



The Dynamics of Environmental Knowledge and Skepticism in Green Footwear Marketing

Angga Ranggana Putra and Caroline Kopot

EasyChair preprints are intended for rapid dissemination of research results and are integrated with the rest of EasyChair.

September 7, 2025

**THE DYNAMICS OF ENVIRONMENTAL KNOWLEDGE AND SKEPTICISM
IN GREEN FOOTWEAR MARKETING**

Angga Ranggana Putra, University of Missouri-Columbia¹

Caroline Kopot, Ph.D., University of Missouri-Columbia²

ABSTRACT

This study examines the relationship of environmental knowledge, attitudes, and social norms in shaping green skepticism toward sustainable footwear. The data was collected from 510 United States respondents and analyzed using Structural Equation Modeling. Results reveal that environmental knowledge positively influences green skepticism, while attitude toward green footwear does not significantly mediate this relationship. Social norms does not moderate the relationship between Environmental Knowledge and Green Skepticism. Findings highlight the importance of leveraging transparent environmental claims to reduce skepticism toward green footwear marketing. Theoretical contributions challenge traditional assumptions about attitude formation and emphasize the multidimensional nature of skepticism. This study underscores the need for credible, socially driven green marketing strategies.

Keywords: Green marketing, green skepticism, environmental knowledge, green consumption

¹ anggaranganaputra@mail.missouri.edu

² ckopot@umsystem.edu

INTRODUCTION

The growing demand for sustainable products has transformed consumer markets, and industries are increasingly embracing eco-friendly innovations (Martins, 2024). Among green product industries, the green footwear industry has become a major focus of consumer interest due to its connection with sustainable fashion and environmental responsibility. However, despite its potential, the industry faces a persistent challenge: green skepticism, which refers to consumer doubt or distrust regarding the authenticity of environmental claims made by businesses. Green skepticism presents a critical barrier to the widespread adoption of eco-friendly footwear, as consumers question the legitimacy of claims about sustainability (Leonidou & Skarmeas, 2017). This skepticism is often fueled by accusations of greenwashing, where companies exaggerate or fabricate their environmental credentials to attract environmentally conscious consumers (Ullah & S. Mateti, 2021). A previous study found that when consumers perceive inconsistencies between a company's stated environmental goals and past actions, skepticism increases, undermining trust in such initiatives (Leonidou & Skarmeas, 2017).

Environmental knowledge is a key factor influencing green product purchase intention. Consumers with extensive environmental knowledge often have a deeper understanding of sustainability issues and may scrutinize the environmental claims of green footwear brands more critically. However, while environmental knowledge can foster positive attitudes toward sustainable practices, it can also increase skepticism if consumers perceive inconsistencies or exaggerated claims (Lee & Cheong, 2024). This dual effect highlights the complexity of addressing consumer trust in the green footwear industry.

Attitude toward green footwear shapes consumer perceptions and behaviors (Syadzwinia & Astuti, 2021). A positive attitude can reduce skepticism and foster trust, making consumers more likely to embrace green products. However, attitudes alone may not fully explain consumer responses, as external influences such as social norms also play a significant role (Vesely & Klöckner, 2018). Social norms is perceived social pressure to engage in or avoid specific behaviors and influence consumer decision-making by shaping perceptions of what is socially acceptable or desirable (Ajzen, 1991). In the context of green footwear, strong social norms that favor sustainable practices can validate environmental claims and reduce skepticism (Bingaman et al., 2022). Conversely, weak social norms may fail to counteract skepticism, even among consumers with positive attitudes or high environmental knowledge (Činjarević et al., 2018).

To better understand these phenomena, this study adopts the Elaboration Likelihood Model (ELM) as its theoretical framework. The ELM explains how individuals process persuasive information through two distinct routes: the central route and the peripheral route (Petty & Cacioppo, 1986). The central route involves thoughtful and analytical evaluation of information, often activated when consumers possess high environmental knowledge. Knowledgeable consumers of environmental issues may critically assess claims about product materials, production processes, and sustainability certifications, increasing skepticism if they perceive inconsistencies. In contrast, the peripheral route involves reliance on external cues, such as social norms or brand reputation. In the green footwear context, social norms can serve as a peripheral cue, influencing perceptions of trustworthiness and authenticity and potentially mitigating skepticism even among critical consumers.

The interplay between environmental knowledge, attitudes, and social norms offers a comprehensive framework for exploring green skepticism in the context of green footwear. Consumers with high environmental knowledge may become more skeptical of green claims when they detect inconsistencies or signs of greenwashing (Neureiter et al., 2024). However, strong social norms can act as a social reassurance, countering skepticism and fostering trust in green footwear products (Wang et al., 2024). This theoretical lens highlights the importance of understanding cognitive and social factors in addressing green skepticism and advancing sustainability in the footwear industry.

Despite the growing interest in green footwear, there is limited research on how environmental knowledge, attitudes, and social norms influence consumer skepticism in this context. Existing studies on green skepticism often focus on general consumer goods (Sivapalan et al., 2024), overlooking the unique challenges and opportunities the green footwear industry presents. For instance, eco-friendly footwear often involves complex claims about material sourcing, production methods, and environmental impact (Leung & Luximon, 2021), which may amplify skepticism among environmentally conscious consumers. This gap in the literature underscores the need for a comprehensive model that integrates these constructs to provide deeper insights into green skepticism in the footwear sector.

This study aims to address these gaps by achieving the following objectives. First, to examine the direct influence of environmental knowledge on green skepticism in the context of green footwear. Second, to investigate the mediating role of attitude toward green footwear in the relationship between environmental knowledge and green skepticism. Third, to evaluate the moderating effect of social norms on the relationship

between environmental knowledge and green skepticism. Furthermore, to achieve these objectives, the study addresses the following research questions:

1. How does environmental knowledge influence green skepticism in the context of green footwear?
2. What is the role of attitude toward green footwear as a mediator in the relationship between environmental knowledge and green skepticism?
3. How do social norms moderate the relationship between environmental knowledge and green skepticism in the green footwear industry?

This study contributes to the existing literature by comprehensively understanding the factors driving green skepticism, specifically in the green footwear industry. By leveraging the Elaboration Likelihood Model, the research integrates environmental knowledge, attitudes, and social norms into a single framework to explain consumer trust in eco-friendly footwear. This focus on green footwear addresses a sector with substantial environmental impact and growing consumer interest, offering theoretical and practical relevance.

Theoretical Perspective and Literature Review

Elaboration Likelihood Model (ELM)

ELM is a dual-process model of persuasion that differentiates between two types of processing: central (high elaboration) and peripheral (low elaboration) (Carpenter, 2020). This model has been extensively applied in consumer research and advertising contexts (Lien, 2001) to deepen our understanding of information processing and persuasion.

According to the ELM, the extent to which individuals engage in elaboration is influenced by various factors, including personal relevance, source credibility, and the quality of arguments presented (Frewer et al., 1997; Petty & Cacioppo, 1984). These factors significantly affect the likelihood of attitude change following exposure to persuasive messages. Although the ELM has been pivotal in clarifying inconsistent findings within persuasion research (Kotowski & Young, 2012), it is not without its limitations. Critics point to issues such as under specification and the model's applicability in contemporary communication contexts (Bitner & Obermiller, 1985; J. Kitchen et al., 2014). Despite these criticisms, the ELM remains a key framework for understanding persuasion processes (Klimmt, 2011) and continues to guide research across various disciplines. Previous studies have investigated its application in diverse domains, for example, online reviews (Sher & Lee, 2009), e-commerce (Yang, 2015), and risk communication (Rucker & Petty, 2006). Additionally, a current study has consolidated existing findings through systematic reviews and weight analyses, providing a more comprehensive understanding of the ELM's relevance in electronic word-of-mouth (eWOM) research (Ismagilova et al., 2021). While the model has garnered both praise and skepticism, it remains a significant point of reference for researchers exploring the dynamics of persuasion in various contemporary contexts.

Environmental Knowledge and Green Skepticism

Research on the relationship between knowledge and skepticism reveals complex dynamics, especially in consumer behavior and green marketing. Knowledge often reduces skepticism under certain conditions. For instance, consumer knowledge can mitigate skepticism toward pro-environmental advertising (Lee & Cheong, 2024), and

balanced persuasion knowledge interventions are more effective in reducing skepticism than one-sided approaches (Isaac & Grayson, 2020). However, skepticism can moderate the impact of environmental knowledge on green behaviors, with high skepticism sometimes reducing the positive influence of knowledge on purchase intentions (Uddin et al., 2023; Zarei & Maleki, 2018).

Other factors shaping skepticism include industry norms, corporate social responsibility, greenwashing, and firm transparency (Foreh & Grier, 2003; Leonidou & Skarmeas, 2017; Musgrove et al., 2018). Social media also plays a role, where skepticism toward green advertising can reduce purchase intentions by diminishing perceived informational value (Luo et al., 2020). Interestingly, environmentally conscious consumers are often more skeptical of green advertising but may find it more informative, reducing their skepticism (Matthes & Wonneberger, 2014). Based on our review of past studies, we hypothesize:

H1: Environmental knowledge will significantly influence green skepticism.

Attitude toward green products and green skepticism

Various factors influence consumer attitudes toward green products. Environmental concern, health consciousness, personal norms, and social influences consistently emerge as significant predictors, with consumers showing stronger preferences for green products when they are aware of environmental and health issues (Alhosseini Almodarresi et al., 2019; Hutahaeon & Kurnia, 2019). Environmental knowledge and perceived consumer effectiveness are also closely linked to positive attitudes and behaviors, while government interventions and eco-literacy programs

further foster sustainable consumption (Hutahaean & Kurnia, 2019; Risqiani & Maemunah, 2019).

Positive attitudes toward green products are strongly associated with increased purchase intentions and willingness to pay a premium for sustainable alternatives (Khoiriyah & Toro, 2018). However, green skepticism—doubt about the credibility of environmental claims—acts as a barrier to green purchasing, undermining trust in green marketing (Zarei & Maleki, 2018). Transparent and credible environmental claims are essential to reduce skepticism and foster trust among environmentally conscious consumers (Bursan et al., 2022; Pham & Barretta, 2024). Positive attitudes can bridge environmental knowledge and green skepticism, reducing doubts by aligning products with environmental values (Chan & Lau, 2000). Based on our review of past studies, we hypothesize:

H2: Attitude toward green footwear will positively mediate the relationship between environmental knowledge and green skepticism.

Social Norm and Green Skepticism

Environmental skepticism, which often supports dominant social paradigms prioritizing economic growth over environmental preservation, poses a challenge to sustainability efforts (Jacques, 2006). However, social norms can promote pro-environmental behaviors by encouraging individuals to align with societal expectations (Griskevicius et al., 2010). Rapid behavioral shifts can occur when social norms change, highlighting their potential as a low-cost strategy for promoting sustainable actions (Nyborg, 2018).

Social norms significantly influence pro-environmental behaviors, making individuals more likely to act when such behaviors are perceived as socially appropriate and easy to perform (Vesely & Klöckner, 2018). Misperceptions about the prevalence of climate-friendly norms can hinder sustainable behaviors, but correcting these misperceptions has increased climate action (Andre et al., 2024). Based on our review of past studies, we hypothesize:

H3: Social norms will moderate the relationship between environmental knowledge and green skepticism, making it stronger when social norms are high.

Research Method

This study employs a quantitative approach to explore the relationships among environmental knowledge, attitudes toward eco-friendly footwear, social norms, and green skepticism. Data were collected from 510 respondents using Amazon Mechanical Turk (MTurk). Screening questions were incorporated at the start of the survey to ensure the data collection targeted the green footwear market. For instance, participants were asked, “Do you own any sustainable or green footwear?” Respondents who answered “no” were disqualified from continuing. Those who answered “yes” were prompted to specify the brand of green footwear they owned.

The variables were measured using a structured questionnaire based on established scales from prior research. Environmental knowledge was assessed with items such as, “How much do you feel you know about environmental issues?” and “How well do you understand and identify environmental symbols on product packaging or advertising?” Responses were rated on a 5-point Likert scale ranging from “Very

Little” to “Very Much” (Pagiaslis & Krontalis, 2014). Attitudes toward green footwear were evaluated using statements like, “I like the idea of purchasing green footwear,” and “I have a favorable attitude toward purchasing green footwear,” rated on a 5-point Likert scale from “Strongly Disagree” to “Strongly Agree” (Mostafa, 2007).

Social norms were measured using items such as, “My family and friends support my decision to purchase green footwear,” rated on the same 5-point Likert scale (Munerah et al., 2021). Lastly, green skepticism was assessed with statements such as, “I am doubtful about the environmental claims made by green footwear brands,” and “Green footwear companies often exaggerate their sustainability efforts,” also rated on a 5-point Likert scale (Mohr et al., 1998).

The collected data were analyzed using Structural Equation Modeling (SEM) with SmartPLS 4 software (Ringle et al., 2024). The analysis was conducted in two stages. The measurement model was evaluated in the first stage to ensure reliability and validity. Reliability was assessed through Cronbach’s alpha and composite reliability, while convergent and discriminant validity were verified using the Average Variance Extracted (AVE).

In the second stage, the structural model was analyzed to test the hypothesized relationships. This included examining the path coefficient and the significance of mediation and moderation effects. Mediation analysis assessed the role of attitudes toward green footwear in linking environmental knowledge to green skepticism, while moderation analysis evaluated the influence of social norms on this relationship.

Result

A total of 510 usable customer surveys were collected with Amazon Mturk; 56.1% of the respondents were females, and 43.9% were males aged between 18 and 42 (81.7%). The majority of participants were White (87.3%), employed part-time (79%), and college graduates (70.6%). In terms of sustainable footwear purchased by respondents, the report indicated that customers purchased Nike (26%), Adidas (22%), Converse (11%), Timberland (10%), KEEN (9%), VEJA and Nisolo (8%), Thesus (5%), and other brands, including Allbirds (1%).

The overall model fit was assessed using the Standardized Root Mean Square Residual (SRMR), squared Euclidean distance (d_{ULS}), and geodesic distance (d_G) indices. The SRMR for the saturated model was 0.099, and the estimated model SRMR was 0.126, both within acceptable thresholds, indicating an adequate model fit (Hair et al., 2022). The d_{ULS} and d_G values also demonstrated satisfactory fit (Henseler et al., 2016), with the saturated model showing $d_{ULS} = 1.502$ and $d_G = 0.368$, and the estimated model showing $d_{ULS} = 2.431$ and $d_G = 0.456$. These results suggest that the structural model adequately represents the data and supports the hypothesized relationships (Tenenhaus et al., 2005).

The measurement model was evaluated to ensure the reliability and validity of the constructs. Composite reliability (CR) values exceeded the recommended threshold of 0.70 for all constructs, ranging from 0.729 for Green Scepticism to 0.847 for Environmental Knowledge. Cronbach's alpha values demonstrated acceptable internal consistency for EK ($\alpha = 0.758$) and SN ($\alpha = 0.667$). However, ATT ($\alpha = 0.555$) and GSC

($\alpha = 0.517$) showed lower reliability, suggesting potential issues with these constructs warrant further examination.

Convergent validity was assessed using Average Variance Extracted (AVE). While EK (AVE = 0.580) achieved the recommended threshold of 0.50, GSC (AVE = 0.403), ATT (AVE = 0.428), and SN (AVE = 0.429) fell below this benchmark, indicating limited convergent validity for these constructs. Outer loadings for all indicators were statistically significant ($p < 0.001$) and above the acceptable threshold of 0.60, suggesting adequate indicator reliability.

The results of the hypothesis testing show that H1 is supported, while H2 and H3 are not statistically significant (See Table 1). For H1, the direct relationship between environmental knowledge (EK) and green sustainable consumption (GSC) was significant ($\beta = 0.097, t = 2.112, p = 0.035$), indicating that EK has a positive and significant impact on GSC. In contrast, H2, which examined the mediating effect of attitude (ATT) in the relationship between EK and GSC, was not significant ($\beta = 0.009, t = 0.272, p = 0.786$), suggesting that ATT does not mediate this relationship. Similarly, H3, which hypothesized that subjective norms (SN) moderate the relationship between EK and GSC, was also not significant ($\beta = 0.028, t = 0.640, p = 0.522$). The findings indicate that EK significantly influences GSC directly, while the mediating role of ATT and the moderating role of SN are not supported in this model. These results underscore the importance of EK as a key driver of green sustainable consumption.

Discussion

Our findings indicate that EK has a significant positive effect on GSC, albeit with a smaller magnitude ($\beta = 0.097$, $p = 0.035$). This result aligns with prior studies that suggest knowledge can reduce skepticism, as better-informed consumers are more likely to trust environmental claims (Lee & Cheong, 2024). However, our study also reveals that EK alone may not significantly alter attitudes or skepticism. This finding partially supports prior research by Zhou (2015) and Uddin et al. (2023), which suggested that knowledge's impact on skepticism is often moderated by factors such as social trust or political beliefs.

Interestingly, our findings contrast with Isaac & Grayson (2020), who emphasized that targeted persuasion knowledge interventions could mitigate skepticism. This discrepancy suggests that while EK plays a role, it may need to be coupled with specific strategies to reduce GSC effectively.

Contrary to expectations, ATT did not mediate the relationship between EK and GSC. This result diverges from studies suggesting that positive attitudes are a crucial link between knowledge and behavior (Khoiriyah & Toro, 2018; Syadzwina & Astuti, 2021). One possible explanation is that attitudes toward specific products, such as green footwear, may not translate directly into broader shifts in skepticism. This aligns with previous research highlighting the multifaceted nature of skepticism, where product-specific attitudes might not overcome general distrust in environmental claims (Moutinho et al., 2011; Yoon & Chen, 2017).

Additionally, the limited influence of ATT may reflect the low internal consistency observed for this construct (Cronbach's $\alpha = 0.555$), raising concerns about its measurement validity. This suggests that future research should refine the operationalization of attitudes in the context of green skepticism.

The moderating effect of SN on the relationship between EK and GSC was not significant ($\beta = 0.028$, $p = 0.522$). This finding contrasts with previous studies suggesting that high social norms amplify the impact of knowledge on environmental behavior (Nyborg, 2018). This discrepancy could be attributed to differences in cultural or contextual factors, as the influence of social norms may vary across societies.

Our findings reinforce the importance of prioritizing social norms in green marketing strategies. Transparent and targeted communication efforts that align with societal expectations can significantly reduce skepticism and build trust (Leonidou & Skarmeas, 2017). Moreover, while EK remains important, it appears more effective when integrated into broader normative frameworks, echoing the recommendations of Matthes & Wonneberger (2014).

Interestingly, the limited role of ATT suggests that green marketing campaigns should focus less on altering product-specific attitudes and more on fostering general trust through credible environmental claims. This supports prior research highlighting the adverse effects of greenwashing and the need for transparent communication (Musgrove et al., 2018; Pham & Barretta, 2024).

Implications

Theoretically, this study highlights the critical role of social norms in reducing green skepticism, suggesting that persuasion models like the Elaboration Likelihood Model should integrate social factors alongside cognitive routes. Additionally, the lack of a mediating effect from attitudes challenges the traditional assumption of attitudes as a central link between knowledge and behavior, warranting further refinement of attitude constructs in future research. Lastly, the findings support a multidimensional approach to skepticism, incorporating individual, societal, and contextual factors to build more comprehensive theoretical models.

Practically, green marketing strategies should leverage social norms by emphasizing societal acceptance and community-driven initiatives to reduce skepticism and foster trust. Transparent and specific environmental claims, backed by credible certifications, are essential to addressing consumer doubts. Furthermore, enhancing environmental knowledge through campaigns tied to social engagement, such as collaborations with local influencers, can amplify the effectiveness of educational efforts.

Despite the valuable insights, this study has limitations. The low reliability and validity of ATT and GSC constructs indicate the need for more robust measurement tools. Additionally, cultural factors specific to the study context may have influenced the findings, particularly regarding the dominance of SN over other predictors. Future research should explore these relationships in diverse cultural settings to enhance generalizability.

FIGURES AND TABLES

Figure 1.

Research Model

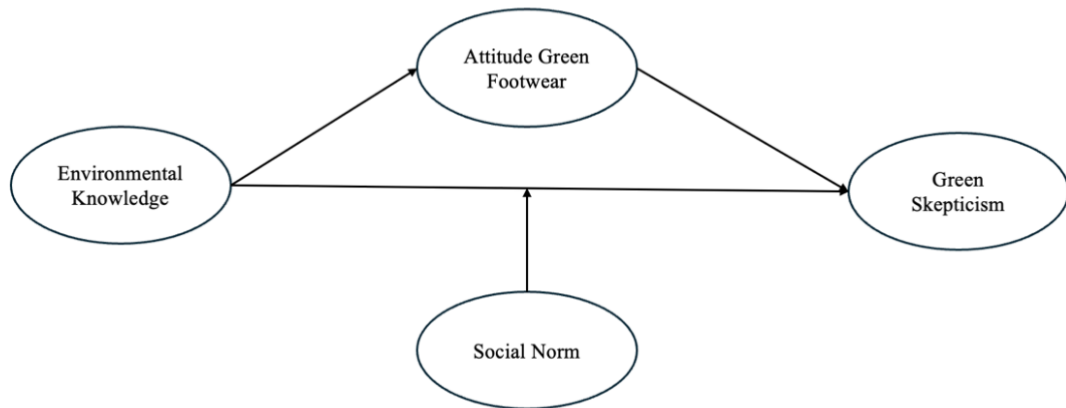


Table 1.

Hypotheses Testing

Path relationship	Coefficient	Mean	St.dev	T-value	P-value	Significant
H1: EK -> GSC	0.097	0.101	0.046	2.112	0.035	Yes
H2: EK -> ATT -> GSC	0.009	0.009	0.032	0.272	0.786	No
H3: SN x EK-> GSC	0.028	0.024	0.043	0.640	0.522	No

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Alhosseini Almodarresi, S. M., Tabataba'i-Nasab, S. M., Bagheri Garabollagh, H., & Mohammadi, F. (2019). Does citizenship behavior have a role in changing attitude toward green products? *International Journal of Management Science and Engineering Management*, 14(4), 284–292. <https://doi.org/10.1080/17509653.2018.1563874>
- Andre, P., Boneva, T., Chopra, F., & Falk, A. (2024). Misperceived Social Norms and Willingness to Act Against Climate Change. *Review of Economics and Statistics*, 1–46. https://doi.org/10.1162/rest_a_01468
- Bingaman, J., Kipkoech, G., & Crowley, J. P. (2022). Inoculation & Greenwashing: Defending Against Misleading Sustainability Messaging. *Communication Reports*, 35(3), 135–147. <https://doi.org/10.1080/08934215.2022.2048877>
- Bitner, Mary. J., & Obermiller, Carl. (1985). The Elaboration Likelihood Model: Limitations and Extensions in Marketing. *Advances in Consumer Research* .
- Bursan, R., Wiryawan, D., Jimad, H., Listiana, I., Riantini, M., Yanfika, H., Widyastuti, R., Mutolib, A., & Adipathy, D. A. (2022). Effect of Consumer Skepticism on Consumer Intention in Purchasing Green Product. *IOP Conference Series: Earth and Environmental Science*, 1027(1), 012037. <https://doi.org/10.1088/1755-1315/1027/1/012037>
- Carpenter, C. J. (2020). Elaboration Likelihood Model. In *The International Encyclopedia of Media Psychology* (pp. 1–14). Wiley. <https://doi.org/10.1002/9781119011071.iemp0070>
- Chan, R. Y. K., & Lau, L. B. Y. (2000). Antecedents of green purchases: a survey in China. *Journal of Consumer Marketing*, 17(4), 338–357. <https://doi.org/10.1108/07363760010335358>
- Činjurević, M., Agić, E., & Peštek, A. (2018). When Consumers are in Doubt, You Better Watch Out! The Moderating Role of Consumer Skepticism and Subjective Knowledge in the Context of Organic Food Consumption. *Zagreb International Review of Economics and Business*, 21(s1), 1–14. <https://doi.org/10.2478/zireb-2018-0020>
- Foreh, M. R., & Grier, S. (2003). When Is Honesty the Best Policy? The Effect of Stated Company Intent on Consumer Skepticism. *Journal of Consumer Psychology*, 13(3), 349–356. https://doi.org/10.1207/S15327663JCP1303_15
- Frewer, L. J., Howard, C., Hedderley, D., & Shepherd, R. (1997). The Elaboration Likelihood Model and Communication About Food Risks. *Risk Analysis*, 17(6), 759–770. <https://doi.org/10.1111/j.1539-6924.1997.tb01281.x>

- Griskevicius, V., Tybur, J. M., & Van den Bergh, B. (2010). Going green to be seen: Status, reputation, and conspicuous conservation. *Journal of Personality and Social Psychology*, 98(3), 392–404. <https://doi.org/10.1037/a0017346>
- Hair, J., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*.
- Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: updated guidelines. *Industrial Management & Data Systems*, 116(1), 2–20. <https://doi.org/10.1108/IMDS-09-2015-0382>
- Hutahaean, C. I., & Kurnia, P. R. (2019). INFLUENCE OF NON-DEMOGRAPHIC FACTORS ON INDONESIAN CONSUMERS PURCHASE INTENTION TOWARDS GREEN PRODUCTS. *ASEAN Marketing Journal*, 11(1). <https://doi.org/10.21002/amj.v11i1.12099>
- Isaac, M. S., & Grayson, K. (2020). Priming skepticism: Unintended consequences of one-sided persuasion knowledge access. *Psychology & Marketing*, 37(3), 466–478. <https://doi.org/10.1002/mar.21313>
- Ismagilova, E., Dwivedi, Y. K., & Rana, N. (2021). *The Use of Elaboration Likelihood Model in eWOM Research: Literature Review and Weight-Analysis* (pp. 495–505). https://doi.org/10.1007/978-3-030-85447-8_41
- J. Kitchen, P., Kerr, G., E. Schultz, D., McColl, R., & Pals, H. (2014). The elaboration likelihood model: review, critique and research agenda. *European Journal of Marketing*, 48(11/12), 2033–2050. <https://doi.org/10.1108/EJM-12-2011-0776>
- Jacques, P. (2006). The Rearguard of Modernity: Environmental Skepticism as a Struggle of Citizenship. *Global Environmental Politics*, 6(1), 76–101. <https://doi.org/10.1162/glep.2006.6.1.76>
- Khoiriyah, S., & Toro, M. J. S. (2018). Attitude Toward Green Product, Willingness To Pay And Intention To Purchase. *International Journal of Business and Society*, 19.
- Klimmt, C. (2011). *Das Elaboration-Likelihood-Modell*. Nomos. <https://doi.org/10.5771/9783845260327>
- Kotowski, M. R., & Young, H. (2012). The Elaboration Likelihood Model: A 30-Year Review. In *Advertising Theory* (pp. 81–98). Routledge. <https://doi.org/10.4324/9780203149546-13>
- Lee, J., & Cheong, H. J. (2024). Exploring the Relationship between Consumer Knowledge and Skepticism towards Pro-Environmental Advertising: An Empirical Investigation. *KOME*, 12(1). <https://doi.org/10.17646/KOME.of.10>
- Leonidou, C. N., & Skarmeas, D. (2017). Gray Shades of Green: Causes and Consequences of Green Skepticism. *Journal of Business Ethics*, 144(2), 401–415. <https://doi.org/10.1007/s10551-015-2829-4>

- Leung, R., & Luximon, A. (2021). Green design. In *Handbook of Footwear Design and Manufacture* (pp. 459–476). Elsevier. <https://doi.org/10.1016/B978-0-12-821606-4.00018-1>
- Lien, N.-H. (2001). Elaboration Likelihood Model in Consumer Research: A Review. *Proceedings of the National Science Council, 11*(4), 301–310.
- Luo, B., Sun, Y., Shen, J., & Xia, L. (2020). How does green advertising skepticism on social media affect consumer intention to purchase green products? *Journal of Consumer Behaviour, 19*(4), 371–381. <https://doi.org/10.1002/cb.1818>
- Martins, A. (2024, March 28). *Most Consumers Want Sustainable Products and Packaging*. Business News Daily. <https://www.businessnewsdaily.com/15087-consumers-want-sustainable-products.html>
- Matthes, J., & Wonneberger, A. (2014). The Skeptical Green Consumer Revisited: Testing the Relationship Between Green Consumerism and Skepticism Toward Advertising. *Journal of Advertising, 43*(2), 115–127. <https://doi.org/10.1080/00913367.2013.834804>
- Mohr, L. A., Eroglu, D., & Ellen, P. S. (1998). The Development and Testing of a Measure of Skepticism Toward Environmental Claims in Marketers' Communications. *Journal of Consumer Affairs, 32*(1), 30–55. <https://doi.org/10.1111/j.1745-6606.1998.tb00399.x>
- Mostafa, M. M. (2007). Gender differences in Egyptian consumers? green purchase behaviour: the effects of environmental knowledge, concern and attitude. *International Journal of Consumer Studies, 31*(3), 220–229. <https://doi.org/10.1111/j.1470-6431.2006.00523.x>
- Moutinho, L., Albayrak, T., Caber, M., & Herstein, R. (2011). The Influence of Skepticism on Green Purchase Behaviour. *International of Business and Social Sciences, 2*(13), 189–197.
- Munerah, S., Koay, K. Y., & Thambiah, S. (2021). Factors influencing non-green consumers' purchase intention: A partial least squares structural equation modelling (PLS-SEM) approach. *Journal of Cleaner Production, 280*, 124192. <https://doi.org/10.1016/j.jclepro.2020.124192>
- Musgrove, C. (“Casey”) F., Choi, P., & Chris Cox, K. (2018). Consumer Perceptions of Green Marketing Claims: An Examination of the Relationships with Type of Claim and Corporate Credibility. *Services Marketing Quarterly, 39*(4), 277–292. <https://doi.org/10.1080/15332969.2018.1514794>
- Neureiter, A., Stubenvoll, M., & Matthes, J. (2024). Is It Greenwashing? Environmental Compensation Claims in Advertising, Perceived Greenwashing, Political Consumerism, and Brand Outcomes. *Journal of Advertising, 53*(4), 511–529. <https://doi.org/10.1080/00913367.2023.2268718>

- Nyborg, K. (2018). Social Norms and the Environment. *Annual Review of Resource Economics*, 10(1), 405–423. <https://doi.org/10.1146/annurev-resource-100517-023232>
- Pagiaslis, A., & Krontalis, A. K. (2014). Green Consumption Behavior Antecedents: Environmental Concern, Knowledge, and Beliefs. *Psychology & Marketing*, 31(5), 335–348. <https://doi.org/10.1002/mar.20698>
- Petty, R. E., & Cacioppo, J. T. (1984). Source Factors and The Elaboration Likelihood Model of Persuasion. *Advances in Consumer Research*, 11, 668–672.
- Petty, R. E., & Cacioppo, J. T. (1986). *The Elaboration Likelihood Model of Persuasion* (pp. 123–205). [https://doi.org/10.1016/S0065-2601\(08\)60214-2](https://doi.org/10.1016/S0065-2601(08)60214-2)
- Pham, N. T., & Barretta, P. G. (2024). Green Marketing or Greenwashing: How Consumers Evaluate Environmental Ads. *Journal of Applied Business and Economics*, 26(1). <https://doi.org/10.33423/jabe.v26i1.6808>
- Ringle, C. M., Wende, S., & Becker, J.-M. (2024). *SmartPLS 4* (4). SmartPLS. <https://www.smartpls.com>
- Risqiani, R., & Maemunah, S. (2019). Building the Attitude of Consumer Concern for Environmentally Friendly Products. *Business and Entrepreneurial Review*, 15(2), 201–212. <https://doi.org/10.25105/ber.v15i2.4634>
- Rucker, D. D., & Petty, R. E. (2006). Increasing the Effectiveness of Communications to Consumers: Recommendations Based on Elaboration Likelihood and Attitude Certainty Perspectives. *Journal of Public Policy & Marketing*, 25(1), 39–52. <https://doi.org/10.1509/jppm.25.1.39>
- Sher, P. J., & Lee, S.-H. (2009). Consumer skepticism and online reviews: An Elaboration Likelihood Model perspective. *Social Behavior and Personality: An International Journal*, 37(1), 137–143. <https://doi.org/10.2224/sbp.2009.37.1.137>
- Sivapalan, A., Jebarajakirthy, C., Saha, R., Mehta, P., Balaji, M. S., & Maseeh, H. I. (2024). Green skepticism: review and research agenda. *Marketing Intelligence & Planning*, 42(8), 1541–1580. <https://doi.org/10.1108/MIP-04-2023-0179>
- Syadzwin, M. N., & Astuti, R. D. (2021). Linking green skepticism to green purchase behavior on personal care products in Indonesia. *IOP Conference Series: Earth and Environmental Science*, 716(1), 012045. <https://doi.org/10.1088/1755-1315/716/1/012045>
- Tenenhaus, M., Vinzi, V. E., Chatelin, Y.-M., & Lauro, C. (2005). PLS path modeling. *Computational Statistics & Data Analysis*, 48(1), 159–205. <https://doi.org/10.1016/j.csda.2004.03.005>
- Uddin, S. M. F., Khan, M. N., Faisal, M. N., & Kirmani, M. D. (2023). Demystifying the green purchasing behavior of young consumers: Moderating role of green skepticism. *Journal of Global Scholars of Marketing Science*, 33(2), 264–284. <https://doi.org/10.1080/21639159.2022.2163415>

- Ullah, S., & S. Mateti, R. (2021). Do appearances deceive? The curious case of CSR activities and shunned companies. *Corporate Social Responsibility and Environmental Management*, 28(1), 11–29. <https://doi.org/10.1002/csr.2028>
- Vesely, S., & Klöckner, C. A. (2018). How anonymity and norms influence costly support for environmental causes. *Journal of Environmental Psychology*, 58, 27–30. <https://doi.org/10.1016/j.jenvp.2018.07.013>
- Wang, E. S.-T., Chang, S.-C., & Li, F.-Y. (2024). Effects of prosocial norms on consumers' social value perceptions, attitudes, and repurchase intentions toward green products. *Present Environment and Sustainable Development*, 18(1), 65–77. <https://doi.org/10.47743/pesd2024181005>
- Yang, S.-F. (2015). An eye-tracking study of the Elaboration Likelihood Model in online shopping. *Electronic Commerce Research and Applications*, 14(4), 233–240. <https://doi.org/10.1016/j.elerap.2014.11.007>
- Yoon, D., & Chen, R. J. C. (2017). A Green Shadow: The Influence of Hotel Customers' Environmental Knowledge and Concern on Green Marketing Skepticism and Behavioral Intentions. *Tourism Analysis*, 22(3), 281–293. <https://doi.org/10.3727/108354217X14955605216032>
- Zarei, A., & Maleki, F. (2018). From Decision to Run: The Moderating Role of Green Skepticism. *Journal of Food Products Marketing*, 24(1), 96–116. <https://doi.org/10.1080/10454446.2017.1266548>
- Zhou, M. (2015). Public environmental skepticism: A cross-national and multilevel analysis. *International Sociology*, 30(1), 61–85. <https://doi.org/10.1177/0268580914558285>