

The Influence of Green Knowledge and Green Perceived Value on Purchase Intention Mediated by Green Lifestyle

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ABSTRACT

This study aims to analyze the influence of green knowledge and green perceived value on purchase intention mediated by green lifestyle on Gen Z tumbler product users in Indonesia. This study was conducted through a quantitative approach with a total sample of 200. The sampling technique used was non-probability sampling with a purposive sampling approach. Data were processed using Structural Equation Modeling with the Smart Partial Least Square statistical program. The results of this study prove that: Green knowledge has no effect on purchase intention; Green knowledge has a positive effect on green lifestyle; Green perceived value has a positive effect on purchase intention; Green perceived value has a positive effect on green lifestyle; Green lifestyle has a positive effect on purchase intention; Green knowledge has a positive effect on purchase intention through green lifestyle as a mediating variable; and green perceived value has a positive effect on purchase intention through green lifestyle as a mediating variable.

Keywords:

Green Knowledge, Green Perceived Value, Purchase Intention, Green Lifestyle

INTRODUCTION

Climate change and environmental degradation are major challenges facing the world today. According to Civil Survey, (2023) explained that the environmental issues that are most troubling Indonesian society and youth are climate change and plastic waste pollution. Indonesia, like many other countries, is grappling with the problem of plastic waste, especially single-use plastic bottles.

Awareness of the importance of preserving the environment is increasing, especially among Gen Z. Gen Z is a generation that is aware of a green lifestyle and knows their obligations towards the environment.(Noor et al., 2017). A tumbler is a drinking container that can be used repeatedly and is an example of an environmentally friendly product (Yohana & Susana, 2020).

Therefore, people, especially Gen Z, are becoming more careful about the environmental impact of their consumption patterns, changing their preferences, and choosing a more environmentally friendly lifestyle in order to preserve the environment (Baktash and Talib 2019). One effort to fulfill this desire is by purchasing environmentally friendly products. Thus, Gen Z's intention to buy or use environmentally friendly products will also increase.

Riyanto et al., (2018) said that the emergence of the problem of large amounts of waste makes people care about the state of the environment and find out about the environment, so that green knowledge encourages action before they make purchases of green products. Consumers who already understand the benefits of environmentally friendly products and strive to protect the environment, their intention to purchase these products can be influenced by their personality (Laksita & Widodo, 2020). Realizing a lifestyle that focuses on reducing the impact of one's life on environmental damage will influence consumers to buy environmentally friendly products (Patak et al., 2021).

Research by Fauzan & Widodo, (2023) shows that green knowledge has a positive effect on purchase intention. While Ahmad & Thyagaraj, (2015) shows that the influence of consumer knowledge of the environment on purchasing intentions was found to be insignificant. Research by Zahra & Rohman, (2024) shows that green perceived value is able to have a positive contribution relationship to purchase intention. While Rakhmawati et al., (2019) shows that there is a negative relationship between green perceived value and green purchase intention. Research by Saleky & Souisa, (2017) shows that green product knowledge has a positive effect on green lifestyle. Research by Santoso & Hartini, (2023) shows that green lifestyle has a positive effect on purchase intention. While Mahmudah & Nugroho, (2023) shows that the lifestyle of consumers who care about the environment does not have a significant effect on purchasing intentions.

Based on the description presented previously, this study will be conducted to analyze the Influence of green knowledge and green perceived value on purchase intention mediated by green lifestyle on Gen Z users of tumbler products in Indonesia.

Theory of Reasoned Action or TRA is a conceptual research model that aims to understand human behavior and actions in certain situations and contexts. The Theory of Reasoned Action (TRA) model was developed by Fishbein & Ajzen (1975). This theory focuses on the relationship between attitude toward behavior, subjective norms, behavioral intention, and behavior itself.

Kotler & Keller, (2016) defines purchase intention as the decision to purchase a brand alternative among various other brand alternatives. Santoso, (2018) said purchase intention is consumer behavior that reflects the extent to which they are committed to purchasing goods or services.

Green lifestyle is all actions taken by a person to contribute to preserving the environment around them by reducing the consumption of goods that can have a negative effect on the environment (Pramesti et al., 2022). Lorenzen, (2012) says green lifestyle is a lifestyle that involves careful consideration of the negative impacts of a person's daily activities on the environment.

Zsoka et al., (2013) stated that green knowledge is a term for issues that occur in the environment and appropriate solutions to prevent negative impacts that will occur in the environment. Hanjani & Widodo, (2019) said that green knowledge can educate the public about issues and phenomena that occur in the environment today, the impact of using environmentally friendly products, and the benefits felt when using products with natural ingredients.

Green perceived value is consumer confidence in purchasing environmentally friendly products with positive intentions driven by the use of products or services and the amount of benefits obtained based on needs, the environment and sustainable expectations (Meilisa 2020). Hanjani & Widodo, (2019) said that green knowledge can educate the public about issues and phenomena that occur in the environment today, the impact of using environmentally friendly products, and the benefits felt when using products with natural ingredients.

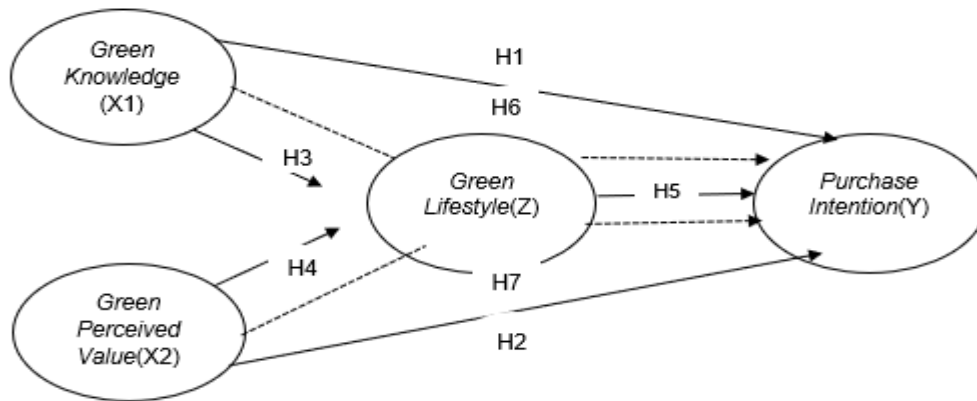


Figure 1. Conceptual framework

Based on the established conceptual framework, this study proposes a series of hypotheses aimed at examining the relationships among green knowledge, green perceived value, green lifestyle, and purchase intention. The first hypothesis (H1) posits that green knowledge has a positive effect on purchase intention. The second hypothesis (H2) suggests that green knowledge positively influences green lifestyle. The third hypothesis (H3) states that green perceived value has a positive effect on purchase intention, while the fourth hypothesis (H4) asserts that green perceived value positively affects green lifestyle. The fifth hypothesis (H5) indicates that green lifestyle has a positive effect on purchase intention. Furthermore, the sixth (H6) and seventh (H7) hypotheses explore the mediating role of green lifestyle in the relationship between green knowledge and purchase intention, as well as between green perceived value and purchase intention, respectively. Collectively, these hypotheses are formulated to investigate both the direct and indirect effects of green-related variables on consumers' intention to purchase environmentally friendly products.

METHOD

This study was conducted using a quantitative approach through online media with a population covering all Gen Z users of tumbler products in Indonesia. The sampling technique used was non-probability sampling with a purposive sampling approach with a sample size of 200. The data collection technique used in this study was a questionnaire, namely collecting primary data by distributing a list of statements to be filled out directly by respondents who were included in the research sample. In this case, the questionnaire was distributed online using Googleform media. The data was processed using Structural Equation Modeling with the Smart Partial Least Square statistical program.

RESULTS AND DISCUSSION

The characteristics of the respondents sampled in this study based on female gender were 140 people (70.0%), while male gender was 60 (30.0%). Characteristics based on age showed that the majority of respondents in this study were aged 18-22 years, as many as 133 people (66.5). The characteristics of respondents based on their last education showed that the majority of respondents in this study were with a last education level of high school/equivalent, as many as 122 people (61.0%).

Respondent characteristics based on occupation show that the majority of respondents in this study were students, amounting to 143 people (71.5%). Based on average monthly shopping expenditure, it shows that the majority of respondents in this study with the highest expenditure were Rp. 500,000 – Rp. 1,000,000 as many as 82 people (41.0%). Meanwhile, based on domicile, Java Island has the largest number compared to other regions, namely 110 people (55.0%).

According to Ghozali, (2021) individual indicators with correlation values >0.7 are considered valid. If the loading factor value is <0.7 , the indicator must be removed from the analysis because it is considered weak to measure the latent variable accurately. Figure 2 and Figure 3 show the data output before and after removing weak indicators. The measurement model was modified again because there were several indicators with loading factor values <0.7 , namely variables X2.1, X2.2, X2.5, Y2, Y8 and Z2.

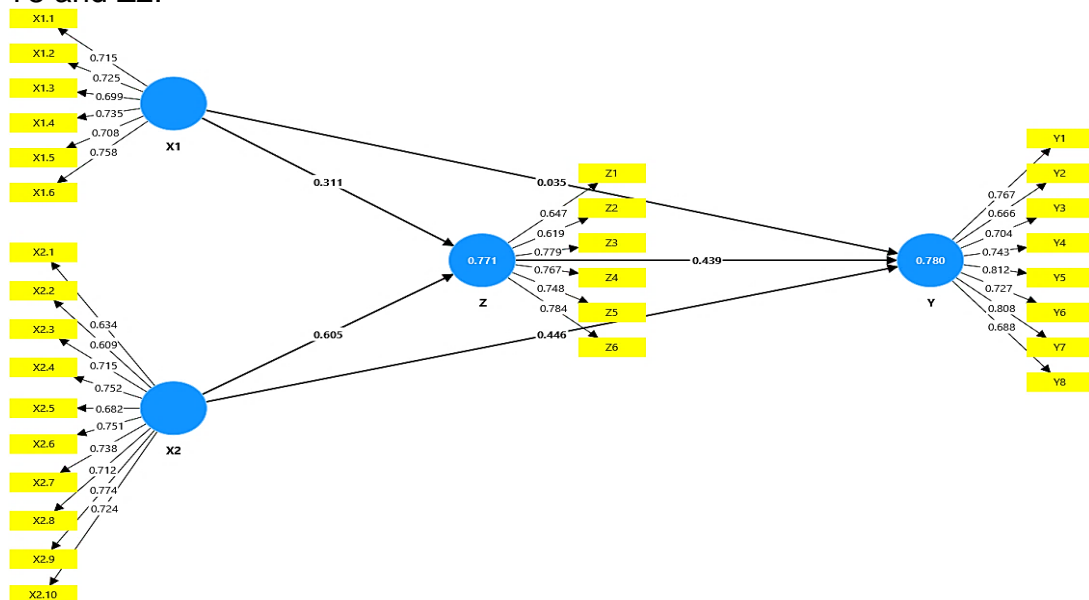


Figure 2. Data output before indicator elimination

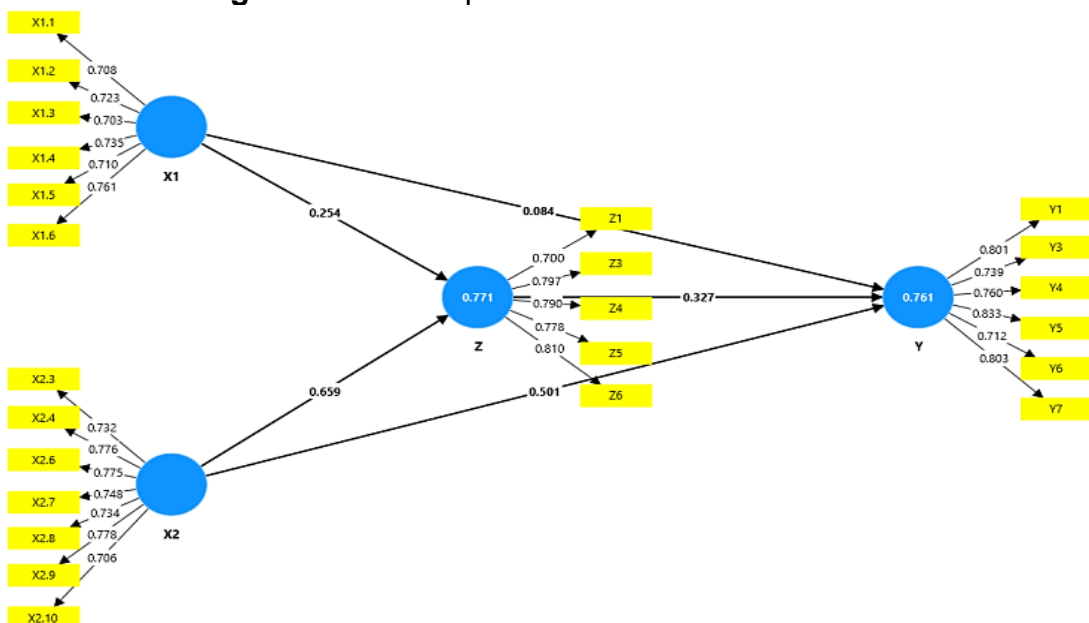


Figure 3. Data output after indicator elimination

In Table 1 it can be concluded that the Average Variance Extracted (AVE) value of all indicators of green knowledge, green perceived value, purchase intention and green lifestyle variables has an Average Variance Extracted (AVE) value >0.5 , so convergent validity is met.

Table 1. Average Variance Extracted (AVE)

	Average variance extracted (AVE)
X1	0.524
X2	0.563
Y	0.602
Z	0.596

In Table 2, it can be concluded that all constructs have composite reliability values >0.7 and Cronbach's alpha >0.6 . So all statement items in the questionnaire have good reliability.

Table 2. Composite reliability and Cronbach's alpha

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)
X1	0.818	0.818	0.868
X2	0.870	0.872	0.900
Y	0.867	0.870	0.900
Z	0.812	0.820	0.870

In Table 3, the R-square value of the purchase intention variable is 0.763, which means that the percentage of the influence of the green knowledge and green perceived value variables on purchase intention is 76.3%. While the R-square of the green lifestyle variable is 0.781, which means that the percentage of the influence of the green knowledge and green perceived value variables on green lifestyle is 78.10%.

Table 3. R-square and Adjusted R-square

	R-square	R-square adjusted
Y	0.761	0.758
Z	0.771	0.769

In Table 4, the results of the hypothesis testing can be stated to have a significant effect if: T-Statistic Value > 1.96 and P value < 0.05 . The following is an explanation of the Path Coefficient results:

1. The green knowledge variable does not affect purchase intention. This can be seen from the valuet-statistics which do not meet the requirements, namely $0.980 < 1.96$, and the p-value $0.327 > 0.05$.
2. The green knowledge variable has a positive effect on green lifestyle. This can be seen from the valuet-statistics which meets the requirements, namely $3.248 > 1.96$, and p-value $0.001 < 0.05$.
3. The green perceived value variable has a positive effect on purchase intention. This can be seen from the valuet-statistics which meets the requirements, namely $5.350 > 1.96$, and p-value $0.000 < 0.05$.
4. The green perceived value variable has a positive effect on green lifestyle. This can be seen from the valuet-statistics which meets the requirements, namely $7.985 > 1.96$, and p-value $0.000 < 0.05$.

5. The green lifestyle variable has a positive effect on purchase intention. This can be seen from the valuet-statistics which meets the requirements, namely $2,868 > 1.96$, and p-value $0.004 < 0.05$.

Table 4. Path coefficients

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
X1 -> Y	0.084	0.098	0.086	0.980	0.327
X1 -> Z	0.254	0.263	0.078	3.248	0.001
X2 -> Y	0.501	0.489	0.094	5.350	0.000
X2 -> Z	0.659	0.645	0.083	7.985	0.000
Z -> Y	0.327	0.323	0.114	2,868	0.004

The indirect influence accompanied by mediating variables can be seen in Table 5 which shows that:

1. The influence of green knowledge on purchase intention through green lifestyle has a valuet-statistics which meets the requirements, namely $2.245 > 1.96$ and the p-value is $0.025 < 0.05$ which means that green lifestyle can be a mediation between green knowledge and purchase intention.
2. The influence of green perceived value on purchase intention through green lifestyle has a positive value.t-statistics which meets the requirements, namely $2,582 > 1.96$ and a p-value of $0.010 < 0.05$, which means that green lifestyle can mediate between green perceived value and purchase intention.

Table 5. Indirect Effect

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
X1 -> Z -> Y	0.083	0.083	0.037	2.245	0.025
X2 -> Z -> Y	0.216	0.210	0.083	2,582	0.010

Based on Table 6, it shows that the analysis of the influence of VAF (Variance Accounted For) value on the green knowledge variable on purchase intention mediated by green lifestyle shows partial mediation with a VAF (Variance Accounted For) value of 49.7%. On the other hand, the green perceived value variable on purchase intention mediated by green lifestyle also shows partial mediation with a value of 30.1%.

Table 6. Influence of VAF value

	Direct Influence	Indirect Influence	Total	VAF Value
X1 -> Z -> Y	0.084	0.083	0.167	0.497
X2 -> Z -> Y	0.501	0.216	0.717	0.301

Discussion

The first hypothesis is rejected. According to the Theory of Reasoned Action (Fishbein & Ajzen, 1975), green knowledge can function as a subjective norm within a group. However, this hypothesis does not prove that subjective norms can influence consumer purchase intentions. This is supported by research Christina & Adiati (2023) which shows the results of the analysis of the subjective norm variable have not been able to predict green purchase intention. This shows that the higher or lower a person's knowledge of environmental issues and a person's knowledge of environmentally friendly products, it will not have an impact on consumer purchasing intentions for environmentally friendly products (Hasanudin & Wulantika, 2024).

Research by Lares (2024); Setyabudi & Adialita, (2020) gives the result that green product knowledge does not have a significant effect on green purchase intention.

The second hypothesis is accepted. According to the Theory of Reasoned Action (Fishbein & Ajzen, 1975), subjective norms can play a role in forming attitudes toward behavior, if the community around a person has good knowledge about environmental issues and environmentally friendly products, this can strengthen the individual's positive attitude towards the behavior so that it supports a green lifestyle. This shows that consumers who have good environmental knowledge can increase a person's awareness of environmental problems and make a person more concerned about the condition of the surrounding environment. Farisy, (2015). This research is in line with research by Saleky & Souisa (2017) which shows that green product knowledge has a positive influence on green lifestyle.

The third hypothesis is accepted. According to the Theory of Reasoned Action (Fishbein & Ajzen, 1975), green perceived value can function as a subjective norm, when many people around consumers feel that environmentally friendly products provide more value in terms of quality, environmental benefits, or health, then consumers tend to feel supported by these social norms so that they choose environmentally friendly products. This research is also in line with research by Zahra & Rohman, (2024); Chae et., (2020); Karli & Tjokrosaputro, (2023) which shows that green perceived value is able to have a positive contribution relationship to purchase intention.

The fourth hypothesis is accepted. According to the Theory of Reasoned Action (Fishbein & Ajzen, 1975), subjective norms can play a role in forming attitudes toward behavior, when the community around consumers feels that environmentally friendly products provide more value in terms of quality, environmental benefits, or health, this can strengthen the individual's positive attitude towards the behavior and support the existence of a green lifestyle. This shows that when users or consumers feel a better difference and are beneficial to the environment when using environmentally friendly products, consumer behavior will also increase. Strong, (2024). This research is in line with research Afianto et al., (2024) which shows that green perceived value has a significant and positive influence on green lifestyle sustainability.

The fifth hypothesis is accepted. According to the Theory of Reasoned Action (Fishbein & Ajzen, 1975), green lifestyle functions as an attitude toward behavior, so that a positive attitude towards green lifestyle can increase purchase intention of environmentally friendly products. If consumers know that using environmentally friendly products is a behavior that can contribute to sustainability and can minimize the impact on the environment, then consumer purchase intention will increase. This shows that by realizing a lifestyle that focuses on reducing the impact of one's life on environmental damage, it will influence consumers to buy environmentally friendly products. Patak et al., (2021). This research is in line with research by Santoso & Hartini, (2023); Pramesti et al., (2022); (Nurdin & Ratnasari, (2024) which shows that green lifestyle has an effect on purchase intention.

The sixth hypothesis is accepted. According to the Theory of Reasoned Action (Fishbein & Ajzen, 1975), if the community around the consumer supports the purchase of environmentally friendly products, then they will have a positive attitude towards the product so that their intention to buy environmentally friendly products will

increase. This research is supported by research by Saleky & Souisa, (2017) that green product knowledge has a positive effect on green lifestyle. With the ability to understand and care about the environment, it can encourage someone to make green purchasing because they are aware of the importance of maintaining a balance between the environment and daily needs. Research Santoso & Hartini, (2023) shows that green lifestyle has a positive effect on purchase intention.

The seventh hypothesis is accepted. According to the Theory of Reasoned Action (Fishbein & Ajzen 1975), if the community around the consumer supports the purchase of environmentally friendly products, then they will have a positive attitude towards the product so that their intention to buy environmentally friendly products will increase. This research is supported by research by Afianto et al., (2024) shows that green perceived value has a significant and positive influence on green life style sustainability. When someone has a strong perception of the value and benefits of environmentally friendly products for sustainability, they will tend to adopt and maintain a sustainable lifestyle. Research by Nurdin & Ratnasari, (2024) shows that green lifestyle has a positive effect on purchase intention.

CONCLUSION

Based on the results of the study, it can be concluded that green knowledge does not affect purchase intention. Green knowledge has a positive effect on green lifestyle. Green perceived value has a positive effect on purchase intention. Green perceived value has a positive effect on green lifestyle. Green lifestyle has a positive effect on purchase intention. Green knowledge has a positive effect on purchase intention through green lifestyle as a mediating variable. Finally, Green perceived value has a positive effect on purchase intention through green lifestyle as a mediating variable in Gen Z users of tumbler products in Indonesia.

Further research can consider additional variables that may play a role in influencing purchase intention, such as green advertising, green trust, green awareness, and so on. This research can also be expanded to other environmentally friendly products, such as fashion products, beauty products, household products, and so on. In addition to the quantitative approach, further researchers can use a qualitative approach, such as through in-depth interviews or direct observation.

Reference

- Afianto, RA, Akhmad, DPN, & Nikmatushholekha, NF 2024. "The Role of Social Media Influencers in Creating Product Value as a Driver of Green Lifestyle Sustainability." *Journal of Economics, Management and Business Research* 3(3):221–36.
- Ahmad, Anees, and KS Thyagaraj. 2015. "Consumer's Intention to Purchase Green Brands: The Roles of Environmental Concern, Environmental Knowledge and Self-Expressive Benefits." *Current World Environ* 10(3):879–89.
- Baktash, Leila, and Muzalwana Abdul Talib. 2019. "Green Marketing Strategies: Exploring Intrinsic and Extrinsic Factors towards Green Customers' Loyalty." *Calitatea* 20(168):127–34.
- Chae, H., Kim, S., Lee, J., Park, K. 2020. "Impact of Product Characteristics of Limited Edition Shoes on Perceived Value, Brand Trust, and Purchase Intention; Focused on the Scarcity Message Frequency." *Journal of Business Research*

120:398–406.

- Christina, S., & Adiati, RP 2023. "Attitude Toward Behavior, Subjective Norm, Perceived Behavioral Control, and Green Trust as Predictors of Green Purchase Intention in Generation Z." *Journal of Student Talent Psychology* 3(2):13–22.
- Farisy, S. 2015. "Study of Psychological Factors Influencing Environmentally Friendly Behavior." Faculty of Psychology Thesis.
- Fauzan, Rizky Sani, and Arry Widodo. 2023. "Consumer Purchase Intention: The Influence of Green Brand and Green Knowledge on the Herbal Medicine and Pharmaceutical Industry of Sido Muncul Tbk." *Fair Value: Scientific Journal of Accounting and Finance* 5(9):3545–52.
- Fishbein, M., and Ajzen, I. 1975. "Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research, Addison-Wesley, Reading, Mass."
- Hanjani, Giovani Antania, and Arry Widodo. 2019. "Consumer Purchase Intention: The Effect of Green Brand and Green Knowledge on Indonesian Nestle Company." *Journal of Secretary and Business Administration* 3(1):39–50. doi: <https://doi.org/10.31104/jsab.v3i1.90>.
- Hasanudin, S., & Wulantika, BVM 2024. "The Influence of Knowledge, Attitude, and Environmental Concern on Green Purchase Intention: A Case Study on Le Minerale Products." In *Proceedings of the National Seminar on Economics and Business* 4:15–24.
- Karli, Dina, and Miharni Tjokrosaputro. 2023. "The Influence of Green Perceived Value and Consumer Attitude on Purchase Intention of Glass Straws." *Journal of Business Management and Entrepreneurship* 7(4):770–81.
- Kotler, P., & Keller, LK 2016. "Marketing Management. In Marketing Management (15th Editi)." Pearson Pretice Hall.
- Laksita and Widodo. 2020. "The Influence of Corporate Social Responsibility on Consumer Purchase Interest Through Green Brand as a Mediator Variable at PT Nutrifood Indonesia."
- Lares, R. 2024. "The Influence of Green Product Knowledge, Green Trust, and Perceived Price on Green Purchase Intention of Environmentally Friendly Roster Consumers Based on the Perspective of Islamic Business Ethics (Study of Environmentally Friendly Roster Product Consumers in Bandar Lampung City)."
- Lorenzen, Janet A. 2012. "Going Green: The Process of Lifestyle Change." *Sociological Forum* 27(1):96–116.
- Mahmudah, Putri Nur, and Dian Ari Nugroho. 2023. "The Influence of Product Attribute, Lifestyle and Perceived Value on Purchase Intention." *Journal of Marketing Management and Consumer Behavior* 2(4):1048–59.
- Meilisa. 2020. "The Contribution of Green Perceived Value, Green Perceived Risk, Green Trust, and Green Awareness in Increasing Green Purchase Intention." *Journal of Business and Management Inspiration* 4(1):31–44.
- Noor, MNM, Jumain, RSA, Yusof, A., Ahmat, MAH, &., and IF Kamaruzaman. 2017. "Determinants of Generation Z Green Pur- Chase Decision: A SEM-PLS Approach." *International Journal of Advanced and Applied Sciences* 4(11):143–47.
- Nurdin, Ashilah Sakinah, and Ina Ratnasari. 2024. "The Influence of Green Lifestyle,

- Green Product Knowledge and Green Advertising on Green Purchase Intention of Volta Brand Electric Motors in the Community in Karawang Regency." *Innovative: Journal Of Social Science Research* 4(4):11407–18.
- Patak, Michal, Lenka Branska, and Zuzana Pecinova. 2021. "Consumer Intention to Purchase Green Consumer Chemicals." *Sustainability* 13(14):7992.
- Pramesti, Prita, Yaneva Anindita Dwi Cahyaningrum, and Fatik Rahayu. 2022. "CONSEQUENCES OF GREEN LIFESTYLE, PRODUCT KNOWLEDGE, AND COMMUNITY." *Trisakti Journal of Economics* 2(2):555–66.
- Rakhmawati, Dewi, Astrid Puspaningrum, and Djumilah Hadiwidjojo. 2019. "The Relationship between Green Perceived Value, Green Brand Image, and Green Trust to Green Purchase Intention." *Iqtishoduna: Journal of Islamic Economics and Business* 15(1).
- Saleky, Saul Ronald Jacob, and Wendy Souisa. 2017. "Green Life Style as a Mediator of Ecoliteracy and Green Product Knowledge on Consumer Purchasing Decisions in Ambon City." *SPECTA Journal of Technology* 1(2):11–20.
- Santoso, Agus, and Hartini. 2023. "Analysis of Purchase Intentions for Electric Vehicles by Promotion, Price and Green Lifestyle by The Community of Sumbawa." *Iconic Research And Engineering Journals* 6(12):364–70.
- Santoso, Pamuji Hari. 2018. "Analysis of the Influence of Price, Brand Image, and Company Credibility on Consumer Purchase Intentions for Kawasaki Products in Yogyakarta City." *COSTING: Journal of Economic, Business and Accounting* 1(2).
- Setyabudi, AW, & Adialita, T. nd "Consumers of AMDK Aqua Brand with 100% Recycled Bottles."
- Madani Survey. 2023. "Environmental Issues That Most Concern Indonesian Youth."
- Tegar, SP 2024. "The Influence of Environmental Knowledge, Environmental Attitude and Green Perceived Value on Green Consumers Behavior (Study of Totebag Users on UIN Raden Intan Lampung Students)."
- Vincent Riyanto, Sharon B. Soesanto, and Sabrina O. Sihombing. 2018. "THE ROLE OF ECOLABELS IN PURCHASE INTENTION: AN EMPIRICAL STUDY ON THE BODY SHOP BRAND." *MIX: Scientific Journal of Management* 8(3):504–22.
- Yohana, NKY, & Atmosfer, IGAKG 2020. "The Role of Attitude in Mediating the Influence of Environmental Awareness on Purchase Intention of Starbucks Tumblers in Badung Regency." *E-Journal of Management* 9(8):3279–3300.
- Zahra, SK, & Rohman, K. 2024. "The Influence of Green Marketing, Green Perceived Value, and Green Brand Image on Purchase Intention." *Journal of Marketing Management and Consumer Behavior* 3(1):135–44.
- Zsóka, Á., Szerényi, Z.M., Széchy, A., & Kocsis, T. 2013. "Greening Due to Environmental Education? Environmental Knowledge, Attitudes, Consumer Behavior and Everyday pro-Environmental Activities of Hungarian High School and University Students." *Journal of Cleaner Production* 48:126–38.