missouri, R., Annafi, N., Lukman, L., Khairunnas, K., Mutmainah, S., Fathir, F., & Alamin, Z. (2023). Peningkatan Kesadaran Dan Partisipasi Masyarakat Melalui Pelatihan Pengelolaan Sampah. *Taroa: Jurnal Pengabdian Masyarakat*, 2(2), 91–101. <https://doi.org/10.52266/taroa.v2i2.2617>
- Mulyati, B., Ilmi, Y. F., & Basri, A. (2023). Sosialisasi Pengelolaan Sampah sebagai Upaya Peningkatan Peran Masyarakat dalam Mengelola Sampah di Kota Serang. *Bantenese : Jurnal Pengabdian Masyarakat*, 5(1), 26–34. <https://doi.org/10.30656/ps2pm.v5i1.6285>
- Ningrum, V., Vibriyanti, D., Hidayati, I., Putri, I. A. P., Katherina, L. K., & Seftiani, S. (2021). Perubahan Perilaku Menyampah Siswa Melalui "Reinforcement." *Jurnal Sosial Humaniora*, 14(2), 166. <https://doi.org/10.12962/j24433527.v14i2.10962>
- Ntim, S. (2023). Higher Education and the Promotion of Pro-Ecosystem Behaviour among Students. *Journal of Studies in Education*, 13(3), 71–88.
- Patimah, A. S., Shinta, A., & Winahyu, G. S. (2021). Strategi Promosi Pengelolaan Sampah di Kalangan Mahasiswa. *Prosiding Seminar Nasional Teknik Lingkungan Kebumihan SATU BUMI*. <https://api.semanticscholar.org/CorpusID:259247355>
- Paudel, T., Li, W. Y., & Kim, Y. G. (2022). Examining Trekkers' Environmentally Friendly Behavior Using an Extended Model of Goal-Directed Behavior (Mgb) and a New Ecological Paradigm Scale (Nep). *E a M: Ekonomie a Management*, 25(4), 137–154. <https://doi.org/10.15240/tul/001/2022-4-009>
- Qodriyatun, S. N. (2014). Meningkatkan Kesejahteraan Masyarakat Melalui Pengelolaan Sampah Berdasarkan Uu No. 18 Tahun 2008. *Aspirasi*, 5(18), 21–33.
- Rachman, I., & Matsumoto, T. (2017). *Perspektif Keuntungan Ekonomi dan Kesadaran Masyarakat dalam Mengelola Sampah Rumah Tangga*. <https://api.semanticscholar.org/CorpusID:149211821>
- Santos, L., & Ramirez, C. G. (2023). Effect of Environmental Knowledge and Awareness

Rijal Abdillah, Raisah Zettira Hermawan: EXPLORING STUDENT ENVIRONMENTAL AWARENESS IN OVERCOMING LITTERING BEHAVIOUR IN THE CAMPUS ENVIRONMENT

- on Green Behavior: Testing Behavioral Intentions, Environmental Attitude, and Green Commitment as Mediators. *The Normal Lights*, 16(2), 1–32. <https://doi.org/10.56278/tnl.v16i2.2081>
- Sasea, L. I., Ibrohim, I., & Sueb, S. (2023). The relationship of environmental knowledge and environmental care attitude of students. *Inornatus: Biology Education Journal*, 3(2), 85–91. <https://doi.org/10.30862/inornatus.v3i2.426>
- Scholtz, B., Burger, C., & Zita, M. (2016). *A Social Media Environmental Awareness Campaign to Promote Sustainable Practices in Educational Environments BT - Advances and New Trends in Environmental and Energy Informatics: Selected and Extended Contributions from the 28th International Conference on Informatics for Environmental Protection* (J. Marx Gomez, M. Sonnenschein, U. Vogel, A. Winter, B. Rapp, & N. Giesen (eds.); pp. 355–369). Springer International Publishing. https://doi.org/10.1007/978-3-319-23455-7_19
- Schultz, P. W. (2011). Conservation Means Behavior. *Conservation Biology*, 25(6), 1080–1083. <http://www.jstor.org/stable/41315395>
- Sholihah, K. K. A. (2020). Kajian Tentang Pengelolaan Sampah di Indonesia. *Kajian Tentang Pengelolaan Sampah Di Indonesia*, 03(03), 1–9.
- Singh, J., & Kaur, R. (2021). Influencing the Intention to Adopt Anti-Littering Behavior: An Approach With Modified TPB Model. *Social Marketing Quarterly*, 27(2), 117–132. <https://doi.org/10.1177/15245004211013333>
- Steg, L., Bolderdijk, J. W., Keizer, K., & Perlaviciute, G. (2014). An Integrated Framework for Encouraging Pro-environmental Behaviour: The role of values, situational factors and goals. *Journal of Environmental Psychology*, 38, 104–115. <https://doi.org/10.1016/j.jenvp.2014.01.002>
- Suaedi, & Tantu, H. (2016). Pembelajaran Pendidikan Lingkungan Hidup. In *IPB Press* (Issue 3).
- Sugiyono. (2016). *Metode penelitian kuantitatif, kualitatif, dan r&d*. Bandung: Alfabeta.
- Sumana, J. R., & Rodrigues, L. L. R. (2020). Behavioral Aspects of Solid Waste Management: A Systematic Review. *Journal of the Air & Waste Management Association*, 0(0). <https://doi.org/10.1080/10962247.2020.1823524>
- Tlebere, T., Scholtz, B., & Calitz, A. P. (2016). *Using Social Media to Improve Environmental Awareness in Higher Education Institutions BT - Information Technology in Environmental Engineering* (J. Marx Gómez & B. Scholtz (eds.); pp. 101–111). Springer International Publishing.
- Torky, N. N. (2017). *Changing Littering Behavior among University Students in Egypt: Integration of Community Readiness and Community-Based Social Marketing*. March, 1–121.
- Widodo, A. S., Yughi, S. A., Hanum, N., & Utomo, N. A. (2021). *Membangun Peran Penting Masyarakat di dalam Pemanfaatan Sampah Sebagai Sumber Daya*. <https://api.semanticscholar.org/CorpusID:244601844>
- Zsóka, Á., Szerényi, Z. M., Széchy, A., & Kocsis, T. (2013). Greening due to environmental education? Environmental knowledge, attitudes, consumer behavior and everyday pro-environmental activities of Hungarian high school and university students. *Journal of Cleaner Production*, 48, 126–138. <https://doi.org/10.1016/j.jclepro.2012.11.030>