

PRO ENVIRONMENTAL RECYCLING BEHAVIORS BEHAVIOR BASED ON EDUCATION LEVEL (STUDY CASE IN BENDUNGAN VILLAGE, INDONESIA)

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Abstract. *The countless debates and controversies that have taken place between communities, individuals, and organisations in Indonesia have contributed to the complexity of the country's environmental problems. These inconsistencies and contradictions may, in essence, be linked back to the factors that led to the environmental problems that we are experiencing and the possible remedies to those problems. People who live in Bendungan Village, Bogor Regency, Indonesia, are used as the sample's units of analysis when taking quantitative data. The goal of community sampling is to get first-hand information about things like trash, recycling, and eco-village activities that happen in the community. The research methodology utilised in this study is a mixed-methods approach. Based on the findings, it has been determined that there exists a discrepancy between the knowledge and actions of the individuals residing in Bendungan Village. This would be the case since their ideas are in direct antagonism to their behavior. The fact that people in the area have adequate information does not make them more likely to engage in environmentally conscious conduct; rather, it demonstrates that there are other factors outside education that influence people's behavior toward environmental sustainability.*

Keywords: Waste Management; Behavior; Pro-Environment; Education; Knowledge.

Abstrak. Perdebatan dan kontroversi yang terjadi antara masyarakat, individu, dan organisasi di Indonesia telah berkontribusi pada kompleksitas masalah lingkungan di Indonesia. Ketidakkonsistenan dan kontradiksi ini pada dasarnya dapat dikaitkan kembali dengan faktor-faktor yang menyebabkan masalah lingkungan dan solusi untuk masalah tersebut. Orang-orang yang tinggal di Desa Bendungan, Kabupaten Bogor, Indonesia, digunakan sebagai unit analisis sampel saat mengambil data kuantitatif. Tujuan pengambilan sampel masyarakat adalah untuk mendapatkan informasi langsung tentang hal-hal seperti sampah, daur ulang, dan kegiatan desa ramah lingkungan yang terjadi di masyarakat. Metodologi penelitian yang digunakan dalam penelitian ini adalah pendekatan metode campuran. Berdasarkan temuan tersebut, telah ditetapkan bahwa terdapat kesenjangan antara pengetahuan dan tindakan individu yang tinggal di Desa Bendungan. Hal ini terjadi karena ide-ide mereka secara langsung bertentangan dengan perilaku mereka. Fakta bahwa orang-orang di daerah tersebut memiliki informasi yang memadai tidak membuat mereka lebih cenderung terlibat dalam perilaku sadar lingkungan; sebaliknya, hal itu menunjukkan bahwa ada faktor-faktor lain di luar pendidikan yang memengaruhi perilaku orang terhadap keberlanjutan lingkungan.

Kata Kunci: Manajemen Sampah; Perilaku, Pro Lingkungan; Pendidikan; Pengetahuan.

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PENDAHULUAN

In terms of the environment, the problems that are associated with waste or garbage are mostly caused by human activity. As a result, it is possible to draw the conclusion that the fundamental cause of environmental problems exists within the human population. Because the majority of environmental problems are created by or originate from human activities, it is imperative that human factors be taken into consideration while developing solutions for environmental problems.

The countless debates and controversies that have taken place between communities, individuals, and organisations in Indonesia have contributed to the complexity of the country's environmental problems. These inconsistencies and contradictions may, in essence, be linked back to the factors that led to the environmental problems that we are experiencing and the possible remedies to those problems. According to the World Bank (2010), the following is a list that can be used to summarise the key reasons of the environmental problems that Indonesia is experiencing: These include: the management of forests and water; the management of climate change and global warming; the management of natural disasters; the management of policies, institutions, and operations; and the management of coastal resources and coral reef ecosystems.

The environmental cleanliness concerns are continuing issues that require continuous efforts to be addressed. These challenges cannot be postponed, let alone ignored, and have to be addressed immediately. The difficulties associated with finding a solution to the problem would be made even more difficult by any delay in addressing it. In Indonesia, the community has a negative attitude towards waste as a result of the growing population and the increasing need for home products. This has led to undesirable repercussions such as an increase in the amount of garbage that is produced. Especially in urban areas, waste management is still an environmental problem that has not been handled up to this point. Inadequate waste management can result in a decline in both the social health of the population as well as the aesthetic quality of the surrounding environment. This is primarily the result of the contamination of both the air and the water, as well as the increase in the number of diseases and undesirable organisms. As a consequence of this, residential areas that are located in close proximity to rubbish dumps become unfit for human habitation. In accordance with the Indonesian

Law No. 18 of 2008, waste is defined as the residual consequence of human activities or natural processes, existing in solid or semi-solid form, consisting of organic or inorganic compounds that may or may not be biodegradable, and being disposed of into the environment because it is regarded to be no longer usable.

When it comes to the environment, the difficulties that correspond to the concerns described above are mostly caused by human activities. As a result, it is possible to draw the conclusion that the fundamental cause of environmental problems exists within the human population. Because the majority of environmental problems are created by or originate from human activities, it is imperative that human factors be taken into consideration while developing solutions for environmental problems.

METODE

A summary of the framework that incorporates the variables that are going to be examined as well as the relationship between these variables is what is known as the study design. This framework can be presented in the form of a diagram or another visual representation. The research methodology utilised in this study is a mixed-methods approach, which includes both qualitative and quantitative investigations (Creswell, 2010).

People who live in Bendungan Village, Bogor Regency, Indonesia, are used as the sample's units of analysis when taking quantitative data. The goal of community sampling is to get first-hand information about things like trash, recycling, and eco-village activities that happen in the community. This information will help us understand how these projects and the community's efforts to control the environment are affecting things. Random selection is used to pick the sample for the study, making sure that every person in the community has an equal chance of being picked (Cresswell, 2010). Because of this, everyone in Bendungan Village has an equal chance of being chosen to take part. The sample for the quantitative data collection is based on the Bendungan Village community in the Ciawi Sub district of Bogor Regency. According to Creswell, the samples were chosen at random, which means that every person in the population has the same chance of being chosen. In this way, every person living in the Village has an equal chance of being the responder. We did the math using Slovin's or Yamane's formula, which is given below (in Stephanie, 2003):

It is thought that random methods were used to get a good sample of the respondents, so the questionnaire has a 10% sampling error ($d = 0.1$). The amount of trust or accuracy in the facts by 90%. The total sample size is 99 people, which was found by using this method.

When using the quantitative method, structured questions or questionnaires are used to collect data. The questionnaire was used to get first-hand information about how people behave and how the group manages its environment. The study factors that need to be looked at influence the questions that are asked and how they are organized in the questionnaire. The questions are carefully thought out to make sure that the group of people who are supposed to answer them can easily understand them. Furthermore, the numeric data gathered from the questionnaires is supported by the qualitative data.

According to Prof. Jon Krosnik, using a 4-point scale is a good idea because it is backed up by a lot of study literature on big surveys. Jon Krosnik, a professor at Stanford University who specializes in survey methodology, wrote in 2002, "A lot of people who fill out surveys don't have strong preferences that guide their thoughts and actions." However, offering a "no opinion" answer choice doesn't seem to be a good way to stop people from reporting weak views. In fact, it would be foolish to use these options because they seem to leave out a lot of real views. What most negative reactions are really about is not not having an opinion at all, but choosing not to put in the mental work needed to say what they think.

HASIL DAN PEMBAHASAN

An Indonesian village known as Bendungan may be found in the Bogor Regency, which is located in West Java. The environment that surrounds the village, including both the physical environment and the social environment, is the subject of the research that will be conducted. Because of the huge land conversion that led to environmental deterioration (deforestation, floods, and pollution in the CRB / Citarum and Ciliwung River Basin), this site was selected as the location for the project.

The village of Bendungan may be found in the Ciawi Subdistrict of the Bogor Regency in the Indonesian province of West Java. There is a portion of Bogor City that encompasses a total land size of 132.9 hectares. The coordinates for its location are 106.861984 East Longitude and -6.668112 South Latitude. Specifically, this hamlet is

surrounded by the following villages: Ciawi, Banjarwaru hamlet, Sukamahi Village, and Pandansari Village. These communities are officially considered to be its neighbours

Kaiser (1998) categorizes behaviors aimed at environmental protection as pro-environmental behavior. Kaiser (1998) categorizes the components of environmentally conscious behavior into energy conservation, sustainable transportation and mobility, waste reduction, recycling, responsible consumption, and behavior preservation. Kollmus and Agyeman (2002) assert that pro-environmental behavior is shaped by internal and demographic influences. Several internal elements contribute to environmental awareness. The elements encompass environmental awareness, environmental knowledge, attitudes, locus of control, accountability, and priorities. External variables encompass institutional, social, and cultural effects. Gender and educational attainment are two demographic factors currently under consideration. An individual's attitude is a crucial internal component influencing environmentally conscious behavior. This survey primarily examines individuals' attitudes towards the environment.

Milfont (2007) defines attitudes toward the environment as psychological dispositions expressed through the assessment of an individual's inclination to endorse or resist elements that influence the quality of the natural environment. In other words, environmental attitudes reflect individuals' sentiments on the environment.

In the 1991 book "Baucus," authored by Melissa S. Baucus and Janet P. Near, the authors contend that participation in illegal action is unethical as it undermines the imperative of moral enforcement via legal systems. Hernandez and Groot (JR Hernández, 2007) assert that two critical factors influence individual engagement in fraudulent operations. These components encompass ethics and the regulatory framework.

Arens and Loebecke (1994) claim that it is imperative for any organization to implement internal control mechanisms to properly manage its operations. This element comprises various components, including risk management assessment, information and communication systems, accounting procedures, control environment, monitoring, and control activities, among others.

Specific patterns are greatly esteemed within the social dynamics and cultural context in which they are found. This phenomenon significantly affects individual

behavior, especially in situations where individuals are more prone to do fraudulent acts. This may lead individuals to perceive fraudulent action as commonplace or socially acceptable. The dualistic nature of individuality and collectivism manifests these cultural manifestations distinctly.

The people who live in this neighborhood are the ones who are responsible for initiating the separation of wet and dry trash in order to improve the efficiency of waste management by both the government and the private entities. As a consequence of this, waste pickers are able to collect or recycle valuable garbage, which eliminates the requirement for additional separation of materials.

The previous waste management system in the hamlet, as well as throughout Indonesia, was rendered ineffective due to the residents' lack of comprehension of the importance of garbage collection in all situations. They do not have sufficient awareness to correctly organize their mess. Despite the fact that the populace is educated on waste management and the economic benefits of refuse as a result of the government's initiative to promote sustainability, there is a barrier in this town because there are not enough market sectors for recycling organic waste.

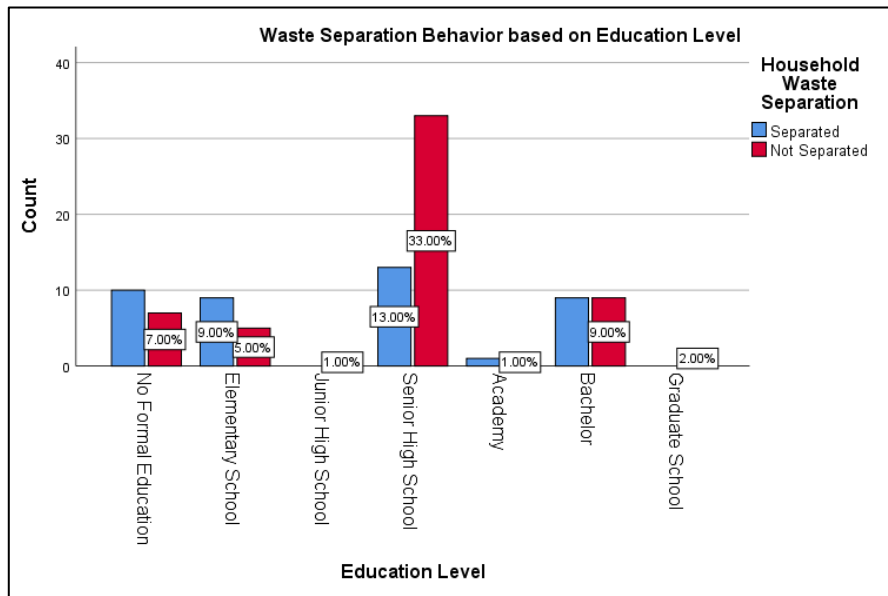
The implementation of sustainability efforts has resulted in the conclusion that waste sorting is no longer the only method for the management of garbage and refuse. To improve the trash's usability, it is required to take a comprehensive initiative to manage the waste situation. The following table provides a presentation of the outcomes of waste segregation procedures both before and after the government's initiative to promote sustainability.

Tabel 1. The behavior of Sorting Waste

No.	Variables	Frequency (before the program)	Percent (before the program)	Frequency (after the program)	Percent (after the program)
1.	Separating Waste	22	22.5	48	48.5
2.	Not Separating Waste	77	77.5	51	51.5
	Total	99	100.0	99	100.0

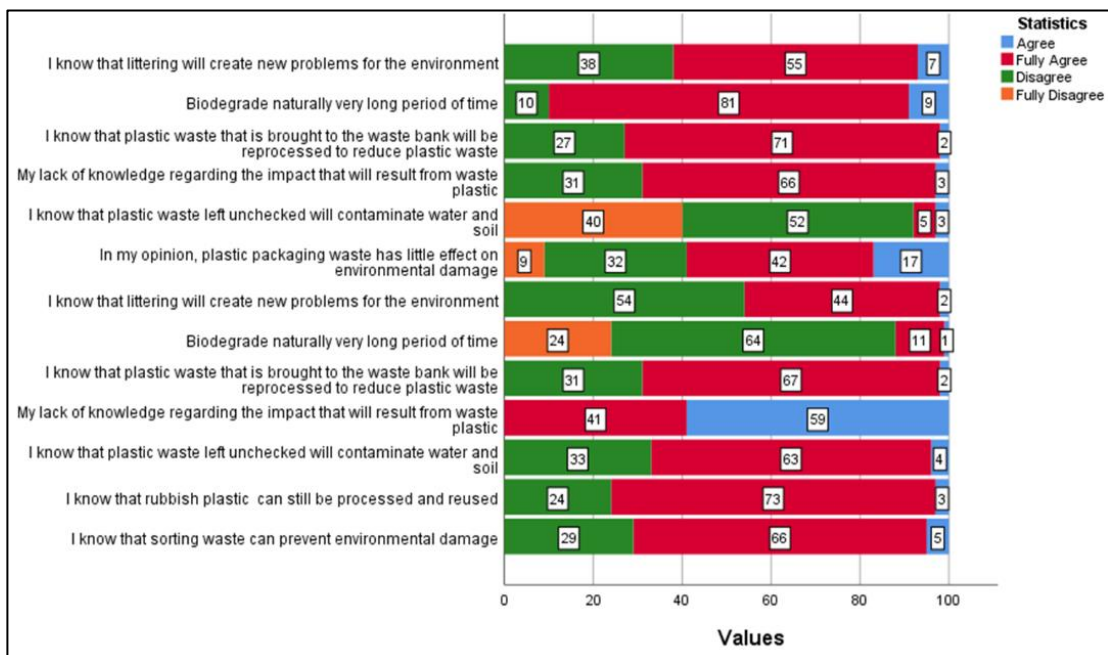
The crosstabulation of the questionnaire findings indicated that most respondents who practice waste separation have attained their high school diploma. Conversely, those with higher education, specifically from an academy, exhibit the lowest waste

separation behavior, comparable to those who have completed junior high education. This research indicated that an increase in education level correlates with a decrease in the percentage of respondents that segregate their household garbage. The data is illustrated in the figure below.



Gambar 1. Waste Separation Behavior based on Education Level

Respondents knowledge on plastic waste. The research showed that most respondents understand the problems with plastic waste, but still most of the chose to burnt their waste.



Gambar 2. Respondent's Knowledge on Recycling

The surrounding environment and social practices may influence the development of biases within the Bendungan Village community toward knowledge acquired from government-sponsored environmental education programs. Despite a significant number of individuals possessing a comprehensive understanding and adequate information to engage in environmentally conscious practices, it is noteworthy that many still do not participate in such behaviors. Individuals sometimes assume that the practices of littering do not exert immediate consequences on their personal benefit (health, environment), resulting in an underappreciation of the environmental conditions widespread in rural areas. This is due to individuals' tendency to assume that these practices do not necessitate their immediate attention.

KESIMPULAN

Based on the findings, it has been determined that there exists a discrepancy between the knowledge and actions of the individuals residing in Bendungan Village. Their thinking, which is mostly based on collectivism or pressure from their neighbors, friends, or the government, could be the explanation for their actual action, which is in direct opposition to their views. This would be the case since their ideas are in direct antagonism to their behavior.

The fact that people in the area have adequate information does not make them more likely to engage in environmentally conscious conduct; rather, it demonstrates that there are other factors outside education that influence people's behavior toward environmental sustainability. This is due to the fact that they have the potential to have an effect known as goal interference, which happens when they reduce the commitment to the goal intention and the strength of the pro-ecological objective. Additionally, they may have an effect on pro-environmental actions thanks to the fact that they may have an economic condition or cultural challenges. According to the findings of the current study, knowledge and beliefs do not have any correlation with environmentally conscious decisions; nevertheless, cultural background and economic factors may have some correlation with such decisions. This may be a significant addition to previous work and have the potential to motivate future work in order to disentangle the ways in which knowledge about the environment and perceptions about the environmental

benefits of trash separation require additional investigation, as well as the ways in which these factors functionally influence environmentally conscious behavior.

According to the persons who took part in the questionnaire, these activities are therefore deemed to be typical or typical in nature. Not only does the execution of activities that are harmful to the environment depend on the ethical ideals that an individual upholds, but it also depends on the specific circumstances that are present. Individualism and collectivism are two instances of social phenomena that are frequently encountered in the culture of the present day. On the other hand, individuals that take part in this phenomenon typically fail to recognize the repercussions that their actions will have. Despite the fact that humans are social beings who are fundamentally connected to other people, they were designed to be unique individuals. This is despite the fact that they are social beings by nature. It is possible for a person to exhibit collective behavior at times, while at other times they may exhibit a strong predisposition toward individualism. This is something that is contingent upon the particulars of the scenario.

It is possible for an individualist to exhibit conduct that is comparable to that of a member of a group when they are working toward the accomplishment of their objectives. The individuals who participated in the survey exhibited this type of behavior in order to obfuscate or conceal their personal objectives. It is also possible that the responders will demonstrate this attitude in order to link themselves with individuals who are working toward the same goal. One more possibility is shown here. When we talk about collaboration, we are referring to the process within which two or more individuals work together toward the accomplishment of a common objective. On the other hand, after the objective is accomplished, the cooperation among individualists will disintegrate and become less effective.

According to the findings of the research, the process of internalizing behavior did not result in the formation of norms and rules that support a more collectivist perspective. It was discovered that individualist values were more prevalent than communal values, and that they were able to successfully impose their influence over the majority of the individuals who lived in the hamlet. In addition, in order to successfully carry out these measures, it is absolutely vital to obtain a collective commitment from all of the individuals who are involved.

There is a relatively low percentage of persons who dispose of waste in an appropriate manner in the place where the research is underway. Although doing so can improve an individual's sense of self-assurance when they are wearing it, the majority of people in this research region chose not to dispose of garbage in the appropriate manner. This is despite the fact that doing so can boost an individual's sense of self-confidence. In order to eliminate littering and to encourage environmentally conscious behavior among members of a community that already possesses basic and fundamental knowledge regarding environmentally responsible behavior, a new strategy is required in addition to education. This is because education alone is not enough to accomplish these goals.

Internalization is required in this research in order to overcome the issue of individualistic behavior that is putting the environment in danger. Despite the fact that it is a lengthy process, implementation of this strategy is essential. Knowledge and information would not be successful in influencing people's behaviors, according to the conclusions of this investigation, which was conducted. Additionally, the outcomes of this study indicated that knowledge does not play a part in defining individualism behavior, and that collectivism behavior has not been able to prevail over the effect of individualism in this community. Both of these conclusions were proved by the observations that were made.

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