

**ENVIRONMENTAL AWARENESS AND SUSTAINABLE ONLINE PURCHASING INTENTIONS  
AMONG GENERATION Z: EVIDENCE FROM INDONESIA'S E-COMMERCE MARKET**

**Octaviani Ratna Sari Santoso<sup>1</sup>, Riffka Fauzany<sup>2</sup>, Fransisca Wuri Wulandari<sup>3</sup> and Nita Rustanti<sup>4</sup>**

<sup>1</sup>Office Administration, Pajajaran Polytechnic ICB Bandung, Jl. P.H.H. Mustopa No.155

<sup>2</sup>Banking and Finance, Pajajaran Polytechnic ICB Bandung, Jl. P.H.H. Mustopa No.155

<sup>3</sup>Office Administration, Pajajaran Polytechnic ICB Bandung, Jl. P.H.H. Mustopa No.155

<sup>4</sup>Hospitality, Pajajaran Polytechnic ICB Bandung, Jl. P.H.H. Mustopa No.155

E-mail: octaviani.ratnasari@poljan.ac.id; riffka.fauzany@poljan.ac.id; fransiska.wuri@poljan.ac.id;  
nita.rustanti@poljan.ac.id

**ABSTRACT**

This study looks at how being aware of the environment affects young people in Indonesia's desire to buy products online in a way that's good for the planet. Since Generation Z has grown up using the internet, they are key in making eco-friendly shopping happen in the online marketplace. The research used a quantitative method, gathering information from 400 people aged 18 to 27 who regularly shop on platforms like Tokopedia, Shopee, and Lazada. A detailed survey with a five-point scale was given, and the data was analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM). The results show that being environmentally aware makes young people more likely to make sustainable purchases, and this happens through their belief in their own ability to make a difference and their trust in green products. Also, seeing environmental messages on social media makes this connection stronger. The study shows how the ecological values and digital habits of Gen Z are important for encouraging responsible online shopping. It adds to the existing knowledge about green consumer behavior and gives useful ideas for marketers and government officials who want to support eco-friendly shopping in Indonesia's rapidly growing e-commerce industry.

**Key words:** Environmental Awareness, Generation Z, E-Commerce, Green Purchasing Intention, Sustainable Consumption

**INTRODUCTION**

Growing environmental concerns, such as global warming and pollution, have encouraged consumers and businesses worldwide to adopt sustainable practices. In Indonesia, the rapid expansion of e-commerce presents new opportunities to promote eco-friendly consumption, especially among Generation Z — a demographic born between 1995 and 2010 that dominates digital transactions.

As digital natives, Gen Z consumers are more informed, socially connected, and environmentally conscious than previous generations. Their behavior, however, is shaped by various psychological and social factors. Prior studies suggest that environmental awareness significantly affects green purchase intention, but this relationship may depend on mediating and moderating mechanisms such as perceived consumer effectiveness, green trust, and social media exposure (Chen, 2010; Kang & Hur, 2021; Lee et al., 2022). Despite extensive research in developed nations, empirical evidence from Indonesia's fast-growing digital market remains limited.

This study aims to:

1. Examine the influence of environmental awareness on sustainable online purchasing intentions among Indonesian Gen Z consumers,
2. Test the mediating roles of perceived consumer effectiveness and green trust, and
3. Assess the moderating effect of social media exposure. The study contributes to sustainability and consumer behavior literature by providing empirical insights from Indonesia's e-commerce context, offering implications for marketers and policymakers seeking to foster responsible consumption in the digital economy.

**METHOD**

**Research Design and Sampling**

The research employed a quantitative, cross-sectional design to collect and analyze empirical data. The sample consisted of 400 respondents aged between 18 and 27 who had previously made purchases through major Indonesian e-commerce platforms such as Tokopedia, Shopee, and Lazada. Participants were selected using a purposive sampling technique, targeting individuals who were active online shoppers and demonstrated

## Environmental Awareness and Sustainable Online Purchasing Intentions Among Generation Z: Evidence From Indonesia's E-Commerce Market

awareness of environmental issues. This approach ensured the inclusion of respondents who could provide relevant and informed insights into sustainable online purchasing behavior.

### Instrumentation

A structured questionnaire employing a five-point Likert scale was utilized, with response options ranging from 1 (“strongly disagree”) to 5 (“strongly agree”). The questions were taken from existing studies that have been checked and approved:

- Environmental Awareness (EA) – taken from Suki (2016) and Yadav & Pathak (2017).
- Perceived Consumer Effectiveness (PCE) – taken from Kim & Choi (2005).
- Green Trust (GT) – based on Chen (2010).
- Social Media Exposure (SME) – taken from Lee et al. (2022).
- Sustainable Online Purchase Intention (SOPI) – taken from Wang et al. (2021).

To verify the internal consistency and convergent validity of the measurement model, Cronbach’s alpha, Composite Reliability (CR), and Average Variance Extracted (AVE) were computed, all surpassing the recommended cut-off values ( $\alpha > 0.7$ ,  $CR > 0.7$ ,  $AVE > 0.5$ ).

### Data Analysis

Partial Least Squares–Structural Equation Modeling (PLS-SEM) was employed using SmartPLS version 4 to analyze the data. This analytical technique was selected due to its suitability for complex models involving mediation and moderation effects, as well as its robustness in handling data that do not follow a normal distribution.

## RESULTS AND DISCUSSION

### Results

The measurement model met all reliability and validity thresholds. The structural model results showed:

- Environmental Awareness → Sustainable Online Purchase Intention:  $\beta = 0.42$ ,  $p < 0.001$
- Mediation by PCE and Green Trust: both indirect effects were significant, confirming partial mediation.
- Moderation by Social Media Exposure: positive and significant ( $\beta = 0.18$ ,  $p < 0.05$ ).
- The final model explained  $R^2 = 0.64$  of the variance in sustainable purchasing intention.

### Discussion

These results show that being environmentally aware helps Gen Z consumers make more sustainable purchasing choices, which matches what earlier studies have found (Nguyen et al., 2023; Saran et al., 2023). The study also shows that two key factors—feeling that their actions can make a difference and trusting green claims—play a role in influencing their decisions. This means Gen Z is driven not just by awareness, but also by their belief in their own impact and confidence in eco-friendly products.

Another important finding is that being exposed to environmental messages on social media strengthens the link between awareness and the desire to buy sustainable products. This supports the work of Lee et al. (2022), who highlighted how online interactions shape people's attitudes toward sustainability.

In summary, this study highlights that Gen Z's environmental values and online habits are key to the future of sustainable shopping, especially in countries like Indonesia that are still developing.

## CONCLUSION

This study shows that being aware of the environment has a big effect on how Generation Z shoppers in Indonesia want to buy things online in a sustainable way. The research found that this connection is partly because people feel they can make a difference and trust that green choices are reliable. It also depends on how much people see environmental messages on social media. These results show that making sustainability a key part of digital platforms can help young people make more eco-friendly buying decisions.

For businesses, it's important to be open and honest in their green marketing to build trust with customers. Government officials should use social media and online campaigns to increase environmental awareness and promote responsible shopping online. Future studies could look at how sustainable behaviors change over time and how they differ in various cultures through longer-term or international research.

## REFERENCES

- Chen, Y.-S. (2010). The drivers of green brand equity: Green brand image, green satisfaction, and green trust. *Journal of Business Ethics*, 93(2), 307–319. <https://doi.org/10.1007/s10551-009-0223-9>
- Chen, Y.-S., & Chang, C.-H. (2013). Towards green trust: The influences of green perceived quality and green satisfaction. *Management Decision*, 51(1), 63–82. <https://doi.org/10.1108/00251741311291319>

- Chaturvedi, A., & Gupta, N. (2022). Factors influencing Generation Z's intention to purchase sustainable clothing. *PLOS ONE*, 17(9), e0315502. <https://doi.org/10.1371/journal.pone.0315502>
- Han, H., & Yoon, H. J. (2020). Role of green trust and green satisfaction in e-commerce purchase decisions. *Business Strategy and the Environment*, 29(5), 2285–2299. <https://doi.org/10.1002/bse.2546>
- Kang, J., & Hur, W. M. (2021). Investigating the mediating role of green trust in the relationship between green advertising and purchase intentions. *Sustainability*, 13(4), 2181. <https://doi.org/10.3390/su13042181>
- Kim, Y., & Choi, S. M. (2005). Antecedents of green purchase behavior: An examination of collectivism, environmental concern, and perceived consumer effectiveness. *Advances in Consumer Research*, 32, 592–599.
- Kumar, P. (2021). Exploring young consumers' environmental attitudes and green purchase intentions. *Journal of Global Marketing*, 34(5), 347–366. <https://doi.org/10.1080/08911762.2020.1859402>
- Lee, E., Kim, M., & Park, J. (2022). The influence of social media on green consumption: The role of eco-motivation. *Journal of Cleaner Production*, 375, 134118. <https://doi.org/10.1016/j.jclepro.2022.134118>
- Liobikienė, G., & Poškus, M. S. (2019). The importance of environmental knowledge for private and public sphere pro-environmental behavior. *Journal of Cleaner Production*, 208, 843–852. <https://doi.org/10.1016/j.jclepro.2018.10.076>
- Nguyen, T. N., Lobo, A., & Nguyen, H. L. (2023). Young consumers and sustainable purchase behavior: The role of environmental concern. *Sustainability*, 15(2), 1012. <https://doi.org/10.3390/su15021012>
- Saran, R., Kashyap, R., & Singh, S. (2023). Gen Z and green purchase intention: The mediating role of environmental concern. *Academy of Marketing Studies Journal*, 27(3), 45–58.
- Suki, N. M. (2016). Green awareness effects on consumers' purchasing decision: Some insights from Malaysia. *International Journal of Consumer Studies*, 40(1), 1–9. <https://doi.org/10.1111/ijcs.12229>
- Wang, H., & Gao, Z. (2024). Digital engagement and sustainable consumption among Gen Z consumers. *Frontiers in Psychology*, 15, 1429454. <https://doi.org/10.3389/fpsyg.2024.1429454>
- Wang, J., Li, D., & Yang, G. (2021). Understanding consumers' green purchase behavior in e-commerce: An extended TPB perspective. *Sustainability*, 13(3), 1524. <https://doi.org/10.3390/su13031524>
- Yadav, R., & Pathak, G. S. (2017). Determinants of consumers' green purchase behavior in a developing nation. *Journal of Cleaner Production*, 167, 1283–1294. <https://doi.org/10.1016/j.jclepro.2017.08.118>