

The Relationship between Personal Responsibility, Environmental Sensitivity and Perceived Behaviour Control with Green Consumers Intention in North Sumatera, Indonesia

Alprida Harahap^{a*}, Amos Neolaka^b, Diana Vivanti^c, ^{a,b,c}Population and Environmental Education Department of Universitas Negeri Jakarta, Indonesia, Email: ^{a*}liaalprida12@gmail.com

‘Green consumers’ are people who use a product to minimize environmental damage. However, behaviour will not occur before the intention. Intention is the main predictor in realizing behaviour. This study aims to find out information about the relationship between personal responsibility, environmental sensitivity, and perceived behavioural control with green consumers intention. There were 200 students as samples taken by convenience sampling. This research is a quantitative and observational type research project with a cross sectional approach conducted on students. The results of the study are personal responsibility, environmental sensitivity, and perceived behavioural control correlation with green consumers intention. However, many factors act as a proxy for the green consumers intention because the sample comes from different backgrounds as well as knowledge about environmental issues. Researchers recommend for further research to examine internal, external, and social factors on North Sumatera using the SEM method.

Key words: *Personal responsibility, environmental sensitivity, perceived behaviour control, green consumers intention.*

Introduction

The environment is a source of human life, animals, plants, and other biodiversity. However, population growth and industrialization can damage the ecological environment. In recent years, environmental issues have received much attention, reflecting the increasing public attention and awareness of environmental issues. Evidently, some of the objectives of the SDGs are about the environment, where one of them is about consumption and responsible production in point 12. According to Jungbluth et al. (2011), food consumption is an additional environmental burden that includes other emissions (such as phosphates, pesticides and heavy metals), and exploitation of natural resources. This includes land and water. According to Pagiaslis et al (2014), several environmental problems are associated with human consumption, therefore bringing environmental awareness occurs to consumers in several countries and this action has been interpreted as a green consumer. Green consumers are consumers who are aware and interested in environmental issues (Soonthonsmai, 2007). Consumers demand green options and are willing to pay premium prices. When consumers start to show their concern for the environment and prefer eco-friendly products and services and have concerns and awareness about the environment, consumers can be said to be green consumers (Saha, 2018). The term of green behaviour, or pro-environment, is a behaviour that minimizes the danger to the environment as much as possible or even benefits it. Examples include minimizing energy use, and reducing waste (European Commission. 2012).

Personal responsibility must be carried out with determinism and free will and, for the most part, refers to people who actively take responsibility. Personal responsibility relates to individuals who take responsibility for their decisions and actions, along with the results they create and their impact on others. Only with the willingness to take full responsibility for the choices made, individuals can rise again, renew their efforts, and change their actions and consequences (Smithikrahi, 2015; Siregar et al, 2019; Humaira et al,2019; Aliyyah et al,2019).

Additionally, life experience also influences the concern for the environment. This is significant with the research conducted by Tanner (1980) and Peterson (1982) (in Bustam et al, 2004). Ping et al (2014) stated that life experiences were significant with environmental sensitivity. Environmental sensitivity is someone's empathy that is related to life experience, especially in decision making when interacting with biotic and abiotic factors in an ecosystem, where sensitivity is associated with a significant type of life experience. Furthermore, according to Yadav et al (2016)that. The youth's perspective on pro-environmental behaviour is very important because they are future consumers and community representatives.

Likewise, according to Ru et. al. (2018), behavioural control is a very important determinant of behavioural intentions. Some external conditions, such as the availability of facilities, time, costs, knowledge of behavior and skills, may be free from personal control. Thus, these factors influence their intention to participate in certain practices such as green consumers intention. Green consumers intention will become a behaviour and this can contribute to minimizing environmental impact. Therefore, this study wants to see the relationship between personal responsibility, environmental sensitivity, and perceived behavior control with green consumers towards students on North Sumatera.

Methods

This research is a quantitative research and observational research type, with a cross sectional approach. The study aims to find the relationship between independent and dependent variables, namely, the relationship between personal responsibility, environmental sensitivity, and perceived behavioural control with green consumers intention. The location of the study was conducted on students in North Sumatera and the population was all students in North Sumatera with the sampling technique, namely accidental sampling. Variables consist of dependent variables, namely, green consumers intention and independent variables including personal responsibility, environmental sensitivity, and perceived behavioural control. Descriptive factors are used in data presentation, central size, and size of spread. Data presentation is a distribution list and histogram. Central sizes are mean, median, and mode. The size of the spread is the standard variance and deviation. Inferential analysis is used to test the hypothesis using regression analysis and correlation, which is preceded by the requirements analysis of the regression analysis, namely, the normality test and linearity test.

Result and Discussion

The Indicators of personal responsibility, environmental sensitivity and perceived behavior control with green consumers intention variables can be shown in the following table:

Table 1: Descriptive statistics and correlations

Construct	mean	median	modus	variants	Stan.Deviation
Personal Responsibility	59.83	60.00	57	58.534	7.651
Environmental Sensitivity	56.80	56.00	66	49.320	7.023
Perceived Behavior Control	56.70	56.00	56	48.842	6.989
Green Consumers Intention	74.11	73.50	70	105.877	10.290

Based on the table above obtained from 200 samples, namely personal responsibility with an average (59.83), environmental sensitivity (56.80), perceived behavior control (56.70) and green consumers intention (74.11). Then, variance of personal responsibility (58),

environmental sensitivity (49), perceived behavior control (48) and green consumers intention (105).

Table 2: Correlation of Independent Variables with Dependent Variables

Indicator	R	R Squares	B	t
Personal Responsibility	0.149	0.022	-0.200	-2.115
Environmental Sensitivity	0.286	0.082	0.419	4.202
Perceived Behavior Control	0.297	0.088	0.438	4.382

Based on the table above, it can be explained that the magnitude of the correlation value (R) of personal responsibility is 0.149, meaning that the correlation between personal responsibility and green consumers intention is weak. This study also obtained the coefficient of determination (R Square) of 0.022, meaning that the influence of the independent variable on the dependent variable is 2.2%. Furthermore, the value of constant (a) is 86,069 while the value of personal responsibility is -0.200, so that the regression equation can be written $y = 86.069 + (-0.200X)$. The coefficient table obtained a significant value of $0.036 < 0.05$, so it can be concluded that the variable of personal responsibility (X) affects the green consumers intention (Y). While based on t value, it is known that t arithmetic of $-2.115 < t$ table (1.97), which means that the variable X has no effect on the variable Y.

The correlation value (R) of environmental sensitivity is 0.286, meaning that the correlation between environmental sensitivity and green consumers intention is weak. This study also obtained the coefficient of determination (R Square) of 0.082, meaning that the influence of the independent variable on the dependent variable is 8.2%. Furthermore, the value of constant (a) is 56,217, while the value of environmental sensitivity is 0.419, so that the regression equation can be written $y = 56,217 + 0.419X$. The coefficient table obtained a significant value of $0.887 > 0.05$, so it can be concluded that the environment sensitivity variable (X) does not affect the green consumers intention (Y). Based on the value of t, it is known that t count is $4,202 > t$ table (1.97), which means that the variable X affects the Y variable.

Furthermore, the correlation value (R) of perceived behavioural control is 0.297, meaning that the correlation between perceived behavioural control and green consumers intention is weak. This study also obtained the coefficient of determination (R Square) of 0.088, meaning that the influence of the independent variable on the dependent variable is 8.8%. Furthermore, the value of constant (a) is 49,289 while the value of perceived behavior control is 0.438, so that the regression equation can be written $y = 49.289 + 0.438X$. The coefficient table obtained a significant value of $0.00 < 0.05$, so it can be concluded that the perceived behavior control variable (X) affects the green consumers intention (Y). Based on the value

of t , it is also known that t arithmetic is $4.382 > t$ table (1.97) which means that the variable X affects the Y variable.

Table 3: Construct and Measurement Items

Variable	Indicator
Personal Responsibility	Focus on environmental tasks On time in completing tasks related to environmental problem Be consistent in making decisions if you feel right by reporting if there is damage to the environment Courage to correct even the risks to environmental destroyers Spending time related to environmental activities
Environmental Sensitivity	Appreciation for others who protect the environment Respect for others and the environment Feel sorry for the events around Sustainable Community
Perceived Behavior Control	I think that I am capable of buying green product in my daily life I have the knowledge and skills to recycle product in my daily life Whether or not I use a green product in my daily is completely up to me
Green Consumers Intention	The desire to select the ecolabel product that you want to buy The desire to buy environmentally friendly products The desire to use environmentally friendly products The desire to promote environmentally friendly products to others, public and private institutions

The results of the study show that the relationship between personal responsibility, environmental sensitivity and perceived behavioural control with green consumers intention is weak but significant. On the other hand, Li (2019) states that the existence of a sense of responsibility will encourage someone to intend. Ardal (2015) also stated that responsibility has a significant influence on intention. According to George (1964), personal responsibility is a person's obligation to complete the activities that have been determined to the level that best suits their abilities. In addition, Brayant (2012) defines responsibility, that is, someone is willing to work hard for his achievement and is responsible for his own words and actions. Therefore, it is necessary to know that the meaning of a personal responsibility on students in North Sumatra towards the environment, especially in the intention of green consumer

behaviour.

Furthermore, according to Louise (2014), environmental sensitivity is mostly done in qualitative research, where environmental sensitivity is associated with life experience. Bodur (2005) also stated that someone who has a low sensitivity is significant towards violating environmental regulations. According to Daniel (2012), environmental sensitivity is the perspective of one's empathy for the environment. Louise (2014) says experiences that come into a person are a source of environmental sensitivity.

Then this perceived behavior control is influenced by several external conditions, such as the availability of facilities, time, cost, knowledge of behavior and skills, may be free from personal control, and thus affect one's intention to participate in certain practices. If individuals have more significant control over themselves, they will have a stronger intention to achieve certain behaviors (Webb et al, 2013) . According to Ru et al (2018) that there is a significant relationship between perceived behavior control with intention. It also agrees with Verma (2018) that perceived behavioral control is significant with intention. According to Mahardika et al (2019), intention as a predictor of the actual behavior of pro-environment consumers. In recent years, pro-environment lifestyles are increasing because consumers increasingly care about environmental quality. However, based on research conducted by Arli et al (2018), the readiness and perceived benefits in consuming green greatly affect a person's intention for green consumers.

Readiness in developing societies is very important in accepting the behaviour of green consumers so that this can affect one's intentions. There are many factors that influence a person in discouraging his intention in green consumers according to Rahman (2018) such as socio-demographic, awareness, experience, knowledge about green products, parental influence, trust, personal responsibility and product prices. Then it can be related to this study that the relationship of personal responsibility, environmental sensitivity and perceived behaviour control is weakly estimated due to some of these factors. This is also supported by research conducted in developing countries, namely the lack of readiness to receive green benefits (Arli et al, 2018).

Conclusion

In developing indicators of measurement of green consumers' behavioural intentions, the results of this research indicate the need to consider attitudes towards the environment and personal responsibility. This can be represented by a concept of consumer tendency to act in protecting and preserving the environment that refers to feelings towards the environment. This concept will lead someone to be more optimistic in facing all challenges to be wise and committed in buying or using environmentally friendly products. Therefore, in measuring



green consumer intention indicators, positive values of environmentally friendly products need to be included.

Acknowledgement

This research was supported by North Sumatera government.

REFERENCES

- Aliyyah, R. R., Rachmadtullah, R., Mulyadi, D., & Ikhwan, S. (2019, March). Using of student teams achievement divisions model (STAD) to improve student's mathematical learning outcomes. In *Journal of Physics: Conference Series* (Vol. 1175, No. 1, p. 012159). IOP Publishing.
- Ardal, S.P. (2015) Motives, Intentions and Responsibility. *The Philosophical Quarterly*, Vol. 15, No. 59, p 146-154. Oxford University Press on behalf of the Scots Philosophical Association and the University of St. Andrews Stable URL: <http://www.jstor.org/stable/2218214>.
- Arli, D., Tan, L. P., Tjiptono, F., & Yang, L. (2018). Exploring consumers' purchase intention towards green products in an emerging market: The role of consumers' perceived readiness. *International Journal of Consumer Studies*, 42(4), 389–401. doi:10.1111/ijcs.12432
- Bodur, M., & Sarigöllü, E. (2005). Environmental Sensitivity in a Developing Country. *Environment and Behavior*, 37(4), 487–510. doi:10.1177/0013916504269666
- Daniel, J. (2012). Environmental Sensitivity Among Wisconsin High School Student. *Environmental Education Research*. No 2 Vol 8, p 155.
- Brayant, Shirley. (2012). The importance of Accepting Personal Responsibility. *Gen/200*. Daisy Fromkin. P 1-6.
- Bustam. T. Young, Anderso & Todd, S. (2004). Environmental Sensitivity and Youthful Participation In Recreation. Cortland, NY. Proceedings of the 2003 Northeastern Recreation Research Symposium. GTR-NE-317.
- European Commission. (2012). *Future Brief : Green Behavior*. Science for Environment Policy. Vol 4.
- George, R. T. (1964). *Principles of Management*. Homewood, Illinois: Richard D. Irwins. h 378-379.
- Humaira, M. A., Aliyyah, R. R., Gaffar, A. A., & Rachmadtullah, R. (2019, March). Preliminary study on the development of blended learning (BLM) model: based on needs analysis and learning independence. In *Journal of Physics: Conference Series* (Vol. 1175, No. 1, p. 012207). IOP Publishing.



- Jungbluth, Niels. Stucki, M & Leuenberger, M. (2011). Environmental impacts of Swiss consumption and production. A combination of input-output analysis with life cycle assessment. No. 1111. Bern: Federal Office for the Environment.
- Li, Y., Luo, L., & Fu, J. (2019). Benefactor intention, perceived helpfulness, and personal responsibility influence gratitude and indebtedness. *Social Behavior and Personality: An International Journal*, 47(2), 1–15. doi:10.2224/sbp.7481.
- Louise, C. (2014). Significant Life Experiences Revisited: A Review of Research on Sources of Environmental Sensitivity. UK. No 3 Vol 29, p 11-21.
- Mahardika, H., Thomas, D., Ewing, M. T., & Japutra, A. (2019). Comparing the temporal stability of behavioural expectation and behavioural intention in the prediction of consumers pro-environmental behaviour. *Journal of Retailing and Consumer Services*, 101943. doi:10.1016/j.jretconser.2019.101943.
- Pagiaslis, A & Krontalis, K. A. (2014). Green Consumption Behavior Antecedents: Environmental Concern, Knowledge, and Beliefs. *Psychology & Marketing*. Vol. 31, No 5, p 335-348. ISSN 07426046.
- Ping, Wang. Liu, Q & Qi, Y. (2014). Factors influencing sustainable consumption behaviors: a survey of the rural residents in China. Vol 63 p 152-165.
- Rahman, Abdul. (2018). *Asian Journal of Environment, History and Heritage*. Vol. 2, Issue. 2, p. 43-54 ISSN 2590-4213 e-ISSN 2590-4310 Published by Malay Arts, Culture and Civilization Research Centre, Institute of the Malay World and Civilization Green Consumerim.
- Ru, X., Wang, S., & Yan, S. (2018). Exploring the effects of normative factors and perceived behavioral control on individual's energy-saving intention: An empirical study in eastern China. *Resources, Conservation and Recycling*, 134, 91–99. doi:10.1016/j.resconrec.2018.03.001.
- Ru, X., Wang, S., & Yan, S. (2018). Exploring the effects of normative factors and perceived behavioral control on individual's energy-saving intention: An empirical study in eastern China. *Resources, Conservation and Recycling*, 134, 91–99. doi:10.1016/j.resconrec.2018.03.001.
- Saha. A. I (2018). *Green Awareness: Consumer intention towards green consumersism in India*. Management and Economics. Published by Tomas Bata University in Zlín. ISBN 97880.



- Siregar, Y. E. Y., Rachmadtullah, R., Pohan, N., & Zulela, M. S. (2019, March). The impacts of science, technology, engineering, and mathematics (STEM) on critical thinking in elementary school. In *Journal of Physics: Conference Series* (Vol. 1175, No. 1, p. 012156). IOP Publishing.
- Smithikrahi, C. Longthong, N & Peijssel, C. (2015). Effect of Using Movies to Enhance Personal Responsibility of University Students. *Canadian Center of Science and Education. Asian Social Science*; Vol. 11, No. 5. E-ISSN 1911-2025.
- Soonthonsmai, V. (2007). Environmental or Green Marketing as Global Competitive Edge: Concept, Synthesis, and Implication. EABR (Business) and ETLC (Teaching) Conference Proceeding, Venice, Italy.
- Verma, V. K., & Chandra, B. (2018). An application of theory of planned behavior to predict young Indian consumers' green hotel visit intention. *Journal of Cleaner Production*, 172, 1152–1162. doi:10.1016/j.jclepro.2017.10.047.
- Webb, D., Soutar, G.N., Mazzarol, T., Saldaris, P., 2013. Self-determination theory and consumer behavioral change: evidence from a household energy-saving behavior study. *J. Environ. Psychol.* 35, 59–66
- Yadav, R., & Pathak, G. S. (2016). Young consumers' intention towards buying green products in a developing nation: Extending the theory of planned behavior. *Journal of Cleaner Production*. Vol 135,p 732–739.doi:10.1016/j.jclepro.2016.06.120.