



Sustainable Knowledge, Awareness, Attitude And Intention For Gen-Z Sustainable Consumption

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ABSTRACT

Knowledge, awareness, and attitude towards sustainable consumption have an impact on someone to change behavior that is more towards sustainable consumption. This research aims to provide the effect of sustainable knowledge, sustainable awareness, and attitude towards sustainable consumption on intention to sustainable consumption. Data collection techniques using self-administered surveys are self-administered by distributing online questionnaires. The sampling method uses non-probability sampling techniques with purposive sampling. The criteria used in the sampling of this study were Gen-Z who knew sustainable products. The statistical test used in this study to test the data was regression analysis using SPSS 26. In the early stages of testing and data analysis, instrument testing was carried out with validity tests and reliability tests as well as classical assumption tests. Testing of models and hypotheses is done with T-test and T-test. According to this research, sustainable knowledge has no effect on Intention toward sustainable consumption, sustainable awareness affects Intention toward sustainable consumption, and attitude toward sustainable consumption affects intention toward sustainable consumption.

INTRODUCTION

Public awareness of environmental problems is increasing with the emergence of various environmental issues that affect people's lives both directly and indirectly. Environmental issues have a variety of impacts. Air pollution causes various health problems and even causes millions of premature deaths (Laudato si, 20). Sewage pollution, results in waste that largely does not decompose biologically (laudato si 21).

The encyclical *Laudato Si'* presents several things related to environmental disasters such as climate change, pollution, biodiversity loss, and water crises that have caused serious damage to nature and human life, especially for poor and marginalized groups. Therefore, it is necessary to carry out collective action based on the moral responsibility of all mankind to care for and safeguard the environment as a moral and ethical responsibility. Similar concerns are also written in the Universal Apostolic Preferences (UAP) of the Society of Jesus in 2019 which contains four mission priorities of the Society of Jesus. One of them is "to collaborate in the care of our Common Home" which is an invitation for young people to realize sin and injustice against the earth and find comprehensive solutions by paying attention to social, cultural, and economic factors for justice to the earth. This can be done by increasing awareness and discretion related to potential environmental damage, waste and its consequences, the impact of natural damage and participating in preserving all inhabitants of the earth (humans and the natural environment).

In line with this, the Sustainable Development Goals (SDGs) echo various sustainability issues of concern. Not only in the environmental sector, but also in the economic and social sectors. The SDGs/SDGs are enforced with universal, integrated and inclusive principles to ensure that no one is left behind. Figure 1 shows 17 Sustainable Development Goals (SDGs), one of which is responsible consumption and production.

Figure 1. Sustainable Development Goals (SDGs).



Source : <https://indonesia.un.org/en/sdgs>

Today's consumers show more concern for environmental and social issues so they begin to change their consumption patterns (Chen, 2012). Globally, consumers in Southeast Asia are the most willing to pay more for sustainable products and services than any other region around the world (Nielsen Global Corporate Sustainability Report, 2015). From a sustainability perspective, Robin and Roberts (1998) say that sustainable consumption is defined as a strategy that focuses on new ways of managing the demand side of the economy, focusing not only on economic benefits but also environmental and social benefits. Sustainable consumption of products can help reduce the environmental and social impacts of production and consumption. Consumers are increasingly aware that consumption has a long-term impact on various fields so that the choice of sustainable consumption patterns is a choice for products that are produced sustainably and environmentally friendly. Sustainability Action for the Future Economy (SAFE) 2021 shows that 62.9% of consumers have purchased sustainable or environmentally friendly products in the past year.

Consumer awareness to choose product consumption patterns that adopt sustainable principles is getting higher. Consumers are getting smarter by choosing environmentally friendly and safe products. Business people inevitably have to follow and adopt the concept of

Sustainability by producing sustainable products. One of the main things related to Sustainable products is products that have environmentally friendly characteristics, besides that the business concept also pays attention to social issues or empowers the surrounding environment.

An individual's decision to use sustainable products begins with how knowledgeable they are about the environment and sustainable products addition, knowledge of a concept can change a person's attitude towards the concept (Alena & Bilal, 2014). For example, if a person has knowledge that by engaging in environmentally friendly behavior, there is a possibility of contributing to the sustainability of the earth his attitude will probably change.

Many determinants of sustainable product choice from previous research such as awareness, knowledge, and attitude. In a review of previous research on consumer purchasing behavior, attitude was one of the most effective factors (Hosseinpour, Mohamed, Rezai, Shamsudin, & Abdlatif, 2015). Attitude is a behavior related to a person's assessment of the behavior as a positive or negative action. Consumers may have different attitudes toward sustainability behavior. For example, a recent study conducted by (Hosseinpour, Mohamed, Rezai, Shamsudin, & Abdlatif, 2014), found that the majority of respondents have a positive attitude towards sustainable eco-friendly behavior.

LITERATURE REVIEW

Gen-z and Intention to Sustainable Consumption

Generation Z is a transition from Generation Y. This generation is very dependent on technology, gadgets, and activities on social media. This generation sometimes prioritizes popularity, number of followers and likes. Dependence on social media makes this generation prefer things that are instant and fast and tend to rush. Generation Z born in 1996-2010 like new things, especially those that show "existence" as a form of social activity and association (Ivancsó and Printz, 2017; McCrindle and Wolfinger, 2009). Some literates believe that studying generational behavior is important to see patterns of consumption behavior. Budac (2014) determined that Gen Z consumers consider a product's environmental impact and carbon footprint.

Interest in sustainable products is not only based on price and product quality, but also considers the ecological effects of green consumption by consumers (Jaiswal & Singh, 2018). In addition, consumer confidence in products is a factor that encourages consumers to consume sustainable products (Mamun et al, 2018). From a sustainability perspective, Robin and Roberts (1998) say that sustainable consumption is defined as a strategy that focuses on new ways of managing the demand side of the economy, not only focusing on economic benefits but also environmental and social benefits. Sustainable product consumption is a consumption pattern that considers the environmental, social, and economic impacts of the products consumed. Sustainable consumption of products can help reduce the environmental and social impacts of production and consumption. Consumers are increasingly aware that consumption has a long-term impact on various fields so the choice of sustainable consumption patterns is a choice for products that are produced sustainably and environmentally friendly.

Sustainable Knowledge

Sustainable knowledge is often referred to as environmental knowledge, indicating that

- 1). Consumers need to understand the environmental and social impacts of a product or service,
- 2). Consumers need to know which products are manufactured in an environmentally friendly way (D'Souza, Taghian, & Lamb, 2006). This knowledge can come from education, peer influence and company marketing information (Kong et al, 2016). Environmental knowledge surveys report that adults in America (Coyle, 2005) and Korea (Kong et al, 2016) have low insight/knowledge about sustainable environments . When consumers have more knowledge about sustainable issues,

their level of intention to sustainable consumption will increase, Incekara et al. and Hassan, Shaw, Shiu, Walsh, and Parry (2013) suggest that there is a gap in young people's behavior based on their knowledge of sustainable products. Previous research has also found that well-informed young people on sustainability issues are more interested. Based on the description above, the following hypothesis is formulated:

H1. Sustainable knowledge effect on the intention for sustainable consumption

Sustainable Awareness

Awareness of environmental sustainability is one of the prerequisites for changes in attitudes and behaviors in caring for the natural environment to inhibit climate change and global warming (Hamid et al, 2017). Therefore, increasing awareness about environmental sustainability is one of the keys to changing behavior (Swaim et al, 2014). Yukses (2013) argues that education has a great influence in creating awareness. Meanwhile, Paul, Modi, and Patel (2016) in Jaiswal & Singh (2018) found a direct relationship between environmental concerns and intention towards green products in developing countries. When sustainable awareness is getting better, consumers will have a better attitude towards sustainable products (Aman, Harun, & Hussein, 2012) in terms of continuous consumption. Based on the description above, the following hypothesis is formulated:

H2. Sustainable awareness effect on the intention for sustainable consumption

Attitude towards Sustainable Consumption

Sustainable consumption not only focuses on economic benefits but also emphasizes contributing to achieving ecological sustainability (Jaiswal & Singh, 2018). A Nielsen survey (2011) found that the majority of Indian consumers have a positive attitude towards eco-friendly products such as energy-efficient products and have recyclable packaging (Jaiswal & Singh, 2018). Another study revealed that consumers will be willing to learn about environmentally friendly products when they have a positive attitude and mindset toward the product (Paul et al., 2016 Mamun et al, 2018).

Attitude is one of the predictors of intention or actual behavior. One of the principles of sustainable consumption is to improve the quality of life without degrading the environment so that the needs of future generations can still be met (Ahamad & Ariffin, 2018). Individual beliefs about sustainability can create the intention to behave sustainably (Kong et al, 2016). Jaiswal & Singh (2018) found a direct relationship between attitudes toward environmentally friendly products with interest in buying products and consuming these products. Ozaki and Sevastyanova (2013) found that attitudes influence consumers' intentions to consume sustainable products. Based on the description above, the following hypothesis is formulated:

H3. Attitude toward sustainable consumption affects intention toward sustainable consumption

METHODS

This research is quantitative, confirmatory and cross-sectional. Data collection techniques with surveys using self-administered surveys are self-administered by distributing questionnaires and each questionnaire is filled directly by respondents (Cooper and Schindler, 2014: 255). The questionnaire is used to measure sustainable awareness, sustainable knowledge, attitude

towards sustainable consumption and intention toward sustainable consumption as measured by a Likert scale of 1 to 5

The sampling method uses non-probability sampling techniques with purposive sampling. The criteria used in the sampling of this study were Gen-Z who knew sustainable products. Hair et al. (2014: 618) suggest that the appropriate sample size is between 100 to 200. The determination of the number of representative samples according to Hair et al. (2014: 619) is 5 to 10 times the number of parameters (estimated parameters) in the model. This sample size is considered to be representative of the population and meets the minimum criteria of statistical tools used in the study.

The statistical test used in this study to test the data was regression analysis using SPSS 26. In the early stages of testing and data analysis, instrument testing was carried out with validity tests and reliability tests as well as classical assumption tests. Testing of models and hypotheses is done with Test F and Test T.

RESULTS

Respondents in this study are Generation Z who know sustainable products. The data collection method used questionnaires distributed online with respondents obtained by a total of 408 respondents. There were 142 female respondents (34.8%) and 266 male respondents (65.2%). Respondents who have a monthly income of < IDR 1,000,000 are 182 people (44.6%), respondents who have a monthly income of > IDR 10,000,000 are 3 people (0.7%), respondents who have a monthly income of IDR 1,000,000 - IDR 2,500,000 are 159 people (39%), respondents who have a monthly income of IDR 2,500,000 - IDR 4,000,000 are 46 people (11.3%), respondents who have a monthly income of IDR 4,000,000 - IDR 5,500,000 are 11 people (2.7%), respondents who have a monthly income of IDR 5,500,000 - IDR 7,000,000 are 5 people (1.2%), IDR 7,000,000 - IDR 8,500,000 are 1 person (0.2%) and respondents who have a monthly income of IDR 8,500,000 - IDR 10,000,000 are 1 person (0.2%). Respondents who have monthly expenses of < IDR 1,000,000 are 203 people (49.8%), respondents who have monthly expenses of > IDR 10,000,000 are 2 people (0.5%), respondents who have monthly expenses of IDR 1,000,000 - IDR 2,500,000 are 174 people (42.6%), respondents who have monthly expenses of IDR 2,500,000 - IDR 4,000,000 are 26 people (6.4%), respondents who have monthly expenses of IDR 4,000,000 - IDR 5,500,000 are 3 people (0.7%). Respondents domiciled in Bali Island are 15 people (3.7%), Java is 353 people (86.5%), Kalimantan is 7 people (1.7%), Maluku and Papua are 3 people (0.7%), Nusa Tenggara is 10 people (2.5%), Sulawesi is 4 people (1.0%), Sumatra is 16 people (3.9%). It can be concluded that the majority of respondents based on domicile are in Java Island 353 people (86.5%).

In the early stages of testing and data analysis, instrument testing is carried out with validity tests and reliability tests. The validity criterion is valid if the calculated r number is greater than the r_{table} and the significance value is <0.05. The criterion for a good reliability value is that Cronbach's alpha value is greater than 0.7 (Hair, Jr., 2015). Validity and reliability tests were carried out on five variables, namely sustainable awareness, sustainable knowledge, attitude towards sustainable consumption and intention to sustainable consumption. Table 1 presents the results of validity and reliability testing on the five variables in this study.

Table 1. Validity Test Result

Variable		Value	Sig.	Information
KNOWLEDGE	1	0.654	0.00	Valid
	2	0.726	0.00	Valid
	3	0.810	0.00	Valid
	4	0.810	0.00	Valid
	5	0.727	0.00	Valid
AWARENESS	1	0.901	0.00	Valid
	2	0.906	0.00	Valid
	3	0.863	0.00	Valid
	4	0.857	0.00	Valid
ATTITUDE	1	0.900	0.00	Valid
	2	0.877	0.00	Valid
	3	0.902	0.00	Valid
	4	0.877	0.00	Valid
	5	0.899	0.00	Valid
INTENTION to SUSTAINABLE CONSUMPTION	1	0.915	0.00	Valid
	2	0.907	0.00	Valid
	3	0.792	0.00	Valid
	4	0.821	0.00	Valid

Source: SPSS output

Table 2. Reliability Test Result

Variable	N of Items	Cronbach's Alpha	Keterangan
KNOWLEDGE	5	0.795	Reliabel
AWARENESS	4	0.905	Reliabel
ATTITUDE	5	0.934	Reliabel
INTENTION TO SUSTAINABLE CONSUMPTION	4	0.880	Reliabel

Source: SPSS output

Based on validity and reliability testing, all statement items in the study are valid and reliable. Testing of classical assumptions carried out shows that the data are normally distributed, multicollinearity does not occur, heteroskedasticity does not occur, and linearity occurs.

Table 3. F test Result

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3859.960	3	1286.653	568.048	.000 ^b
	Residual	915.077	404	2.265		
	Total	4775.037	407			

a. Dependent Variable: INTENTION TO SUSTAINABLE CONSUMPTION

b. Predictors: (Constant), ATTITUDE, KNOWLEDGE, AWARENESS

Source: SPSS output

The above data can be known Sig values of $0.000 < 0.05$ so it can be interpreted that all independent variables used in the model together can explain the independent variables. It can also be concluded that the model in this study has a good level of goodness-of-fit.

Table 4. Correlation table

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.899 ^a	.808	.807	1.505

a. Predictors: (Constant), ATTITUDE, KNOWLEDGE, AWARENESS

Source: SPSS output

In the table above, it can be seen that the magnitude of the correlation value or relationship of 0.899 means that it has a very strong correlation level. The Adjusted R Square value of 0.807 means that the Attitude, Knowledge and Awareness variables explain 80.7% of the variation that occurs in Intention Towards while other variations of 19.3% (100%-80.7%) are explained by other variables that were not used in this study.

Table 5. T Test Result

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig
		B	Std. Error	Beta		
1	(Constant)	1.113	.431		2.583	.010
	KNOWLEDGE	.017	.033	.017	.526	.599
	AWARENESS	.105	.040	.115	2.641	.009
	ATTITUDE			.786	17.583	.000

a. Dependent Variable: INTENTION TO SUSTAINABLE CONSUMPTION

Source: SPSS output

Based on Sig Value, $0.017 < 0.05$ it can be concluded that $H_a(1)$ is rejected and $H_o(1)$ is accepted. So, sustainable knowledge does not affect the Intention to sustainable consumption (H_1 rejected). Then, Sig values, $0.115 > 0.05$ can be concluded $H_a(2)$ accepted and $H_o(2)$ rejected. So, sustainable awareness affects the Intention to sustainable consumption (H_2 accepted). And then, Sig values, $0.784 > 0.05$ can be concluded $H_a(3)$ accepted and $H_o(3)$ rejected. So, attitude toward sustainable consumption affects intention toward sustainable consumption (H_3 accepted).

DISCUSSION

The results showed that sustainable knowledge does not affect the Intention of sustainable consumption. An individual's decision to use sustainable products begins with how knowledgeable they are about the environment and sustainable products. Consumers in practice do not buy much of such products. The main reason is that consumers do not have the essential knowledge about the attributes of sustainable products (Hosseinpour, Nezakati, et al, 2015). Previous research has found that young consumers tend to have good knowledge of

environmental issues and eco-friendly practices, but are lacking in the adoption of sustainable consumption practices (Sharma and Rani, 2020; Ertmańska, 2021). Furthermore, the lack of sustainable consumption practices results from limited access to environmentally friendly products and services, as well as the perception that environmentally friendly products are more expensive and less stylish (Ertmańska, 2021), So they are not interested in buying them.

Another result showed that sustainable awareness affects the Intention to sustainable consumption. This awareness of sustainable consumption will have an impact on one's behavior to change their behavior to be more environmentally friendly. Some of these facts show that consumer awareness of choosing product consumption patterns that adopt sustainable principles is getting higher. Oleh karena itu, meningkatkan kesadaran mengenai kelestarian lingkungan merupakan salah satu kunci untuk merubah perilaku (Swaim dkk, 2014). The higher the awareness of sustainable products, the higher the intention to consume sustainable products.

Recent results show that attitude toward sustainable consumption affects on intention *toward* sustainable consumption. Attitude is one of the predictors of intention. In a review of previous research on consumer purchasing behavior, attitude was one of the most effective factors (Hosseinpour, Mohamed, Rezai, Shamsudin, & Abdlatif, 2015). Another study revealed that consumers will be willing to learn about environmentally friendly products when they have a positive attitude and mindset toward the product (Paul et al., 2016 in Mamun et al, 2018). Jaiswal & Singh (2018) found a direct relationship between attitudes toward environmentally friendly products with interest in buying products and consuming these products. Ozaki and Sevastyanova (2013) found that attitudes influence consumers' intentions to consume sustainable products. This shows that the more positive the attitude towards sustainable consumption, the higher the intention to consume sustainable products.

CONCLUSION

Based on the results of this research, sustainable knowledge does not affect Intention toward sustainable consumption, sustainable awareness affects Intention toward sustainable consumption and attitude toward sustainable consumption affects intention *toward* sustainable consumption. From a sustainability perspective, Robin and Roberts (1998) say that sustainable consumption is defined as a strategy that focuses on new ways of managing the demand side of the economy, not only focusing on economic benefits but also environmental and social benefits. Sustainable product consumption is a consumption pattern that considers the environmental, social, and economic impacts of the products consumed. Sustainable consumption of products can help reduce the environmental and social impacts of production and consumption. Consumers are increasingly aware that consumption has a long-term impact on various fields so the choice of sustainable consumption patterns is a choice for products that are produced sustainably and environmentally friendly.

This research is limited to the consumption of sustainable products in general. Future research may focus on sustainable product consumption behaviors specifically such as motorized vehicles, electronics or cosmetics. In addition, it can expand the context of research that is not only limited to Generation Z so that intergenerational differences related to sustainable consumption can be carried out.

REFERENCES

- Ahamad, Nurul Ruwaidah dan Ariffin, Mariani. (2018). Assessment of knowledge, attitude and practice towards sustainable consumption among university students in Selangor, Malaysia. *Sustainable Production and Consumption*. vol. 16, pages 88-98.
- Chen, Y.S. and Chang, C.H. (2012), "Enhance green purchase intension: the roles of green in China", *Journal of Business Ethics*, Vol. 46 No. 1, pp. 45-49.
- Cooper, D. R. & Schindler, P. S. (2014). *Business Research Methods* 12th ed. McGraw Hill Book. Co. New York.
- Coyle, K. (2005). *Environmental literacy in America*. National Environmental Education & Training Foundation. Washington
- D'Souza, C., Taghian, M., & Lamb, P. (2006). An empirical study on the influence of environmental labels on consumers. *Corporate Marketing Information Communications: An International Journal*, 11, 162-173.
- Dickinger, A. and Kleijnen, M. (2008), "Coupons going wireless: determinants of consumer intention to redeem mobile coupons", *Journal of Interactive Marketing*, Vol. 22 No. 3, pp. 23-39.
- Garbie, Ibrahim H. (2015). Sustainability Awareness in Industrial Organizations. *Procedia*.26, 64-69.
- Hamid, S., Ijab, M. T., Sulaiman, H., Md. Anwar, R., & Norman, A. A. (2017). Social media for environmental sustainability awareness in higher education. *International Journal of Sustainability in Higher Education*, 18(4), 474-491
- Hassan, L.; Shaw, D.; Shiu, E.; Walsh, G.; Parry, S. Uncertainty in ethical consumer choice: A conceptual model. *J. Consum. Behav.* 2013, 12, 182-193.
- Jaiswal, Deepak dan Singh, Bhagwan (2018). Toward sustainable consumption: Investigating the determinants of green buying behavior of Indian consumers. *Business Strategy and Development*. Vol.1, no.1, 64-73. <https://doi.org/10.1002/bsd2.12>
- Kaiser, F. G., & Fuhrer, U. (2003). Ecological behavior's dependency on different forms of knowledge. *Applied Psychology*, 52, 598-613.
- Kong, H. M., Ko, E., Chae, H. and Mattila, P. (2016). Understanding fashion consumers' attitude and behavioral intention toward sustainable fashion products: Focus on sustainable knowledge sources and knowledge types. *Journal of Global Fashion Marketing*. Vol. 7, No. 2, 103-119. <http://dx.doi.org/10.1080/20932685.2015.1131435>
- Mamun, A. Al, Mohamad, M. R., Yaacob, M. R. B. dan Mohiuddin, M. (2018). Intention and behavior towards green consumption among low-income households. *Journal of Environmental Management*, Vol. 227, no.1, Pages 73-86
- Ozaki, R.; Sevastyanova, K. Going hybrid: An analysis of consumer purchase motivations. *Energy Policy* 2011, 39, 2217-2227
- Aman, L., Harun, A., & Hussein, Z. (2012). The influence of environmental knowledge and concern on green purchase intention is the role of attitude as a mediating variable. *British Journal of Arts and Social Sciences*, 7, 145-167
- Rivas, A., Liao Y-K, Vu M-Q, dan Hung C-S. (2022). Toward a Comprehensive Model of Green Marketing and Innovative Green Adoption: Application of a Stimulus-Organism-Response Model. *Sustainability*. Vol.14, no.6. <https://doi.org/10.3390/su14063288>

- Swaim, J., Maloni, M., Napshin, S. and Henley, A. (2014), "Influences on student intention and behavior toward environmental sustainability", *Journal of Business Ethics*, Vol. 124 No. 3, pp. 465-484
- Yukse, I. (2013), "The evaluation of architectural education in the scope of sustainable architecture", *Procedia – Social and Behavioral Sciences*, Vol. 89, pp. 496-508.