Jurnal Ecopsy Volume 9, Nomor 1, April 2022, 76-87
doi: 10.20527/ecopsy.2022.03.007

eISSN: 2354-7634
pISSN: 2354-7197

The Role of Environmental Attitude Towards Ecological Behavior of Early Adulthood in Jakarta Greater Area (Jabodetabek)

Peranan Sikap terhadap Lingkungan dalam Mempengaruhi Perilaku Ekologis pada Kelompok Dewasa Muda di Jabodetabek

Ade Iva Murty*, Andita Putri Ramadhania, Alfin Adichandra, dan Dienia Airlia
Fakultas Psikologi, Universitas Pancasila, Jakarta, 12630 Indonesia

ABSTRAK

Perilaku ekologis sangat signifikan untuk memperlambat perubahan iklim. Penelitian ini bertujuan untuk menginvestigasi peran sikap terhadap lingkungan dalam mempengaruhi perilaku ekologis. Penelitian ini menggunakan pendekatan campuran dan terdiri dari 191 responden dan 2 kelompok peduli lingkungan. Pengambilan data kuantitatif dilakukan menggunakan survei daring dan pengambilan data kualitatif dilakukan melalui wawancara. Uji regresi sederhana menunjukkan bahwa sikap terhadap lingkungan mempengaruhi perilaku ekologis secara positif dan signifikan. Uji tambahan memakai faktor demografi seperti jenis kelamin, tempat tinggal, sumber pemasukan, dan tingkat pendidikan menunjukkan bahwa faktor tersebut tidak mempengaruhi perilaku ekologis. Hasil studi kasus memunculkan tema-tema seperti nilai terhadap lingkungan, penggunaan teknologi, peran relawan muda, dan pengalaman masa lampau. Maka, dapat disimpulkan bahwa perilaku ekologis kaum dewasa awal di Jabodetabek dipengaruhi oleh sikap mereka terhadap lingkungan dan menerapkan perilaku ekologis sebagai bagian dari gaya hidup. Umumnya responden cenderung memilih media sosial untuk mengekspresikan pendapat mereka tentang permasalahan lingkungan. Maka dari itu, jika pemerintah atau organisasi lain ingin meningkatkan perilaku ekologis kaum dewasa muda di Jabodetabek, fokusnya adalah mengembangkan kampanye melalui media sosial yang akan mendorong kaum dewasa muda Jabodetabek memiliki sikap yang positif terhadap pelestarian lingkungan.

Kata kunci: sikap terhadap lingkungan, perilaku ekologis, nilai-nilai, pemanfaatan teknologi, relawan muda

ABSTRACT

Ecological behavior is the most important factor to slow down climate change. This research aims to investigate the role of Environmental Attitude towards Ecological Behavior. This research utilized the mixed-method approach and consisted of 191 respondents and 2 pro-environmental groups. Quantitative data was collected through an online survey and qualitative data was collected through interviews. A simple regression model test showed that Environmental Attitude positively and significantly affects ecological behavior. After controlling for demographic factors such as gender, residency, source of income, and education level. It was found that these variables do not have significant effects on ecological behavior. Meanwhile, case studies reflect themes such as values of environment, technological use, the role of young volunteers, and past experiences. So, it can be concluded that the early adults in Jabodetabek implements ecological behavior as an effect of Environmental Attitude, and as a lifestyle. Most of respondents tend to use social media as a way of expressing their opinions and ideas regarding environmental problems. Therefore, if the government or other organizations have some programs for increasing the awareness of early adult in Jabodetabek to implement ecological behavior practice, they should focus on developing social media campaigns that will improve early adult environmental attitudes.

Keywords: Environmental Attitude, ecological behavior, values, technological use, youth volunteer

***Korespondensi:**
Ade Iva Murty
aiwicaksono@gmail.com

Masuk: 10 Oktober 2021
Diterima: 25 Maret 2022
Terbit: 15 April 2022

Sitasi:
Murty, A. I, Ramadhania, A. P., Adichandra, A., & Airlia, D. (2022). The Role of Environmental Attitude Towards Ecological Behavior of Early Adulthood in Jakarta Greater Area (Jabodetabek). *Jurnal Ecopsy, 9*(1), 76-87. http://doi.org/10.20527/ecopsy.2022.03.007

INTRODUCTION

According to Wuebbles and Jain (2001), and Stott et al., (2010), for over 50 years, human beings has been the major cause of climate change. This is due to the effects from their behavior, especially when associated with fossil fuel combustion such as charcoal, oil, natural gas, and also deforestation. Furthermore, this has also made the earth warmer due the increase of hot air gas that is caused by Carbon Dioxide in the atmosphere. Climate change is very detrimental to the sustainability of human beings and an increase in population as resulted in many lands being restructured in order to meet the needs for housing, food production, and fossil fuel energy demands. This has made Carbon Dioxide (CO2) become more dispersed around the globe. CO2 has flourished a raise in temperature and made the earth not just warmer but also experience many hydrometeorology disasters.

Intergovernmental Panel on Climate Change (IPCC) 2021 (UNEP, 2021) has shown the world some evidence of problems faced by humans when climate change goes on without further prevention. This is closely associated with widespread and rapid changes in the atmosphere, ocean, cryosphere, and biosphere. The IPCC reached an agreement that the base value of total human activities causing global surface temperature increase, between 1850 to 1900 and 2010 to 2019 was 0.8ºC to 1.3ºC with the best estimate at 1.07ºC. It was believed that greenhouse gas (GHG) were the main driver of earth warming since 1979. Globally, averaged precipitation over land has *likely* increased since 1950, with a faster rate of increase since the 1980s (UNEP, 2021). The rise in the global total population directly affects the demand for housing and other infrastructures for human lives and urban development.

The scale of recent changes across the climate system as a whole have been unprecedented over many centuries. Human-induced climate change is already affecting many weather and climate extremes such as heatwaves, heavy precipitation, droughts, and tropical cyclones and in particular, their attribution to human influence has become strengthened. Furthermore, countries are currently dealing with hydro-meteorological disasters. This type of disaster is defined as a natural phenomenon or process involving atmospheric, hydrological, or oceanographic components that could bring loss of life, health impacts, property damage, loss of livelihoods and services, social and economic disruptions, or environmental damage (The OPERANDUM, 2019). The research by Paul et al., (2018) mentioned that hydrometeorological disaster has caused fatalities more lethal compared year per year since 1950 in the USA alone and around the globe. This includes flooding, heat, cold, lightning, wind events, and tropical events. Previous studies have also shown that they cannot be detached from the climatic change affecting the geographical area from time to time.

According to the report from National Agency for Disaster Countermeasure (BNPB), it was stated that 95% of disasters in the Indonesia are examples of hydrometeorological, which can be comprehended as disasters mostly triggered by extreme weather and climate (Situmorang, 2021). Jakarta Greater Area also known as Jabodetabek has become the worst area in Indonesia that has been suffering from disasters and climate change. It is also one of the most continuously expanding areas that has been facing heavy rains, floods, landslides, abrasion in the coastline, and even typhoons. This is a challenge for inhabitants of Jabodetabek, in their respective cohort developmental stage. Furthermore, when discussing on the prevention of climate change, the main actors are individuals with a high awareness of environmental problems. In a nutshell, early adulthood also has a very essential role in applying ecological behaviour as part of strategies to prevent climate change from becoming worst annually.

This research is very significant in the context of the current environmental situation in Indonesia. Therefore, during the development

of a comprehensive understanding of Jakarta's Greater Area, it was found that the problems of hydrometeorological disasters always point at how a human being behaves as an integral part of every city. Tamar et.al. (2020) has also conducted a research among students at one of the universities in the Eastern Part of Indonesia and found that several values could be functioned as an enhancement or negation for pro-environmental behavior. The research by Anderson and Krettenauer (2021) in Canada, once identified that adults significantly showed connectedness to nature compared to adolescents and also higher in pro-environmental behaviour. The findings were very substantial in terms of how the urgency of this research was developed. Age, gender, and economic status have been reviewed incessantly as demographic factors with various effects on pro-environmental behaviour. However, for stakeholders to build a strong and relevant strategy for preventing environmental disasters due to climate change, it is important to identify certain characteristics of how every age group will contribute. The first step towards adulthood, should also be a noteworthy base in the society with a consequential understanding of environmental problems.

Kaiser et.al. (1999) stated that ecological behaviour reflects the conduct of an individual as a conscious choice for minimizing the negative effects on the environment. It refers to a conceptualization that has to be assigned first as a general concept and then as a concrete behaviour. Kaiser (1998) admitted that there are some problems measuring ecological behaviour have something to do with its inconsistency from one domain to another. For example, a person could behaves very carefully if it concerns energy saving, whether fossil fuel or electricity. However, the same individual could be careless enough in the context of how he or she uses plant-based tissues for everyday utensils. Ecological behaviour is interchangeable with that of pro-environmental. Anderson and Krettenauer (2021) defined pro-environmental behavior as actions that individuals take to either minimize environmental harm or actively help to restore the natural environment. Based on this context, the best type of behavior was selected.

Kaiser (1998) emphasized the need to perceive ecological behavior as a unidimensional variable. Although Kaiser & Wilson (2004) found that the multidimensional version of GEB fits the data best. It was proven to have a negligible practical significance as the unidimensional model was only marginally less able to predict the data compared to the multidimensional. Therefore, the unidimensional version of GEB was used in order to understand how ecological behavior is goal-directed. Furthermore, a goal-directed attitude will be much more reliable for the attribution about the background of some choices, understanding how it is being practiced, together with its social and cultural context. Several variables have been studied as predictors of ecological behaviour. Roy and Pal (2009) studied the influence of lifestyle change, Lansana (1992), Scott (1999) examined the role of age towards ecological behavior, and Geiger et al. (2018) learned about mindful awareness for predicting the behavior. Kaiser and Gutscher (2003) studied the role of intention, Singh and Gupta (2013) and Tariq et al. (2020) discovered the role of environmental attitude towards ecological behavior.

People's environmental actions are based not only on their perception or motivation. Therefore, it is important to carry out research on social and cultural constraints because of their role as a macro predictor for ecological behaviour. The communities also play a major role in making people to show such attitude. The effects of climate change have shaped the life of human beings and can also become a deadly threat if not controlled. Indonesia has been placed as the fourth largest producer of Green House Gas world wide. However, not many research has completely explored the role of environmental attitude on the ecological behavior of young adults in Indonesia.

Attitude is the basic concept in social psychology, and it represents subjectivism. Furthermore, it can be viewed as the response

of individuals based on their interpretation of the world around them (Ross, Lepper & Ward in Fiske et.al. 2010). Environmental problems are also a major stimulus capable of shaping a persons' attitude. Therefore, it is important to understand their significant role on ecological behavior.

Young adults are those in their early stage of development to becoming the future generation that will lead the country with their career paths. Therefore, before this study commenced, there was an understanding of the attitudes of early adults, and their effect on the ecological behavior of the environment.

The following research question was formulated:
"How significant is the role of environmental attitude towards ecological behavior in the context of early adulthood in Jakarta Greater Area (Jabodetabek)?" The following hypothesis were reached:
Ho: Environmental attitude does not have a significant effect on ecological behavior.
Ha: Environmental attitude has a significant effect on ecological behavior.

This research aims to investigate the role of environmental attitude on ecological behavior, as a foundation for government, NGOs, and every academician that is concerned over the environmental problems in Jabodetabek.

METHOD

This research used the mixed-method approach, while the first stage followed the quantitative method. This methodology focused on objectively testing the theory, followed by statistical testing to discover the relationship between the research variables (Creswell & Creswell, 2017).

The relationship between variables was discovered by conducting a structured measurement on the individuals to obtain a numerical score. Afterwards the data was analyzed statistically and interpreted based on the theory, and the variables that were used as the foundation (Gravetter & Forzano, 2018). This process is commonly referred to as explanatory research, and it involves ascertaining the reason for the occurence of the phenomenon, how each variable interacts, and the significance of the effect between them.

The second stage in this research involved using a qualitative method to understand the psychological phenomena and the analysis of social and cultural forms (Denzin & Lincoln, 2018). The results were obtained through a quantitative research and used to provide data in a form of a case study. This was performed using an *in-depth* interview, data management, and the thematization process, which resulted in themes that were later used for a deeper comprehension of the research questions.

According to Leppink (2017), the mixed research method used in this research is referred to as the 4th model as it combines the best aspects of both quantitative and qualitative research methodologies. The quantitative results was enriched by the explanations obtained through the findings in qualitative research. This is in line with the research by Clark et al., (in Hesse-Biber & Leavy, 2008) which stated that further validation through *data enhancement* from qualitative research is needed when quantitatively generalizing a population. The case study results will be very useful to help explain the findings and the conclusion of this research.

Participant

The inclusion criteria were participants that are early adults, aged 18-25 years, male/female, and those currently living in Jakarta greater area. About 200 participants were obtained, however, due to incomplete data, 9 were dropped. As a result, a total of 191 participants were used. A *non-probability sampling design* was also used due to lack of access to the data needed to use the *probability sampling methods*. The data collection was conducted through the sharing of the *google-form* link via social media such as *WhatsApp* and *Instagram*. This form contained the

participants *informed consent* and the questionnaire itself. Furthermore, data collection through social media was useful in reaching more respondents.

Measurement

2 questionnaires were used and the first was the *General Ecological Behavior Scale* (Kaiser, 1998). This is a unidimensional questionnaire and consists of 50 items rated through *Guttman scaling methods*. During the process of adaptation, the creator of the GEB scale was consulted for advice, which was followed completely. Furthermore, through the advice, it was understood that GEB uses the Campbell paradigm founded by Kaiser et al., (2013). This implies that the single item of GEB can express a behavior extensively. In turn, it was possible to adapt the questionnaire and only pick a few items that are suitable to use and still measure the same variable as the original version. The result was a 21 items questionnaire rated through a *Likert* scale, ranging from 1 to 4 (Strongly Disagree, Disagree, Agree, and Strongly Agree). The SPSS test revealed that the questionnaire had an α of 0.71. Therefore, according to Taber (2018), it was considered to have good reliability.

The 2nd questionnaire was the *Environmental Attitude Inventory* developed by Milfont & Duckitt, 2004. Their publication in 2004 for this questionnaire resulted in two factors, 10 dimensions, and 99 items. Furthermore, Milfont and a colleague created the short form of the *Environmental Attitude Inventory*, which consists of two factors, 10 dimensions, and 24 items, in 2010 (Milfont, 2007; Milfont & Duckitt, 2010). This questionnaire was rated through a *Likert Scale* ranging from 1 to 4 (Strongly Disagree, Disagree, Agree, and Strongly Agree). After reviewing this short version, the team decided to use the version of this questionnaire because it fits with Indonesian culture characteristics. Afterwards, the sentences were simplified and adjusted in order for the items to be more easily understandable. The SPSS test reveals that this questionnaire has α of 0.66. Therefore, according to Taber (2018), it can be considered to have adequate reliability.

Procedures

This began by formulating a research problem, then choosing the most suitable method to be used. Furthermore, information on the best method to properly adapt the questionnaires to fit the Indonesia culture was sourced from the developers. After the adaptation process, the validity and reliability of the questionnaires was tested. This was followed by data collection and analysis, and a report on the progress of the study.

This research used a mixed method approach which involves the following procedures. First, the research team chose the best learning method, next, the literature review was carried out, and the internet was used for the selection of communities and organization. Finally, in-depth interview and report writing were prepared. The criteria for selection was the dynamics of the community in terms of its programs and coverage of target groups.

Analysis Technique

Validity and reliability was tested through the *Classic Test Theory*, using SPSS v23.0. The results of the CTT test on the General Ecological Behavior scale was α = 0.715, while on the Environmental Attitude Inventory it was α = 0.662. Therefore, it was concluded that both questionnaires were reliable. Subsequently, the homogeneity of the data was tested using SPSS 23.0, but the normality test was not performed. This is because according to the *central limit theorem* by Field (2009) when the research participants are greater than 30, the data will be distributed normally, and can be considered parametric. This was followed by conducting a *Simple Regression Test.*

RESULT

According to the *demographic data* (See table 1.), out of the 191 participants, 144

(75.4%) were women, while 47 (24.6%) were men. Furthermore, 72 (37.7%) lived in Jakarta, 37 (19.4%) in Bogor, 37 (19.4%) in Depok, 16 (8.4%) in Tangerang, and 29 (15.2%) in Bekasi. In terms of education it was found that 111 (58.1%) were high school graduates, while 80 (41.9%) are either in college or already graduated. Finally, out of the 191 participants, 35 (18.3%) were not dependent on their parents for their income. Meanwhile, 9 (4.7%), 18 (9.4%), 35 (18.3%) and 94 (49.2%) still depended on their parents for 25, 50, 75, and 100% of their income.

Table 1. Demographic Data

Primary Characteristics	*n*	%
Gender		
Female	144	75.4
Male	47	24.6
Residency		
Jakarta	72	37.7
Bogor	37	19.4
Depok	37	19.4
Tangerang	16	8.4
Bekasi	29	15.2
Education Level		
High School	111	58.1
College	80	41.9
Main Source of Income		
Not Dependent on Parents	35	18.3
25% Dependent on Parents	9	4.7
50% Dependent on Parents	18	9.4
75% Dependent on Parents	35	18.3
100% Dependent on Parents	94	49.2

Based on the simple regression test (See table 2.) it was found that R^2 = 0.011, B = -0.564, F (1;189) = 2.069, SE=0.0392, and p<0.05, indicating that gender affects ecological behavior by 1.1%.

Table 2. Gender on Ecological Behavior (EB)

Effect	R^2	*SE*	95% CI		*F*	*P*
			LL	UL		
Gender	0.011	0.0392	1.338	0.209	2.069	0.003

Based on the simple regression test result (See table 3.), it was found that R^2 = 0.005, B = -0.206, F (1;189) = 1.032, SE=0.203, and p>0.05, indicating that people's residency affects ecological behavior by 0.5%. Based on this data, it was concluded that although people's residency affects ecological behavior, its effect is insignificant.

Table 3. Residency on Ecological Behavior (EB)

Effect	R^2	*SE*	95% CI		*F*	*P*
			LL	UL		
Resi-dency	0.005	0.203	-0.607	0.194	1.032	0.311

Based on the simple regression test result (See table 4.) it was found that R^2 = 0.000, B = -0.015, F (1;189) = 0.006, SE=0.191, and p>0.05. This indicates that source of income does not affect ecological behavior.

Table 4. Source of Income on Ecological Behavior (EB)

Effect	R^2	*SE*	95% CI		*F*	*P*
			LL	UL		
Source of Income	0.000	0.191	-0.392	0.362	0.006	0.937

Based on the simple regression test result (See table 5.), it was found that R^2 = 0.000, B = -0.013, F (1;189) = 0.000, SE=0.595, *and* $p>0.05$. This indicates that education level does not affects ecological behavior.

Table 5. Education Level on Ecological Behavior (EB)

Effect	R^2	*SE*	95% CI		*F*	*P*
			LL	UL		
Edu-cation Level	0.000	0.595	-1.187	1.161	0.000	0.983

Table 6. Descriptive Data of Ecological Behavior (EB)

		Frequency	%
Valid	Low	14	7.3
	High	175	91.6
	Very High	2	1.0

According to the table above, it was shown that 91.6% or 175 participants had a high score in *ecological behavior* practice, while 1% and 7.3% had a very high and a low score, respectively. Therefore, it was concluded that most of the young adults living in Jakarta's Greater Area have a high level of *ecological behavior.*

Table 7. Descriptive Data of Environmental Attitude (EA)

		Frequency	%
Valid	High	127	66.5
	Very High	64	33.5

According to the table above, it was found that 66.5% had a high score in *environmental attitude,* while 33.5% scored very high. In conclusion, young adults in Jakarta's Greater Area are known for having a high score in *environmental attitude.*

Table 8. Regression Test

Effect	R^2	*SE*	95% CI		*F*	*p*
			LL	UL		
EA	0.287	0.041	0.278	0.441	75.614	0.000

Based on the simple regression test result (See table 8.), it was found that $R^2 = 0.287$, $B = 0.359$, F (1;189) = 75.61, SE=0.41, *and* $p<0.001$. This was in line with the formulated hypothesis that stated "Environmental attitude has a significant effect on ecological behavior". Therefore, it was concluded that the higher an individual scores in *environmental attitude,* the higher their implementation of ecological behavior. This two factors positively and significantly affects each other by 28.7%, while the rest of the percentage is predicted by other variables not included in this research.

This research also employed a qualitative approach by collecting data through *in-depth interviews* with Gerakan Indonesia Diet Kantong Plastik (GIDKP) and Komunitas Peduli Ciliwiung (KPC). Both of those communities were chosen after carefully discussing which had programs towards environmental problems and agreed to be interviewed for the research.

Based on several alternatives, a preliminary interview was conducted in order to continue with the GIDKP (Gerakan Indonesia Diet Kantong Plastic or Indonesia Movement for Plastic Diets) and KPC (Komunitas Penjaga Ciliwung or Community for Ciliwung River). Furthermore, few themes were found through this process. The first was good values toward the environment, and their utilization. The second was technology utilization which refers to the fact that technology is a very important factor for conserving the environment, especially digitally. Digital technology helps organizations to be able to reach out to potential volunteers and promote them to be more involved in the practices of ecological behavior. The third was young volunteers which refers to few people ranging from the age of 16 to 35.

Both GIDKP and KPC showed that young volunteers are one of the most important groups to help build awareness towards conserving the environment. However, they are usually involved in activities which represents their passion for technology or green products. Furthermore, their involvement could be perceived as significant, as they can be good examples for the common cohort. The fourth and last theme was past experience, and it was found that both participants suggested that their childhood and adolescence experience was the most important time for them to start learning about environmental problems and building awareness towards the importance of environmental conservation. Past experience is a part of Psychological Experience that can help explain why and how young adult individuals developed their environmental attitude and ecological behavior. Therefore, attracting young volunteers with past experience on environmental problems was the most important determinant for young adults in practicing ecological behavior.

The two case studies represent the role of communities and organizations in developing

general ecological behavior. Furthermore, both GIDKP and KPC have their own platform for enabling programs that are related and relevant to environmental issues. For GIDKP, problems of plastic waste have been explored by raising the issue through social media and other media channel. This is important because these media platforms relate to adolescence and early adults, as they are currently the internet geniuses. However, this was different from KPC, which takes a different route. It also has a direct involvement with the huge problems of Ciliwung River. Nowadays this river is very dirty and an unhealthy source of water for people. KPC ignites the bigger audience of the society to place their best effort in saving the Ciliwung River from becoming a massive failure of environmental management.

DISCUSSION

The results showed that environmental attitude significantly contributed to ecological behavior, in the context of early adulthood in Jabodetabek. Therefore, at the very heart of the problems associated with climate change lies the need for applying ecological behavior. Kaiser (1999) further stated that ecological behavior is consciously implemented for minimizing negative effects of human influence towards the ecological system. Environmental attitude is a construct that reflects disposition for evaluating natural environment with norms, starting from strongly disagree to agree. Meanwhile, environmental attitude describes beliefs that influences behavior that supports preservation and utilization of nature responsibly. The earth has been changing deeply and it has become possible to also find negative impacts of the increase in total population. Problems such as hydrometeorological disasters, famine, the decrease of biodiversity further stresses that the world needs enhancement of ecological behavior.

Ecological behavior has cognitive, affective, and psychomotor tendencies with regards to the preservation and utilization of the natural environment. Concerning the natural environment, once it undergoes degradation, it would be very hard to recover. However, Eagly and Chaiken (1993 in Rhodes et.al., 2016) found that the role of environmental attitude on ecological behavior heavily depends on individual differences and situational factors. They also suggested the use of persuasion variables for understanding the interrelation between these two variables. In the context of Jabodetabek, the qualitative part of the research confirms that the role of environmental attitude towards ecological behavior should be reviewed also in terms of other constructs that can be perceived as coming from individual experiences and personal values.

The two case studies were able to enhance the statistical result of the relation between the two variables. Result themes extracted from cases of GIDKP and KPC are values, technology use, the role as young volunteers, and past experience with environmental problems. Validation coming from case studies can be thought of as a foundation for everyone in acknowledging the importance of environmental attitude towards ecological behavior. The rate of utilization of ecological behavior was heavily influenced by the cognitive aspect, specifically the knowledge and information that can be obtained from many sources. Currently, young adults have primacy over a generation as they can access many learning sources on the internet and are strikingly connected with behavioral trends around the world. In the preservation dimension, ecological behavior is strengthened by positive perception about environmental issues discussion and together build up an appropriate lifestyle for minimizing societal damage. Early adults in Jabodetabek were shown to have alternatives for implementing ecological behavior. For example, bringing their shopping bags to the groceries, dodging plastic utensils, using public transport, saving electrical energy, and gardening. In a nutshell, it can be said that early adults in Jabodetabek prefers to perform a healthy and green lifestyle, as a way of implementing ecological behavior. Meanwhile, the results were in line the research of Rezvani et al.(2017) who discovered the role

of personal norms and anticipated emotions toward pro-environmental behavior. Anticipated emotions directly affect how the youth consumes green products and feels proud about their green lifestyle. Within the stage of development, pride and emotions become an important consideration for implementing certain behavior.

It has been shown that early adults care a lot about their lifestyle instead of their involvement in environmental movements such as GIDKP and KPC. Their preferences are inclined to the individual involvement and the coziness of conducting some lifestyle, in particular when its being supported with high technology. This is in line with research by Pagiaslis and Krontalis (2014), which studied biofuel buying in Europe. Furthermore, environmental empathy directly and positively contributes to belief, knowledge, and intention of ecological behavior. The results are also in accordance with Anderson and Krettenauer (2021), which discovered evidence about the contribution of emotional connectedness with nature as a predictor for pro-environmental behavior. Subsequently, adults displayed significantly higher levels of emotional connectedness to nature and pro-environmental behavior compared to adolescents and there are some differences when it is controlled with gender and geographical area. Based on the three research, it is believed that early adulthood cares about the environment and they build up involvement through lifestyle and technology. However, it is reflected as a feeling of connectedness with nature, but they do not limit the involvement to the social activism of environmental protection. This connectedness has something to do with a personal way of showing care for the earth.

For decades research about climate change came from natural sciences. Climate scientists and geologists also provided evidence of changes and consequences. The field of psychology was underrepresented, though every scientist agrees that climate change is mostly a result of human behavior. Human perception, behavior, and well-being were implicated as contributors to consequences of climate change (Clayton & Manning, 2018). Psychology as the science of human behavior was also involved in discussions about how human behavior can and should be modified to slow and limit the amount of climate change and to adjust to new climate platforms. It was found that the significant contribution of environmental attitude, but as environmental psychology research. It was suggested that future research includes and uses more predictors coming from many branches of psychology. For example, inspired by a study from Tariq et al. (2019) about leader ecological commitment. The success of developing ecological behavior cannot be detached from the role of government and society leadership. Furthermore, other variables were also inspired by the study of human values (Dietz, Fitzgerald, & Shwom, 2005; Kim & Kim, 2010; de Aragão & Alfinito, 2021; Aruta, 2021) and self-identity (Adnan, Ahmad, & Khan, 2017). Both predictors, values, and self-identity, are variables that reflect the basic psychological concepts of a human being. In the sense that, our connectedness to nature was originated deep down in our mental setting, climate change scientifically deals with humans, and not just natural things. The state of connectedness with nature can be stated as a basic view for attitude formation. When attitude is in line with ecological behavior, individuals will be energized to implement their decisions for preserving the environment, and at the same time preventing more damage to the natural environment.

The research suggests that government signalizes and cares about climate change and its effects on human life. All the government's policies should be oriented towards the preservation of the environment and responsibility for the utilization of natural resources. The government will be referred to and supported in the practicality of programs such as energy-saving, garbage inhibition, keeping the river and ocean clean, and also sustaining our biodiversity. Non-Governmental Organizations or NGOs will be at the forefront

of mobilizing environmental awareness in society, especially among young adults. Additionally, when there is cooperation between the Government and Society, the slow down degradation processes of environmental realities are guaranteed.

CONCLUSION

It was concluded that the higher someone score in Environmental Attitude, the higher their likelihood of implementing ecological behavior. Moreover, this research also found that both variables significantly affected each other among the early adolescent population who lives in Jakarta's Greater area (JABODETABEK). Therefore, this proves that Environmental Attitude is a predominant factor in implementing Ecological Behavior.

Based on the interview result, it was found that young adults decide to volunteer in this environmental conserving activity due to their past experiences with nature that resulted in fond memories of nature such as swimming with a family on a beautiful beach or a bad memory about a natural disaster such as having their home flooded. These memories then have helped shape their behavior and made them develop a high value for conserving nature. Moreover, in dealing with environmental problems young volunteers tend to use technology such as social media to facilitate their volunteer activity.

APPRECIATION

The best appreciation goes to the Faculty of Psychology Universitas Pancasila, for their financial support of this research. The research team would also like to thank GIDKP and KPC for their participation in this study.

REFERENCES

Adnan, A., Ahmad, A., & Khan, M. N. (2017). Examining the role of consumer lifestyles on Ecological behavior among young Indian consumers. *Young Consumers*, *18*(4), 348–377. https://doi.org/10.1108/yc-05-2017-00699

Anderson, D. J., & Krettenauer, T. (2021). Connectedness to Nature and Pro-Environmental Behaviour from Early Adolescence to Adulthood: A Comparison of Urban and Rural Canada. *Sustainability*, *13*(7), 3655. https://doi.org/10.3390/su1307365

Aruta, J. J. (2021). Connectedness to Nature encourages, But Materialism hinders, Ecological behavior in the Philippines: The higher order and Second-Order factors of Environmental attitudes as Viable Mediating Pathways. *Ecopsychology*, *13*(2), 114–122. https://doi.org/10.1089/eco.2020.0053

Clayton, S., & Manning, C. (Eds.). (2018). *Psychology and climate change: Human perceptions, impacts, and responses*. Academic Press.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches.* SAGE Publications, Inc.

de Aragão, B. S., & Alfinito, S. (2021). The relationship between human values and conscious Ecological behavior Among consumers: Evidence from Brazil. *Cleaner and Responsible Consumption*, *3*, *100024.* https://doi.org/10.1016/j.clrc.2021.100024

Denzin, N. K., & Lincoln, Y. S. (2018). *The sage handbook of qualitative research*. Sage.

Dietz, T., Fitzgerald, A., & Shwom, R. (2005). Environmental values. *Annual Review of Environment and Resources*, *30*(1), 335–372.https://doi.org/10.1146/annurev.energy.30.050504.144444

Field, A. (2009). *Discovering statistics using SPSS*. Sage publications.

Fiske, S. T., Gilbert, D. T., & Lindzey, G. (Eds.). (2010). *Handbook of Social*

Psychology, Volume 2 (Vol. 2). John Wiley & Sons.

Geiger, S. M., Otto, S., & Schrader, U. (2018). Mindfully green and healthy: An indirect path from mindfulness to ecological behavior. *Frontiers in Psychology*, *8*, 2306. https://doi.org/10.3389/fpsyg.2017.02306

Gravetter, F. J., & Forzano, L.-A. B. (2018). *Research methods for the behavioral sciences.* Cengage Learning.

Hesse-Biber, S. N., & Leavy, P. (2008). *Handbook of emergent methods*. New York.

Kaiser, F. G. (1998). A general measure of ecological Behavior. *Journal of Applied Social Psychology*, *28*(5), 395-422. https://doi.org/10.1111/j.1559-1816.1998.tb01712.x

Kaiser, F. G., & Gutscher, H. (2003). The Proposition of a General Version of the Theory of Planned Behavior: Predicting Ecological Behavior. *Journal of Applied Social Psychology*, *33*(3), 586–603. https://doi.org/10.1111/j.1559-1816.2003.tb01914.x

Kaiser, F. G., & Wilson, M. (2004). Goal-directed conservation behavior: The specific composition of a general performance. *Personality and individual differences*, *36*(7), 1531-1544. https://doi.org/10.1016/j.paid.2003.06.003

Kaiser, F. G., Wölfing, S., & Fuhrer, U. (1999). Environmental Attitude and Ecological Behaviour. *Journal of Environmental Psychology*, *19*(1), 1–19. https://doi.org/10.1006/jevp.1998.0107

Kaiser, F. G., Hartig, T., Brügger, A., & Duvier, C. (2013). Environmental protection and nature as distinct attitudinal objects: An application of the Campbell paradigm. *Environment and behavior*, *45*(3), 369-398. DOI: 10.1177/0013916511422444.

Kim, S., & Kim, S. (2010). Comparative Studies of Environmental Attitude and its Determinants IN Three East Asia Countries: Korea, Japan, and China. *International Review of Public Administration*, *15*(1), 17–33. https://doi.org/10.1080/12294659.2010.10805164

Kumar, R. (2018). *Research methodology: a step-by-step guide for beginners*. Sage.

Lansana, F. M. (1992). Distinguishing Potential Recyclers from Nonrecyclers: A Basis for Developing Recycling Strategies. *The Journal of Environmental Education*, *23*(2), 16–23. https://doi.org/10.1080/00958964.1992.9942792

Leppink, J. (2017). Revisiting the quantitative–qualitative-mixed methods labels: Research questions, developments, and the need for replication. *Journal of Taibah University Medical Sciences*, *12*(2), 97–101. https://doi.org/10.1016/j.jtumed.2016.11.008

Milfont, T. L., & Duckitt, J. (2004). The structure of environmental attitudes: A first- and second-order confirmatory factor analysis. *Journal of Environmental Psychology, 24*, 289–303. https://doi.org/10.1016/j.jenvp.2004.09.001

Milfont, T. (2007). A Brief Version of the Environmental Attitudes Inventory (EAI-24). 1–4.

Milfont, T. L., & Duckitt, J. (2010). The environmental attitudes inventory: A valid and reliable measure to assess the structure of environmental attitudes. *Journal of Environmental Psychology*, *30*(1), 80–94. https://doi.org/10.1016/j.jenvp.2009.09.001

Pagiaslis, A., & Krontalis, A. K. (2014). Green Consumption Behavior Antecedents: Environmental Concern, Knowledge, and Beliefs. *Psychology & Marketing*, *31*(5), 335–348. https://doi.org/10.1002/mar.20698

Paul, S. H., Sharif, H. O., & Crawford, A. M. (2018). Fatalities caused by

hydrometeorological disasters in Texas. *Geosciences*, *8*(5), 186. https://doi.org/10.3390/geosciences8050186

Rezvani, Z., Jansson, J., & Bengtsson, M. (2017). Cause I'll Feel Good! An Investigation into the Effects of Anticipated Emotions and Personal Moral Norms on Consumer Pro-Environmental Behavior. *Journal of Promotion Management*, *23*(1), 163–183. https://doi.org/10.1080/10496491.2016.1267681

Rhodes, N., Toole, J., & Arpan, L. M. (2016). Persuasion as Reinforcement: Strengthening the Pro-Environmental Attitude-Behavior Relationship through Ecotainment Programming. *Media Psychology*, *19*(3), 455–478. https://doi.org/10.1080/15213269.2015.1106322

Roy, J., & Pal, S. (2009). Lifestyles and climate change: link awaiting activation. *Current Opinion in Environmental Sustainability*, *1*(2), 192–200. https://doi.org/10.1016/j.cosust.2009.10.009

Scott, D. (1999). Equal Opportunity, Unequal Results. *Environment and Behavior*, *31*(2), 267–290. https://doi.org/10.1177/00139169921972100

Singh, N., & Gupta, K. (2013). Environmental attitude and ecological behaviour of Indian consumers. *Social Responsibility Journal*, *9*(1), 4–18. https://doi.org/10.1108/17471111311307787

Situmorang, H. D. (2021, April 14). BNPB: Bencana Di Indonesia 95% Adalah Bencana Hidrometeorologi, beritasatu.com. https://www.beritasatu.com/nasional/760305/bnpb-bencana-di-indonesia-95-adalah-bencana-hidrometeorologi

Stott, P. A., Gillett, N. P., Hegerl, G. C., Karoly, D. J., Stone, D. A., Zhang, X., & Zwiers, F. (2010). Detection and attribution of climate change: a regional perspective. *Wiley Interdisciplinary Reviews: Climate Change*, *1*(2), 192-211. https://doi.org/10.1002/wcc.34

Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in science education*, *48*(6), 1273-1296.

Tamar, M., Wirawan, H., Arfah, T., & Putri, R. P. S. (2020). Predicting pro-environmental behaviours: the role of environmental values, attitudes and knowledge. *Management of Environmental Quality: An International Journal*.

Tariq, M., Yasir, M., & Majid, A. (2020). Promoting employees' environmental performance in hospitality industry through environmental attitude and ecological behavior: Moderating role of managers' environmental commitment. *Corporate Social Responsibility and Environmental Management*. https://doi.org/10.1002/csr.2019

The OPERANDUM. (2019, September 13). "What are hydro-meteorological hazards?" Operandum. https://www.operandum-project.eu/news/what-are-hydrometeorological-hazards/

UNEP. (2021, August 9). Climate Change 2021: the Physical Science Basis, the Working Group l contribution to the Sixth *Assessment Report.* https://www.unep.org/resources/report/climate-change-2021-physical-science-basis-working-group-i-contribution-sixth

Wuebbles, D. J., & Jain, A. K. (2001). Concerns about climate change and the role of fossil fuel use. *Fuel processing technology*, *71*(1-3), 99-119. https://doi.org/10.1016/S0378-3820(01)00139-4