

Green voices of generation Z: Leveraging social media to drive environmental awareness and action

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Abstract

Environmental issues have become a major public concern, with air, deforestation, and land and water pollution being major contributors. Social media has become an effective tool for disseminating information about preserving the environment, particularly among Generation Z, a native digital generation. A study involving 100 respondents found that respondents aged 19 or older had a higher level of awareness of environmental issues, with urban areas having access to more information. Tiktok, Instagram, and Twitter were the most popular platforms for green product content. The study also found that social media content offers accurate information, is comprehensive, highly educational, and stimulates curiosity, suggesting that social media content is an effective means to attract people to care more about the environment, potentially affecting other generations. Environmental social media content plays a crucial role in influencing young people to care more about the environment. Environmental campaigns can be more successful by understanding the dynamics of digital interactions and bridging the attitude-behavior gap.

Keywords: Generation z; Environmental issue; Social media content; Green product

1. Background

In the last few decades, environmental issues have become one of the most popular issues that have attracted a lot of public attention. Many have highlighted that the earth is not in good condition because so many environmental challenges have emerged. Air pollution, deforestation, pollution of land and water and other events that lead to environmental damage (Ekins & Zenghelis, 2021). The imbalance between human activities that are increasingly making the environment increasingly critical from the effects of human activities. This environmental issue is not only in several countries but has become a serious issue in many countries from around the world (Alanazi, 2023).

Many individuals, groups, or organizations have contributed to carrying out activities aimed at improving the environment due to human activities that continue to cause environmental damage (Thiri et al., 2022). Many movements from individuals, groups or national and international organizations have contributed through activities including training people to be able to contribute to improving the environment. This movement is certainly not balanced with the amount of damage experienced by the environment due to human activities. At least this activity provides a lot of improvement to environmental damage from human activities (Awewomom et al., 2024).

In this digital era, social media has become one of the effective tools to provide an understanding of the importance of preserving the environment (Arnot et al., 2024). Social media platforms are a medium for disseminating information to the public (Hajri & Daife, 2024). Generation Z as a native digital generation is very active in social media. Social media, which is a tool for disseminating information, is a very powerful means to provide knowledge and persuasion to care

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more about the environment. Content on social media can influence Generation Z who are very active in social media (Hohenhaus et al., 2023; Truc, 2024; Vladimirova et al., 2024).

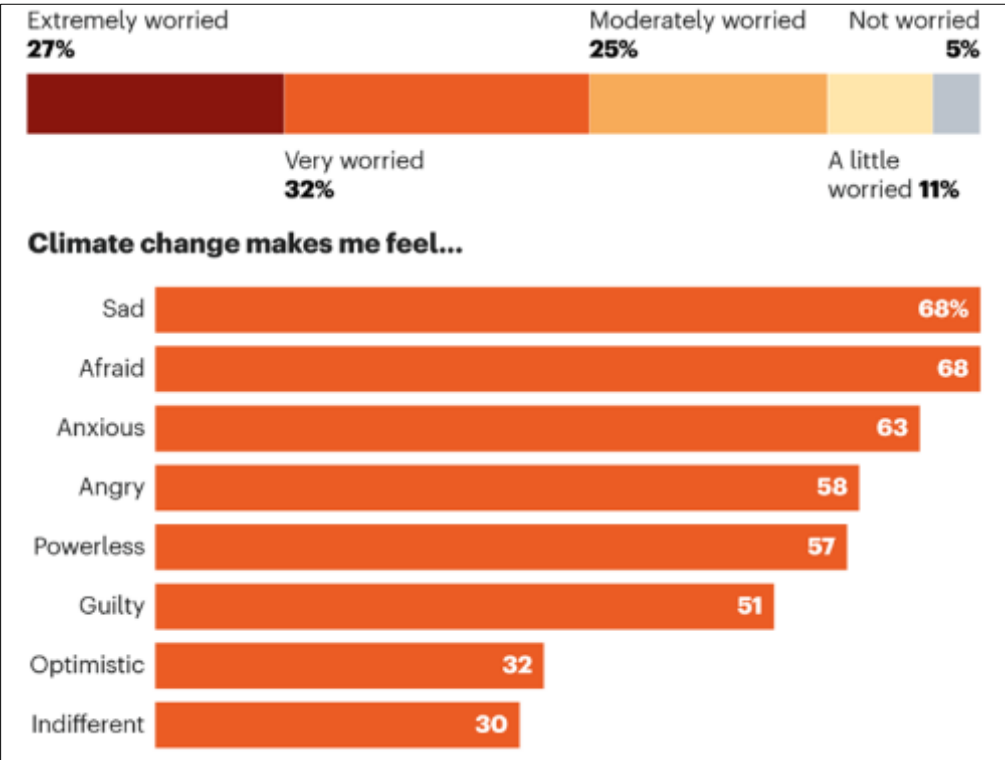


Figure 1 Climate Anxiety on Young People

Source: <https://www.nature.com/articles/d41586-024-00998-6>

Young people's concern for the environment is very high compared to other generations, from the data above it can be seen that young people's responses to current environmental conditions are many who are sad and afraid of current environmental conditions. Environmental issues are one that is always a hot topic in various countries because many environmental cases always have problems (Lawrance et al., 2022). Generation Z who has concerns about the environment are one of the important ones with the development of social media with environmental issue content that can influence Generation Z to care more about the environment (Gaziulusoy, 2020; Tsevreni et al., 2023; Zaremba et al., 2023).

2. Research methods

This research is quantitative research by collecting data through questionnaires as primary data and strengthened by interviews with generation Z to strengthen the questionnaire data. Respondents in this study were 100 people with 50 men and 50 women. The data collected were tabulated and analyzed to draw conclusions from the research results. This research is presented in two parts, namely from respondents such as gender, age, location of residence, type of social media used and type of environmentally friendly products that have been purchased by respondents. The questionnaire asked to respondents compared the results between male respondents and female respondents. The results of the questionnaire are presented in diagrams and tables and described as an explanation.

3. Results

The results of this study are described in graphs and tables and described in more detail and the results of this study can be seen in the following results.

3.1. Demographic respondents

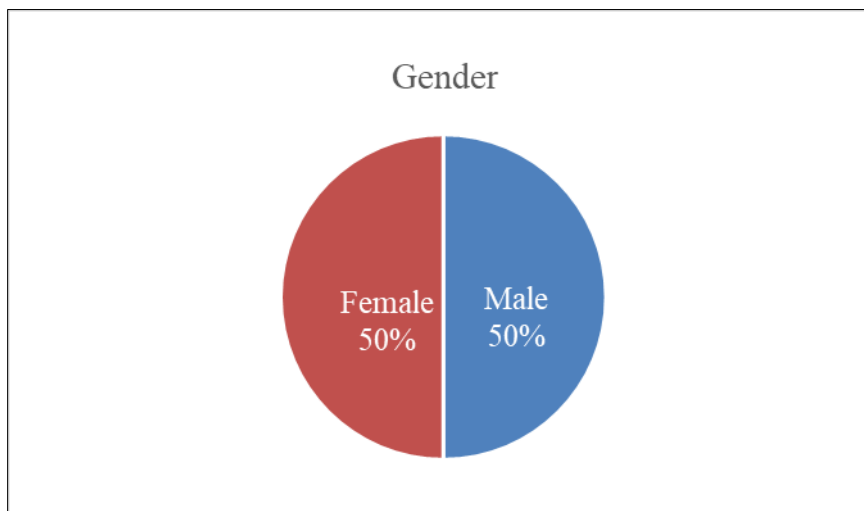


Figure 2 Respondents Gender

Demographic data based on graphic 2 gender shows that the number of respondents between men and women is balanced, which is 50% of the total 100 respondents. This allows researchers to conduct a comparative analysis between men and women in a balanced manner to avoid the dominance of one gender.

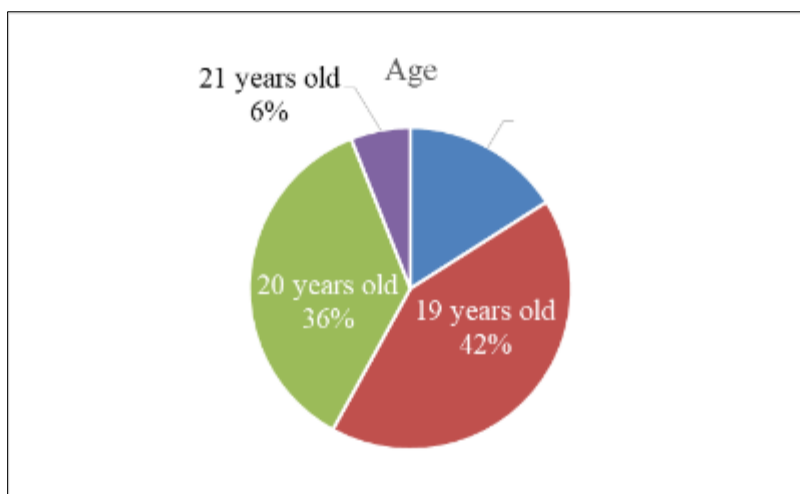


Figure 3 Respondents Age

In terms of age, the majority of respondents who filled out the questionnaire were respondents aged 19 years with 42% or 42 respondents. Followed by respondents aged 20 years as much as 36% or 36 respondents and respondents aged 18 years as much as 16% or 16 respondents. This means that respondents who have a higher level of awareness of the environment are respondents aged 19 years.

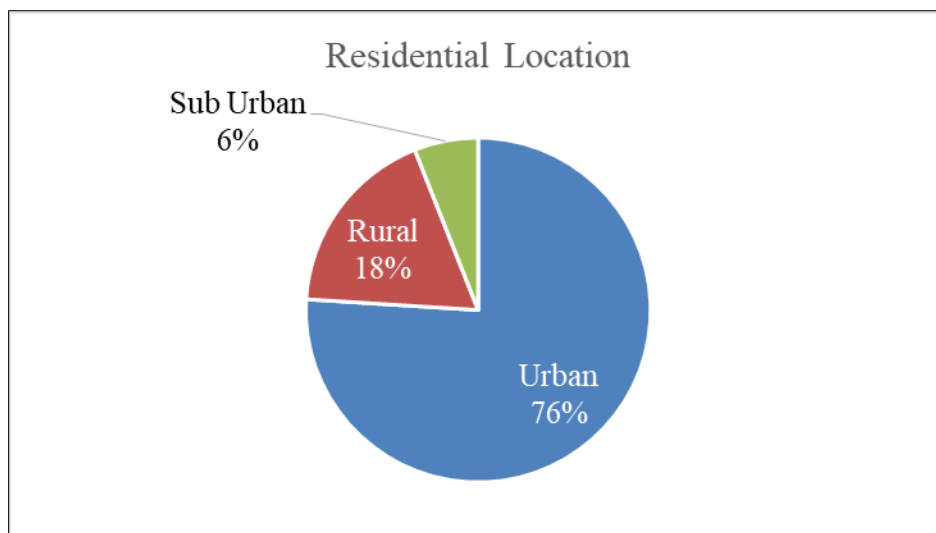


Figure 4 Respondents Residential Location

In terms of residential location, it can be seen that the majority of respondents who filled out the questionnaire were respondents with urban residential locations with a result of 76% or 76 respondents. Followed by rural areas as much as 18% or 18 respondents and suburban areas as much as 6% or 6 respondents. From these data it can be seen that respondents who live in urban areas have access to more information and knowledge about environmentally friendly products. This is because urban areas generally have a higher level of exposure to environmental issues and are also the target market for companies.

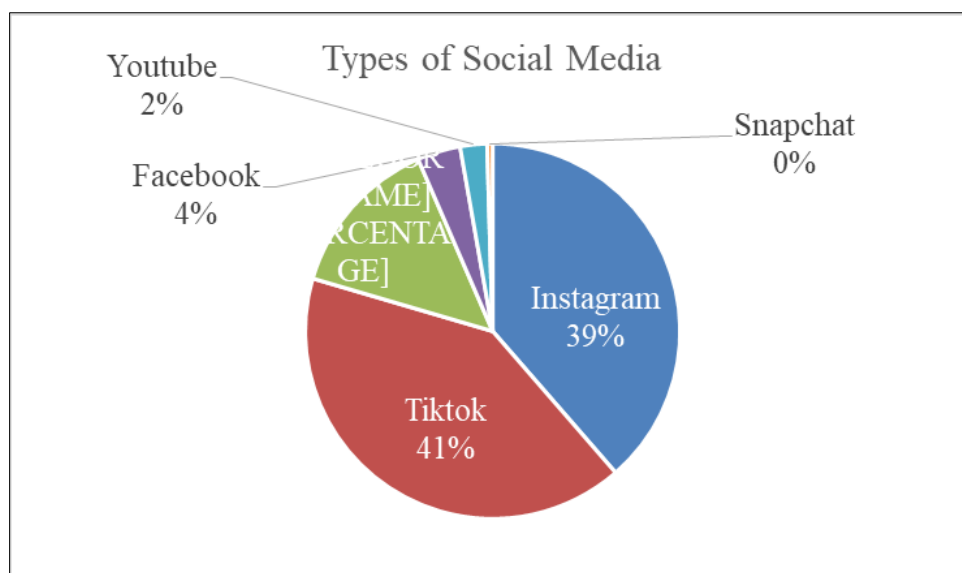


Figure 5 Respondents Types of social media

Demographic data based on social media type, respondents use more than one social media platform to view social content about green products. The more social media used, the more information respondents have about green products and other environmental issues. The social media that is often accessed by respondents is Tiktok with 41% while Instagram is 39% followed by Twitter at 14%. Overall, respondents prefer to use Tiktok and Instagram to find information.

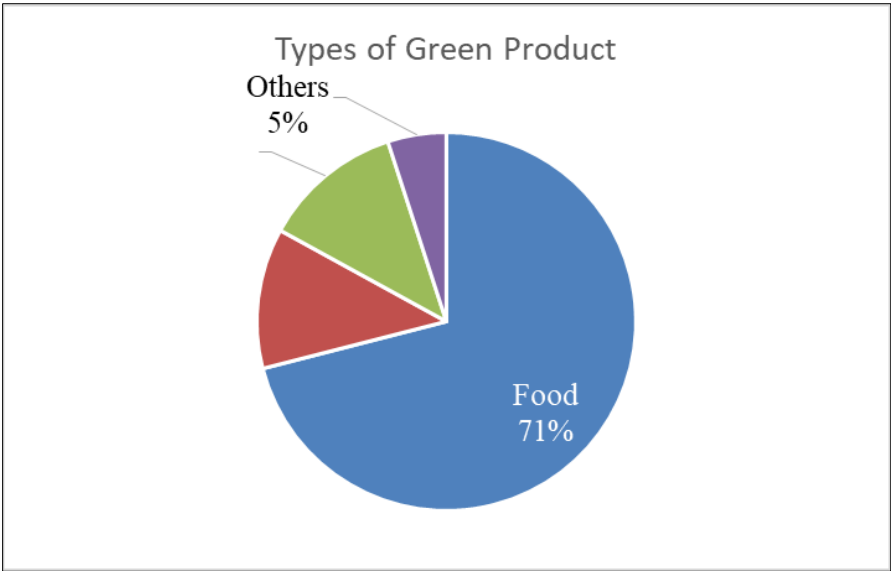


Figure 6 Respondents Types of Green Product

Demographic data based on the type of green product ever purchased shows that 71% of respondents chose food products, 12% chose clothing products, 12% chose cosmetic products, and the remaining 5% chose other products such as tumblers, tote bags, food containers, and others. This shows that environmentally friendly food products are more often purchased by respondents because they are easier to find on the market directly or through online stores.

3.2. Environmental social media content

Social media is one of the strategic tools for disseminating information about the environment and social media is a means of influencing young people to care about the environment (Confetto et al., 2023). Many young people are influenced to care more about the environment because of the influence of green product content on social media (Liao, 2024). Environmental campaigns can be more successful in engaging young people and creating a generation of knowledgeable and engaged environmental managers by understanding the dynamics of digital interactions and bridging the attitude-behavior gap. The following data is a comparison between male and female Generation Z who have opinions about the environmental social media content they see on social media and the effects they feel on the content they see on social media (Li et al., 2024; Lopes et al., 2024).

Data analysis categorization provides an understanding of each category of each answer tabulated from each respondent's answer. Total 100 respondents with 50 men and 50 women.

Table 1 Interpretation of Respondents by Category

No	Average Range	Category
1	1.00 - 1.80	Very Bad
2	1.80 – 2.60	Bad
3	2.60 – 3.40	Enough
4	3.40 – 4.20	Good
5	4.20 – 5.00	Very good

This calculation provides details of each question asked to respondents regarding environmental social media content viewed by respondents and calculates the average of the collected answers.

Table 2 Contents on social media offer accurate information on products

These Contents offer accurate information on products	
Male	Female
3.66	3.74

Based on table 2, it can be seen that the question about contents on social media offer accurate information on products from the tabulation of respondents' answers shows that male respondents with an average score of 3.66 are in the good category and female respondents with an average score of 3.74 are also in the good category. Overall, male and female respondents have similarities, namely both are in the good category, although the average score of women is higher than that of men in total.

Table 3 Contents on social media offer useful information

These Contents offer useful information	
Male	Female
4.08	4.26

Based on table 3 shows that contents on social media offer useful information, the average score results for male respondents of 4.08 are in the good category, while the answers of female respondents with an average score of 4.26 or are in the very good category. Female respondents feel that contents on social media have very useful information for female respondents (Jamshed et al., 2025; Mari et al., 2023).

Table 4 The information provided by contents on social media is comprehensive

The information provided by these Contents is comprehensive	
Male	Female
3.64	3.52

Based on table 4 shows that the information provided by contents on social media is comprehensive, male respondents have an average score of 3.64 and are in the good category and female respondents with an average score of 3.52 and are in the good category. In the question the information provided by contents on social media is comprehensive there is a difference, namely male respondents have a higher average score than female respondents (Liu et al., 2016).

Table 5 Contents on social media were highly educational

These Contents were highly educational for me	
Male	Female
4.04	3.96

Based on table 5 shows that contents on social media were highly educational for me, in male respondents the average score was 4.04 in the good category. While for female respondents had a lower average score of 3.96 and was still in the good category. contents on social media were highly educational for me male respondents had a higher average score where they felt the content on social media educated respondents about green products. This means that green product content is very effective as a means to educate the public, in this study generation z but can be applied to other generations (Bardwell, 2017).

Table 6 Contents on social media had made me more knowledgeable

These Contents had made me more knowledgeable	
Male	Female
4.08	4.22

Based on table 6 shows that contents on social media had made me more knowledgeable, male respondents with an average score of 4.08 and are in the good category and female respondents are higher with an average score of 4.22 in the very good category. Female respondents feel that contents on social media had made me more knowledgeable when compared to male generation z respondents. Condensation on social media is considered to provide useful knowledge for generation z and this is also likely to have the same effect on other generations (Gautam & Bajpai Tewari, 202;)Lee et al., 2024).

Table 7 Contents on social media stimulated curiosity

These Contents stimulated my curiosity	
Male	Female
3.8	3.98

Based on table 7 shows contents on social media stimulated curiosity, male respondents have an average score of 3.8 in the good category and female respondents have an average score of 3.98 in the good category. These results indicate that generation z, both male and female, content on social media related to the environment and green products increases respondents' curiosity. These results can also show the same results in other generations that content on social media is an effective means to attract people to care more about the environment (Smyczek, 2023).

4. Conclusion

Environmental issues have become a significant public concern in recent decades, with air pollution, deforestation, and land and water pollution being major contributors. The imbalance between human activities has led to environmental damage, and social media has become an effective tool for disseminating information about the importance of preserving the environment. Generation Z, a native digital generation, is highly active on social media platforms, which can influence their concerns about the environment.

The most popular social media platforms for green product content were Tiktok (41%), Instagram (39%), and Twitter (14%). Respondents preferred Tiktok and Instagram for finding information about green products and environmental issues. The type of green product purchased was food products (71%), clothing products (12%), cosmetic products (12%), and other items like tumblers, tote bags, and food containers (5%).

Environmental social media content plays a crucial role in influencing young people to care more about the environment. Environmental campaigns can be more successful by understanding the dynamics of digital interactions and bridging the attitude-behavior gap. By comparing male and female Generation Z's opinions on environmental social media content and their feelings towards it, environmental campaigns can create a generation of knowledgeable and engaged environmental managers.

The study reveals that social media content offers accurate information on products, with male respondents scoring 3.66 in the good category and female respondents scoring 3.74. Both genders have similar scores, with women scoring higher. The content also provides useful information, with male respondents scoring 4.08 in the good category and female respondents scoring 4.26 in the very good category. The information provided by social media is comprehensive, with male respondents scoring 3.64 and female respondents scoring 3.52.

The content is highly educational, with male respondents scoring 4.04 in the good category and female respondents scoring 3.96. The content has made respondents more knowledgeable, with male respondents scoring 4.08 and female respondents scoring 4.22 in the very good category. The content stimulates curiosity, with male respondents scoring 3.8 in the good category and female respondents scoring 3.98 in the good category. These results suggest that social

media content is an effective means to attract people to care more about the environment, potentially affecting other generations

Compliance with ethical standards

Statement of ethical approval

Participants are fully informed about the research goal and procedures prior to receiving a questionnaire. They were also advised of their right to refuse or withdraw from the research.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

References

- [1] Alanazi, F. (2023). Electric Vehicles: Benefits Challenges and Potential Solutions. *Journal of Applied Scienc*, 13, 1–23.
- [2] Arnot, G., Pitt, H., McCarthy, S., Cordedda, C., Marko, S., & Thomas, S. L. (2024). Australian youth perspectives on the role of social media in climate action. *Australian and New Zealand Journal of Public Health*, 48(1), 100111. <https://doi.org/10.1016/j.anzjph.2023.100111>
- [3] Awewomom, J., Dzeble, F., Takyi, Y. D., Ashie, W. B., Ettey, E. N. Y. O., Afua, P. E., Sackey, L. N. A., Opoku, F., & Akoto, O. (2024). Addressing global environmental pollution using environmental control techniques: a focus on environmental policy and preventive environmental management. *Discover Environment*, 2(1). <https://doi.org/10.1007/s44274-024-00033-5>
- [4] Bardwell, N. B. (2017). The perceptions and usage of social media in higher education.
- [5] Confetto, M. G., Covucci, C., Addeo, F., & Normando, M. (2023). Sustainability advocacy antecedents: how social media content influences sustainable behaviours among Generation Z. *Journal of Consumer Marketing*, 40(6), 758–774. <https://doi.org/10.1108/JCM-11-2021-5038>
- [6] Ekins, P., & Zenghelis, D. (2021). The costs and benefits of environmental sustainability. *Sustainability Science*, 16(3), 949–965. <https://doi.org/10.1007/s11625-021-00910-5>
- [7] Gautam, U., & Bajpai Tewari, D. (2023). Public Knowledge, Attitudes, and Practices Toward COVID-19 Pandemic: A Cross-Sectional Study in Delhi and National Capital Region (NCR), India. *SAGE Open*, 13(1), 1–14. <https://doi.org/10.1177/21582440231153370>
- [8] Gaziulusoy, A. İ. (2020). The experiences of parents raising children in times of climate change: Towards a caring research agenda. *Current Research in Environmental Sustainability*, 2, 100017. <https://doi.org/10.1016/j.crsust.2020.100017>
- [9] Hajri, O., & Daife, Y. (2024). The role of social media in engaging young people in environmental issues. *E3S Web of Conferences*, 477. <https://doi.org/10.1051/e3sconf/202447700079>
- [10] Hohenhaus, M., Boddy, J., Rutherford, S., Roiko, A., & Hennessey, N. (2023). Engaging Young People in Climate Change Action: A Scoping Review of Sustainability Programs. *Sustainability (Switzerland)*, 15(5), 1–20. <https://doi.org/10.3390/su15054259>
- [11] Jamshed, M., Alam, I., Almashy, A., & Warda, W. U. (2025). Assessing Saudi learners' engagement with social media in English classrooms. *International Journal of Evaluation and Research in Education*, 14(3), 2450–2460. <https://doi.org/10.11591/ijere.v14i3.28509>
- [12] Lawrance, E. L., Thompson, R., Newberry Le Vay, J., Page, L., & Jennings, N. (2022). The Impact of Climate Change on Mental Health and Emotional Wellbeing: A Narrative Review of Current Evidence, and its Implications. *International Review of Psychiatry*, 34(5), 443–498. <https://doi.org/10.1080/09540261.2022.2128725>
- [13] Lee, N., Huh, J., Jeong, H., & Park, W. (2024). Effectiveness of Online Interactive Education in Dental Radiology. *International Dental Journal*, 74(5), 1024–1032. <https://doi.org/10.1016/j.identj.2024.03.016>

- [14] Li, J., Chiu, D. K. W., Ho, K. K. W., & So, S. (2024). The Use of Social Media in Sustainable Green Lifestyle Adoption: Social Media Influencers and Value Co-Creation. *Sustainability (Switzerland)*, 16(3), 1–18. <https://doi.org/10.3390/su16031133>
- [15] Liao, C. H. (2024). Exploring social media determinants in fostering pro-environmental behavior: insights from social impact theory and the theory of planned behavior. *Frontiers in Psychology*, 15(July), 1–19. <https://doi.org/10.3389/fpsyg.2024.1445549>
- [16] Liu, J. H., Shi, W., Elrahman, O. A. (Sam., Ban, X. (Jeff), & Reilly, J. M. (2016). Understanding social media program usage in public transit agencies. *International Journal of Transportation Science and Technology*, 5(2), 83–92. <https://doi.org/10.1016/j.ijtst.2016.09.005>
- [17] Lopes, J. M., Gomes, S., Suchek, N., & Nogueira, S. (2024). The hidden reasons behind generation Z's green choices. *Discover Sustainability*, 5(1). <https://doi.org/10.1007/s43621-024-00764-8>
- [18] Mari, E., Biondi, S., Varchetta, M., Cricenti, C., Frascchetti, A., Pizzo, A., Barchielli, B., Roma, P., Vilar, M. M., Sala, F. G., Giannini, A. M., & Quaglieri, A. (2023). Gender differences in internet addiction: A study on variables related to its possible development. *Computers in Human Behavior Reports*, 9(December 2022). <https://doi.org/10.1016/j.chbr.2022.100247>
- [19] Smyczek, S. (2023). International Service Management in the Context of Sustainable Development. In *International Service Management in the Context of Sustainable Development*. <https://doi.org/10.22367/uekat.9788378758754>
- [20] Thiri, M. A., Villamayor-Tomás, S., Scheidel, A., & Demaria, F. (2022). How social movements contribute to staying within the global carbon budget: Evidence from a qualitative meta-analysis of case studies. *Ecological Economics*, 195. <https://doi.org/10.1016/j.ecolecon.2022.107356>
- [21] Truc, L. T. (2024). Greening the future: How social networks and media shapes youth's eco-friendly purchases. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(4), 100410. <https://doi.org/10.1016/j.joitmc.2024.100410>
- [22] Tsevreni, I., Proutsos, N., Tsevreni, M., & Tigkas, D. (2023). Generation Z Worries, Suffers and Acts against Climate Crisis—The Potential of Sensing Children's and Young People's Eco-Anxiety: A Critical Analysis Based on an Integrative Review. *Climate*, 11(8). <https://doi.org/10.3390/cli11080171>
- [23] Vladimirova, K., Henninger, C. E., Alosaimi, S. I., Brydges, T., Choopani, H., Hanlon, M., Iran, S., McCormick, H., & Zhou, S. (2024). Exploring the influence of social media on sustainable fashion consumption: A systematic literature review and future research agenda. *Journal of Global Fashion Marketing*, 15(2), 181–202. <https://doi.org/10.1080/20932685.2023.2237978>
- [24] Zaremba, D., Kulesza, M., Herman, A. M., Marczak, M., Kossowski, B., Budziszewska, M., Michałowski, J. M., Klöckner, C. A., Marchewka, A., & Wierzba, M. (2023). A wise person plants a tree a day before the end of the world: coping with the emotional experience of climate change in Poland. *Current Psychology*, 42(31), 27167–27185. <https://doi.org/10.1007/s12144-022-03807-3>
- [25] <https://www.nature.com/articles/d41586-024-00998-6>