

THE GREENWASHING TRAP: HOW MISLEADING MARKETING AFFECTS CONSUMER GREEN PURCHASING HABITS

Neringa VILKAITĖ-VAITONĖ 

*Institute of Dynamic Management, Faculty of Business Management,
Vilnius Gediminas Technical University, Saulėtekio av. 11, LT-10223 Vilnius, Lithuania*

Article History:

- received 24 March 2024
- accepted 15 October 2024

Abstract. The rising environmental concern has driven organizations to adopt green marketing practices. However, a growing number of organizations have been engaging in greenwashing practices, which mislead customers about their environmental performance. This can have negative consequences for the organization, the industry, and society as a whole. Despite the growing concern about greenwashing, there is limited research on how it affects consumers' purchasing decisions. To address this gap, we conducted a study to explore the effect of greenwashing perception on green purchase intention in the touristic accommodation industry. Primary data was collected from 693 tourists who visited the Canary Islands, and structural equation modeling (SEM) was used to verify hypotheses with the help of AMOS 29 software. The findings revealed that greenwashing perception does not directly affect green purchasing intention or impact green trust. However, green trust was found to be a significant predictor of sustainable choices in the touristic accommodation industry. Additionally, the study provided evidence that previous touristic accommodation experience moderates the relationship between green trust and green purchase intention and the relationship between greenwashing perception and green trust. This research has important implications for marketers and adds to the body of knowledge on greenwashing and green purchasing. By incorporating the Stimulus-Organism-Response (SOR) paradigm, this study uncovers new linkages that better help understand the phenomenon of green purchasing among travelers.

Keywords: greenwashing, green purchase, sustainable accommodation, green trust, purchase intention, purchase behavior, environmentally friendly tourism, green marketing.

JEL Classification: M31.

 Corresponding author. E-mail: neringa.vilkaite-vaitone@vilniustech.lt

1. Introduction

The depletion of natural resources, increasing environmental pollution, and concerns regarding the sustainability of future generations have brought the issue of promoting environmentally friendly behaviors to the forefront (Ahmad et al., 2022; Pham, 2019; Santos et al., 2024a). This has led to a growing awareness of the need for sustainable practices, particularly in the tourism industry, where organizations and consumers are mobilizing to work together to save the environment. To demonstrate their commitment to environmental sustainability, tourism organizations are developing green marketing solutions to showcase their concern for the environment (Isac et al., 2024). However, despite these efforts, the phenomenon of greenwashing, where companies promise more environmental benefits than they actually deliver, is becoming increasingly common (Braga Junior et al., 2019; Jog & Singhal, 2020; Sebe-

rini et al., 2024). Such practices are not only deceitful but also irresponsible (Santos et al., 2024b). They have the potential to mislead consumers and erode their trust in environmentally responsible organizations, posing a threat to society at large. Despite the possible negative outcomes, tourism organizations continue to practice greenwashing in order to appeal to environmentally aware customers, improve their reputation, and stay ahead of the competition. This enables them to seem environmentally friendly without implementing substantial, sustainable improvements, which could save costs and help them meet the established standards for "green" practices in the field (Alyahia et al., 2024).

Existing research has primarily focused on factors influencing corporate greenwashing behavior (Gomes et al., 2024; Sensharma et al., 2022), its measurement (Dorfleitner & Utz, 2023; Nemes et al., 2022; Papagiannakis et al., 2024), people's abilities to identify greenwashing (Eng

et al., 2021), mechanisms of greenwashing behavior in environmental, social and governance disclosures (Yu et al., 2020), conceptual evolution on social networks (Blazkova et al., 2023). While studies have examined the effects of greenwashing in various industries, including fashion (Lu et al., 2022; Promalessy & Handriana, 2024), energy (Jin et al., 2024; Nguyen et al., 2021; Zhang et al., 2018), personal care (Jog & Singhal, 2020), finance (Liu et al., 2024; Wu, 2024) tobacco (Moran et al., 2024) and food (Dreist et al., 2025; Leblebici Kocer et al., 2023), there is a considerable gap in knowledge regarding consumers' perception of greenwashing and its associated consequences, particularly within the touristic accommodation industry which, as per Papagiannakis et al. (2024), has long been accused of engaging in greenwashing practices. This paper intends to fill this gap by analyzing the direct effect of greenwashing perception on green purchases and the role of trust in this relationship. As organizations strive to earn the trust of environmentally conscious consumers (Isac et al., 2024), evaluating the impact of trust on this relationship is crucial. Additionally, we will explore whether the previous accommodation experience moderates the relationship between greenwashing perception and purchase intention. Therefore, this study seeks to address the following research questions:

- RQ1. How does greenwashing perception influence green purchase intention in the tourist accommodation industry?
- RQ2. Will green trust have a mediating effect between greenwashing perception and purchase intention?
- RQ3. Will the previous accommodation experience moderate the relationship between greenwashing perception and purchase intention?

By addressing these research questions, this study aims to explore the impact of greenwashing perceptions on green purchase intentions by examining the mediating role of green trust and the moderating role of previous purchasing experience. Using the Stimulus-Organism-Response (SOR) theory as a basis, we have developed an integrated research model that focuses on the possible mediation and moderation.

The subsequent sections of this article will provide a review of relevant literature and the development of research hypotheses. This will be followed by a presentation of the research methodology, key findings, and a thorough discussion of the results. Finally, we will outline our conclusions.

2. Literature review

2.1. Stimulus-organism-response (SOR) framework

Numerous studies have focused on green purchasing, predominantly relying on the theory of planned behavior (Ch et al., 2021; Chin et al., 2018; Kabel et al., 2021). This theory postulates that subjective norms, perceived behav-

ioral control, and attitude influence consumer intention and behavior. This approach has not fully explored other contributing factors to green purchase behavior despite its usefulness. To address this gap, the present study adopts the SOR theory to investigate additional factors such as greenwashing and green trust.

The SOR paradigm, a behavioral approach rooted in environmental psychology, seeks to understand how individuals respond to various situations by treating themselves positively or negatively (Kaur & Luchs, 2022). This paradigm considers the behavioral responses (R) of an organism while taking into account the impact of external stimuli (S) on internal states (O), as explained by Luo et al. (2020). The application of SOR theory in the field of marketing is particularly crucial as it enables marketers to identify external stimuli that can be manipulated to influence consumers' behavior.

Drawing on the SOR theory, greenwashing is viewed as an external stimulus that triggers consumer reactions, leading to specific mental states. The intervention process, which includes both the intellectual and emotional states of consumers prior to their response to external stimuli, is considered a component of an organism (Islam et al., 2020). In this regard, the present study posits that green trust falls into the realms of cognition and affection and views green trust as an organism state. The organism processes stimuli and responds through consumers' behaviors, which may involve purchase intentions (Islam et al., 2020). Based on the discussions above, we propose a primary model based on the SOR paradigm to examine how greenwashing (S) influences green trust (O) and subsequently affects purchase intention (R).

2.2. Hypotheses development

Green purchase intention is a crucial aspect of sustainable consumption behavior, which refers to the subjective probability that consumers will purchase green products (Akturan, 2018). It reflects consumers' plans to purchase certain products and their particular quantities in a given period. Green products are characterized by features that differentiate them from conventional products, and they are designed to meet green consumption requirements (Braga Junior et al., 2019). However, depending on the practices of the organizations, green products may be genuinely eco-friendly, or they may be characterized as greenwashing products designed to deceive consumers with false claims of sustainability (Dahl, 2010).

The term "greenwashing" was first coined by American environmentalist J. Westerveld in 1986. He accused hotels of greenwashing by encouraging guests to reuse towels to appear environmentally conscious when in reality, their motives were purely profit-driven (Akturan, 2018). According to Dahl (2010), greenwashing refers to the practice of making false or exaggerated claims about a company's sustainability practices to gain a competitive advantage. The primary goal of greenwashing is to create the impression that the company is taking steps to manage its

environmental impact responsibly, even if that is not the case (Bulut et al., 2021).

In recent years, several studies have examined the impact of greenwashing perception on consumers' green purchase intention. According to Sun and Shi (2022), Lu et al. (2022), greenwashing perception has a significant negative effect on consumers' green purchasing intentions. The more consumers perceive that a company is engaging in misleading green marketing practices, the less likely they are to buy products from that company. Conversely, if consumers believe that a company is genuinely committed to environmentally responsible practices, they are more likely to purchase products from that company. Based on the literature review, we posit that:

H1. Greenwashing perception negatively affects green purchase intention.

Numerous factors, such as the business, salesperson, item, service, brand, and environment, can impact consumer trust (Komiak & Benbasat, 2004). Santos et al. (2024c), argue that greenwashing undermines the authenticity of a company's sustainability practices and communications, resulting in doubts regarding the company's trust. Moreover, Wang et al. (2020) found that greenwashing behavior has led to a significant lack of trust in both eco-friendly products and the industry as a whole. This poses a particular challenge for building trust among environmentally conscious customers, who constitute a crucial demographic (Isac et al., 2024). Chen and Chang (2013), Guo et al. (2017) also note that when consumers perceive greenwashing, it can harm the company's reputation and product trust. In an empirical study within the fast fashion industry, Promalessy and Handriana (2024) found that greenwashing exacerbates consumer green skepticism, leading to increased consumer distrust. Based on empirical evidence, we hypothesize that:

H2. Consumers' perception of greenwashing has a negative effect on their green trust.

According to Nguyen and Pervan (2020), consumer behavior towards an organization is significantly influenced by the trust. Establishing trust with consumers has been noted to lead to a higher level of green purchasing. On the other hand, a failure to develop trust may lead to difficulties in convincing consumers of the value of a product. Studies by Chen and Chang (2012), as well as Nekmahmud et al. (2022), have shown that green trust has a significant impact on purchase intentions among consumers. The former study identified green trust as a crucial determinant of purchase intentions among Taiwanese consumers in purchasing information and electronics products (Chen & Chang, 2012). The latter study found a positive association between green trust and intention to purchase among non-European travelers. However, this impact was not apparent among European travelers. Given that trust is a critical antecedent of green purchase intentions, this study proposes that:

H3. Green trust positively affects green purchase intention.

Research has shown that trust is crucial in boosting consumer confidence in their decisions (Guenzi et al., 2009). However, if consumers are presented with enough evidence of greenwashing, their trust in organizations may be eroded, resulting in a decrease in their purchasing intentions (Chen & Deng, 2016; Leonidou et al., 2013; Timmons et al., 2024). In fact, Natasya et al. (2023) have highlighted that perceptions of greenwashing can have a damaging effect on consumer trust in organizations, which in turn negatively impacts purchase intentions. Based on the review of the literature, we anticipate that:

H4. Green trust mediates the relationship between greenwashing perception and green purchase intention.

According to Barber (2014), non-green accommodations have a significant negative impact on the environment. To address these concerns, consumers are increasingly searching for eco-friendly lodging options that prioritize water and energy conservation, emissions reduction, sustainable purchasing policies, and waste management. It is presumed that sustainable accommodations are more environmentally friendly. Therefore, the relationships between research constructs may differ between two groups of tourists: those who stayed at sustainable accommodations during their last trip (Group 1) and those who selected unsustainable alternatives (Group 2). The following hypotheses have been developed:

H5a. The previous accommodation experience moderates the relationship between greenwashing perception and green purchase intention.

H5b. The previous accommodation experience moderates the relationship between greenwashing perception and green trust.

H5c. The previous accommodation experience moderates the relationship between green trust and green purchase intention.

Figure 1 lays out the plausible relationships between the variables in question. As previously stated, ample evidence suggests that the perception of greenwashing has both a direct and indirect impact on the intention to buy

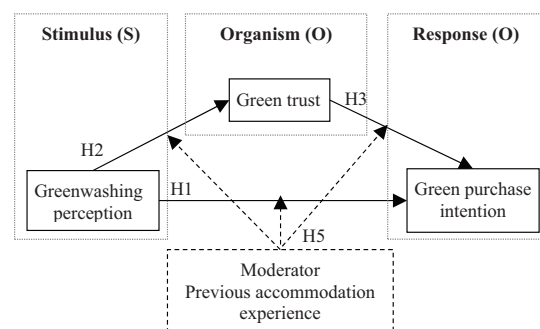


Figure 1. Conceptual framework

green products. Furthermore, it is proposed that green trust can act as a mediator in the link between the greenwashing perception and the intention to purchase. It is also possible that past experiences with accommodations may moderate all the relationships in the model.

3. Methods

This study employed a positivist approach, utilizing recognized scholarly evidence and principles to gather data. Research hypotheses were formed based on prior studies, and a quantitative research design was utilized for data collection and analysis. The study focused on tourists who had visited the Canary Islands within the past 12 months, encompassing eight islands situated in the Atlantic Ocean: Tenerife, Gran Canaria, Lanzarote, Fuerteventura, La Palma, La Gomera, El Hierro, and La Graciosa.

We used pre-validated items to construct a structured questionnaire to test our proposed hypotheses. To assess greenwashing perception, we adopted a 4-item scale previously used by Braga Junior et al. (2019). To measure the level of green trust, we employed a three-item scale from Ahmad et al. (2022) and Román-Augusto et al. (2022), specifically designed to evaluate eco-friendly claims, reputation, and belief in green tourist accommodations. The study evaluated consumers' green purchase intention using a set of four items recommended by Ku et al. (2012), Nekmahmud and Fekete-Farkas (2020), Román-Augusto et al. (2022), utilizing a 5-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5).

The questionnaire underwent several revisions to ensure its reliability. Esteemed academic professionals provided valuable input, which was incorporated into the questionnaire with minor modifications. Additionally, a pre-study was conducted with a convenient sample of 40 students to guarantee the utmost reliability of each construct. The feedback received from the students was taken into consideration, and slight adjustments were made to the wording of the questionnaire.

The non-governmental organization Canary Green' provided valuable assistance in collecting data for this study. An online questionnaire was distributed through a specially organized event and shared on "Canary Green's" social media pages (including Facebook, Instagram, LinkedIn, and Twitter) to increase response rates. "Lanzarote Retreats", a family-run company that offers holiday accommodations, also invited their newsletter subscribers to participate in the survey. Respondents were assured that their participation was voluntary and that their responses would be kept confidential solely for research purposes. To encourage participation, respondents were offered an incentive of a week's stay at a sustainable hotel. Data was collected between December 2022 and February 2023.

The research included a screening question to ensure that only qualified respondents were included (those who had visited at least one of the Canary Islands during the last 12 months). Of the 747 questionnaires received, 693

were deemed acceptable for the final research. 60.6% of the respondents were female, while 38.8% were male, as indicated in Table 1. Most participants (57.1%) were between 18 and 29 years old. Regarding employment status, 66.2% of the respondents were employed, 21.2% were students, and 10.4% were unemployed or retired. The majority of the respondents were from the United Kingdom (21.1%), followed by Germany (18.9%) and mainland Spain (13.4%).

Table 1. Demographic profile of the respondents

Demographics		No. of respondents	%
Gender	Female	420	60.6
	Male	269	38.8
	Other	4	0.6
Age	18–29 years	396	57.1
	30–39 years	98	14.1
	40–49 years	69	10.0
	50–59 years	69	10.0
	60 or above	61	8.8
Occupation	Student	147	21.2
	Employee	332	47.9
	Self-employed	127	18.3
	Unemployed or retired	72	10.4
	Other	15	2.2
Place of residence	United Kingdom	146	21.1
	Germany	131	18.9
	Spain	93	13.4
	Sweden	51	7.4
	Poland	37	5.3
	Italy	32	4.6
	France	29	4.2
	Lithuania	21	3.0
	Other EU	95	13.7
	Other	58	8.4

The suggested model was evaluated using SPSS 29 and AMOS 29 software. Covariance-based structural equation modelling (SEM) was used to test the hypotheses.

4. Results

4.1. Common method bias

The dependent and independent variables were gathered from the same source, so there is a potential for common method bias. To address this concern, the study conducted a Harman single-factor test under Kock et al.'s (2021) guidelines. Exploratory factor analysis (EFA) was performed on all measurement items, and the un-rotated factor so-

lutions indicated that a single factor accounted for only 37.73% of the total variance, with the single-factor variance falling below 50%. Based on these findings, it was determined there is no common method bias in this study.

4.2. Measurement model

In order to ensure the accuracy and credibility of the measurements, the study utilized AMOS and the maximum likelihood estimation procedure to conduct a confirmatory factor analysis (CFA), given that the measurements

Table 2. Results of reliability and validity

Measurement items		FL	CR	AVE	α
Green-washing	I'm sure that sustainable hotels, in the majority, are only sustainable on their labels	0.596	0.755	0.436	0.732
	The majority of hotels position themselves to be more sustainable than they really are	0.689			
	The advertising of sustainable hotels is never true	0.680			
	Hotels' websites always exaggerate their services' sustainable characteristics	0.671			
Green trust	Eco-friendly claims of sustainable hotels are commonly reliable	0.655	0.784	0.549	0.781
	The eco-friendly reputation of sustainable hotels is commonly trustworthy	0.776			
	I believe that sustainable hotels live up to their promises to care for our health and the environment	0.784			
Green purchase intention	My willingness to book a room in a sustainable hotel is very high	0.752	0.783	0.478	0.808
	The probability that I would consider booking sustainable accommodation when there are similar alternatives is very high	0.587			
	I would like to choose sustainable accommodation more frequently	0.643			
	I intend to book sustainable hotels due to their ecological and health performance	0.766			

were based on subjective evaluations. The study assessed the model's reliability and validity by calculating factor loadings (FL), composite reliability (CR), average variance extracted (AVE), and Cronbach's alpha (α) (Table 2). The model was deemed reliable since the CR scores exceeded the threshold of 0.70 (Hair et al., 2010). While the AVE for two constructs (greenwashing and green purchase intention) fell below the recommended threshold of 0.5, such values were deemed acceptable in terms of convergent validity as long as the CR values exceeded 0.6 (Fornell & Larcker, 1981). The Cronbach's alphas for all constructs ranged from 0.732 to 0.808.

It was discovered that the square root of the AVE of each of the constructs in the study exceeded the squared correlation of the constructs, implying that the convergent validity was confirmed in all instances (Hair et al., 2010) (Table 3).

Table 3. Results of discriminant validity

Constructs	Green-washing	Green trust	Green purchase intention
Greenwashing	0.660		
Green trust	-0.061	0.741	
Green purchase intention	-0.016	0.506	0.691

To evaluate the accuracy of our measurement model, we estimated multiple goodness-of-fit indices. A good fit for the model is indicated by a Chi-square ratio (χ^2/df) value between 2 and 5, as well as CFI and TLI values greater than or equal to 0.90, AGFI greater than or equal to 0.80, and RMSEA less than or equal to 0.08 (Hair et al., 2010). The results of our analysis showed that our model fits well, with statistics above the threshold values ($\chi^2/df = 2.912$, CFI = 0.963, TLI = 0.951, AGFI = 0.941, RMSEA = 0.053).

4.3. Hypotheses testing

The structural model was utilized to evaluate the conceptual model, and the goodness statistics were employed to assess its performance. Table 4 displays the results of the direct relationships for the entire sample.

Table 4. Results and hypotheses testing

Hypothesis	Effect	Estimate (β)	p-value	Hypothesis supported
H1: Greenwashing \rightarrow Green purchase intention	Direct	0.018	0.672	No
H2: Greenwashing \rightarrow Green trust	Direct	-0.052	0.177	No
H3: Green trust \rightarrow Green purchase intention	Direct	0.643	0.000	Yes
H4: Greenwashing \rightarrow Green trust \rightarrow Green purchase intention	In-direct	0.017	0.768	No

The study's findings suggest that there is no direct relationship between consumers' perception of greenwashing and their intention to purchase green products, which contradicts hypothesis H1. Additionally, hypothesis 2 was rejected due to the insignificant impact of greenwashing on green trust. However, the study did reveal a significant positive relationship between green trust and green purchase intention, supporting hypothesis 3.

To explore the mediating effect of green trust and its association with the stimulus factor (perception of greenwashing) and response factor (green purchase intention), we used a bootstrap procedure with 5,000 subsamples to calculate the 95% confidence interval after correcting for bias in the indirect effect. Results indicated that greenwashing did not have a significant impact on green purchase intention, either directly or indirectly.

We also conducted a multi-group analysis to investigate the possible moderating effect of previous accommodation experience. Participants were categorized into two groups based on their previous stays: sustainable accommodations (Group 1) and non-sustainable accommodations (Group 2). Both research models displayed a good fit for the data, as shown in Table 5.

Table 5. Multi-group analysis

Path	Stayed at sustainable accommodation (n = 334)		Stayed at non-sustainable accommodation (n =)	
	Estimate (β)	p-value	Estimate (β)	p-value
Greenwashing → Green purchase intention	0.010	0.871	0.011	0.897
Greenwashing → Green trust	0.087	0.150	-0.215***	0.000
Green trust → Green purchase intention	0.624***	0.000	0.757***	0.000
Greenwashing → Green trust → Green purchase intention	0.010	0.938	0.011	0.937
Model fit indices	X ² /df = 2.072; CFI = 0.963; TLI = 0.947; AGFI = 0.930; RMSEA = 0.057		X ² /df = 2.180; CFI = 0.958; TLI = 0.939; AGFI = 0.929; RMSEA = 0.057	

The results of the multi-group analysis indicate that the relationship between green trust and green purchase intention was significant for tourists who stayed at sustainable accommodations. This relationship remained significant for those who chose non-sustainable alternatives as well (H5c). Additionally, a negative impact of greenwashing on green trust was observed in the latter group (H5b). These findings suggest that prior accommodation experiences play a moderating role in the relationships between greenwashing and green trust, and between green trust and purchase intention.

5. Discussion

While previous studies have indicated that greenwashing has a detrimental impact on consumers' purchasing decisions, there has been a lack of research exploring how green trust and prior purchasing experience influence the relationship between greenwashing perceptions and green purchasing intentions. Through examining these factors within the context of the tourist accommodation industry, we have discovered the following insights.

To our surprise, we were unable to establish a significant relationship (RQ1) between misleading marketing practices and consumers' green purchasing intentions through the data collected from tourists. Despite numerous studies in the field supporting the negative relationship between greenwashing and green purchase intention (Isac et al., 2024; Natasya et al., 2023; Zhang et al., 2018), our findings are consistent with a few other studies. For instance, Guerreiro and Pacheco (2021) did not support the proposed negative impact of greenwashing on green purchase intention. Similarly, Lopes et al. (2023) found that consumers' perception of prevalent greenwashing behavior among companies is positively associated with the circular consumption intention. The non-significant relationship between greenwashing and green purchase intention in our research may be attributed to a lack of accurate information on the impact of greenwashing on companies' broader consequences. The European Securities and Markets Authority (2023) stated that greenwashing allegations do not have a clear financial impact on firms, highlighting the absence of an effective market-based mechanism to prevent potential greenwashing behavior. Therefore, it is speculated whether consumers tend to forget and forgive. Additionally, consumers may not always be able to identify greenwashing, leading to a controversial response. For example, Volschenk et al. (2022) found that consumers reward greenwashing when it goes undetected, emphasizing the lack of consumer awareness of greenwashing. Similarly, Dutta-Powell et al. (2024) confirmed that companies using greenwashing ads have higher green credentials compared to those depicted in non-greenwashed ads.

The study yielded unexpected results as we were unable to establish a negative impact of greenwashing on consumer trust. This outcome is consistent with the findings of Baxter et al. (2024), who were equally surprised to discover that instances of greenwashing did not significantly alter consumer trust, and in many cases, trust levels even increased.

While greenwashing may not have a significant effect on green trust, the latter has a powerful influence on green purchasing behavior. Nguyen-Viet (2022) discovered a significant relationship between green trust and green purchase intention in a sample of 780 milk consumers in Vietnam. Moreover, Guerreiro and Pacheco (2021), Sharma and Kushwaha (2019) have corroborated this connection. The fact that these findings hold true across different regions and contexts bolsters the generalizability of the study's results.

The findings of the study revealed that the presence of green trust did not act as a mediator in the relationship between greenwashing perception and purchase intention (RQ2). This result might come as a valuable insight for marketers who face greenwashing issues. It implies that if dealt with appropriately, greenwashing may not significantly influence green purchase intention, nor affect it through trust. However, these results also raise some pertinent questions, such as why tourists still intend to book accommodations that are at the center of greenwashing scandals. Yet, the noteworthy negative impact of greenwashing on green trust in the group of tourists who stayed at non-sustainable accommodation (RQ3) provides some hope that the situation may change.

The study's results should be interpreted in the context of limitations. Firstly, the research only focused on tourist accommodation services, so a broader scope would lead to a more comprehensive understanding of the impact of greenwashing on green purchasing. Expanding the scope beyond tourist accommodation services would provide a broader understanding of the effect that greenwashing has on consumer behavior across different tourism segments. Additionally, the sample size was limited to those who have visited the Canary Islands, and a more diverse group of participants from different tourist destinations with varied cultural backgrounds would enhance the generalizability of the findings. The conceptual model only included two factors as determinants of behavioral intention, whereas considering a wider range of predictors in future studies could provide a more accurate depiction of the green purchasing phenomenon. Variables such as environmental concern, social influence, or perceived value could provide deeper insights into the complex motivations behind sustainable consumption. Finally, the study did not differentiate between various types of greenwashing, despite previous research indicating the differential impact of separate forms on purchasing behavior (Bladt et al., 2024; De Freitas Netto et al., 2020; De Jong et al., 2020). Therefore, future studies should consider measuring the direct effect of different types of greenwashing on purchase intention while also exploring the potential mediation of green trust.

6. Conclusions

This study delved into the influence of greenwashing perception on green purchase intentions, taking into account the mediating role of green trust and the moderating role of previous purchase experience, based on SOR theory. The data gathered from 693 tourists led to the conclusion that greenwashing does not significantly impact green trust or green purchase intention in the tourist accommodation industry. Additionally, green trust did not act as a mediator between greenwashing and green purchase intention. However, it was found that greenwashing had a significant impact on green trust for tourists who had opted for non-sustainable accommodation on their last trip.

The study makes several significant theoretical contributions to the literature on greenwashing and sustainable consumer behavior. Firstly, it underscores the pivotal role of trust in influencing green purchase intentions, thereby highlighting trust as a mediator between greenwashing perception and purchasing behavior. By providing empirical evidence that greenwashing does not directly or indirectly impact purchase intention, the research challenges established beliefs regarding the direct negative effects of greenwashing. Secondly, the multi-group analysis reveals that prior accommodation experiences have a moderating effect. It demonstrates that tourists without sustainable accommodation backgrounds are more susceptible to losing trust in green claims when exposed to greenwashing. This sheds light on the experiential aspect of consumers' responses to green marketing practices and extends the theoretical framework linking consumer behavior, trust, and sustainability claims.

The findings underscore significant practical implications for tourism entities aiming to bolster their marketing strategies and sustainability initiatives. In light of the pivotal role of green trust in advancing green purchasing, tourism organizations should place emphasis on establishing and upholding trust through authenticity, transparency, and equitable communication of implemented sustainable measures. Moreover, educating consumers on identifying genuine green practices may enable them to make more informed decisions and diminish the propensity to penalize brands for perceived greenwashing.

References

- Ahmad, F. Sh., Rosli, N. T., & Quoquab, F. (2022). Environmental quality awareness, green trust, green self-efficacy and environmental attitude in influencing green purchase behaviour. *International Journal of Ethics and Systems*, 38(1), 68–90. <https://doi.org/10.1108/IJOES-05-2020-0072>
- Akturan, U. (2018). How does greenwashing affect green branding equity and purchase intention? An empirical research. *Marketing Intelligence & Planning*, 36(7), 809–824. <https://doi.org/10.1108/MIP-12-2017-0339>
- Alyahia, M., Azazz, A. M. S., Fayyad, S., Elshaer, I. A., & Mohamad, A. A. A. (2024). Greenwashing behavior in hotels industry: The role of green transparency and green authenticity. *Sustainability*, 16(3), Article 1050. <https://doi.org/10.3390/su16031050>
- Barber, N. A. (2014). Profiling the potential "green" hotel guest: Who are they and what do they want? *Journal of Hospitality & Tourism Research*, 38(3), 361–387. <https://doi.org/10.1177/1096348012451462>
- Baxter, K., Ghandour, R., & Histon, W. (2024). Greenwashing and brand perception – A consumer sentiment analysis on organisations accused of greenwashing. *International Journal of Internet Marketing and Advertising*, 21(1/2), 149–179. <https://doi.org/10.1504/IJIMA.2024.140452>
- Bladt, D., Van Capelleveen, G., & Yazan, D. M. (2024). The influence of greenwashing practices on brand attitude: A multidimensional consumer analysis in Germany. *Business Strategy and the Environment*, 33(2), 597–625. <https://doi.org/10.1002/bse.3496>
- Blazkova, T., Pedersen, E. R. G., Andersen, K. R., & Rosati, F. (2023). Greenwashing debates on Twitter: Stakeholders and critical

- topics. *Journal of Cleaner Production*, 427, Article 139260. <https://doi.org/10.1016/j.jclepro.2023.139260>
- Braga Junior, S., Martínez, M. P., Correa, C. M., Moura-Leite, R. C., & Da Silva, D. (2019). Greenwashing effect, attitudes, and beliefs in green consumption. *RAUSP Management Journal*, 54(2), 226–241. <https://doi.org/10.1108/RAUSP-08-2018-0070>
- Bulut, C., Nazli, M., Aydin, E., & Haque, A. U. (2021). The effect of environmental concern on conscious green consumption of post-millennials: The moderating role of greenwashing perceptions. *Young Consumers*, 22(2), 306–319. <https://doi.org/10.1108/YC-10-2020-1241>
- Ch, T. R., Awan, T. M., Malik, H. A., & Fatima, T. (2021). Unboxing the green box: An empirical assessment of buying behavior of green products. *World Journal of Entrepreneurship, Management and Sustainable Development*, 17(4). <https://doi.org/10.1108/WJEMSD-12-2020-0169>
- Chen, K., & Deng, T. (2016). Research on the green purchase intentions from the perspective of product knowledge. *Sustainability*, 8(9), Article 943. <https://doi.org/10.3390/su8090943>
- Chen, Y., & Chang, C. (2012). Enhance green purchase intentions: The roles of green perceived value, green perceived risk, and green trust. *Management Decision*, 50(3), 502–520. <https://doi.org/10.1108/00251741211216250>
- Chen, Y. S., & Chang, C. H. (2013). Greenwash and green trust: The mediation effects of green consumer confusion and green perceived risk. *Journal of Business Ethics*, 114, 489–500. <https://doi.org/10.1007/s10551-012-1360-0>
- Chin, C.-H., Chin, C.-L., & Wong, W. P.-M. (2018). The implementation of green marketing tools in rural tourism: The readiness of tourists? *Journal of Hospitality Marketing & Management*, 27(3), 261–280. <https://doi.org/10.1080/19368623.2017.1359723>
- Dahl, R. (2010). Greenwashing: Do you know what you're buying. *Environmental Health Perspectives*, 118(6), 246–252. <https://doi.org/10.1289/ehp.118-a246>
- De Freitas Netto, S. V., Sobral, M. F. F., Ribeiro, A. R. B., & Soares, G. R. D. L. (2020). Concepts and forms of greenwashing: A systematic review. *Environmental Sciences Europe*, 32(1), Article 19. <https://doi.org/10.1186/s12302-020-0300-3>
- De Jong, M. D. T., Huluba, G., & Beldad, A. D. (2020). Different shades of greenwashing: Consumers' reactions to environmental lies, half-lies, and organizations taking credit for following legal obligations. *Journal of Business and Technical Communication*, 34(1), 38–76. <https://doi.org/10.1177/1050651919874105>
- Dorfleitner, G., & Utz, S. (2023). Green, green, it's green they say: A conceptual framework for measuring greenwashing on firm level. *Review of Managerial Science*, 18, 3463–3486. <https://doi.org/10.1007/s11846-023-00718-w>
- Dreist, D., Zühlsdorf, A., Spiller, A., & Kühl, S. (2025). Greenwashing in food labelling: Consumer deception by claims of climate neutrality and the importance of an interpretative labelling approach. *Food Quality and Preference*, 122, Article 105294. <https://doi.org/10.1016/j.foodqual.2024.105294>
- Dutta-Powell, R., Rhee, J. J., & Wodak, S. (2024). Two interventions for mitigating the harms of greenwashing on consumer perceptions. *Business Strategy and the Environment*, 33(2), 882–903. <https://doi.org/10.1002/bse.3520>
- Eng, N., DiRusso, C., Troy, C. L. C., Freeman, J. R., Liao, M. Q., & Sun, Y. (2021). "I had no idea that greenwashing was even a thing": Identifying the cognitive mechanisms of exemplars in greenwashing literacy interventions. *Environmental Education Research*, 27(11), 1599–1617. <https://doi.org/10.1080/13504622.2021.1976732>
- European Securities and Markets Authority. (2023). *The financial impact of greenwashing controversies*. Publications Office. <https://data.europa.eu/doi/10.2856/557305>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>
- Gomes, M., Marsat, S., Peillex, J., & Pijourlet, G. (2024). Does religiosity influence corporate greenwashing behavior? *Journal of Cleaner Production*, 434, Article 140151. <https://doi.org/10.1016/j.jclepro.2023.140151>
- Guenzi, P., Johnson, M. D., & Castaldo, S. (2009). Comprehensive model of customer trust in two retail stores. *Journal of Service Management*, 20(3), 290–316. <https://doi.org/10.1108/09564230910964408>
- Guerreiro, J., & Pacheco, M. (2021). How green trust, consumer brand engagement and green word-of-mouth mediate purchasing intentions. *Sustainability*, 13(14), Article 7877. <https://doi.org/10.3390/su13147877>
- Guo, R., Tao, L., Li, C. B., & Wang, T. (2017). A path analysis of greenwashing in a trust crisis among Chinese energy companies: The role of brand legitimacy and brand loyalty. *Journal of Business Ethics*, 140(3), 523–536. <https://doi.org/10.1007/s10551-015-2672-7>
- Hair, J. F., Balin, B. B., & Anderson, R. E. (2010). *Multivariate data analysis*. Maxwell Macmillan International Editions. https://doi.org/10.1007/978-3-642-04898-2_395
- Isac, N., Javed, A., Radulescu, M., Cismasu, I. D. L., Yousaf, Z., & Serbu, R. S. (2024). Is greenwashing impacting on green brand trust and purchase intentions? Mediating role of environmental knowledge. *Environment, Development and Sustainability*. <https://doi.org/10.1007/s10668-023-04352-0>
- Islam, J. U., Shahid, S., Rasool, A., Rahman, Z., Khan, I., & Rather, R. A. (2020). Impact of website attributes on customer engagement in banking: A solicitation of stimulus-organism-response theory. *International Journal of Bank Marketing*, 38(6), 1279–1303. <https://doi.org/10.1108/IJBM-12-2019-0460>
- Jin, Y., Li, H., & Lu, J. (2024). How does energy policy uncertainty perception affect corporate greenwashing behaviors? Evidence from China's energy companies. *Energy*, 306, Article 132403. <https://doi.org/10.1016/j.energy.2024.132403>
- Jog, D., & Singhal, D. (2020). Greenwashing understanding among Indian consumers and its impact on their green consumption. *Global Business Review*, 25(2). <https://doi.org/10.1177/0972150920962933>
- Kabel, D., Elg, M., & Sundin, E. (2021). Factors influencing sustainable purchasing behaviour of remanufactured robotic lawn mowers. *Sustainability*, 13(4), Article 1954. <https://doi.org/10.3390/su13041954>
- Kaur, T., & Luchs, M. G. (2022). Mindfulness enhances the values that promote sustainable consumption. *Psychology and Marketing*, 39(5), 990–1006. <https://doi.org/10.1002/mar.21636>
- Kock, F., Berbekova, A., & Assaf, A. G. (2021). Understanding and managing the threat of common method bias: Detection, prevention and control. *Tourism Management*, 86, Article 104330. <https://doi.org/10.1016/j.tourman.2021.104330>
- Komiak, S. X., & Benbasat, I. (2004). Understanding customer trust in agent-mediated electronic commerce, web-mediated electronic commerce, and traditional commerce. *Information Technology and Management*, 5, 181–207. <https://doi.org/10.1023/B:ITEM.0000008081.55563.d4>
- Ku, H.-H., Kuo, C.-C., Wu, C.-L., & Wu, C.-Y. (2012). Communicating green marketing appeals effectively: The role of consumers' motivational orientation to promotion versus prevention. *Journal of Advertising*, 41(4), 41–50. <https://doi.org/10.1080/00913367.2012.10672456>

- Leblebici Kocer, L., Senturk Ulucak, Z., & Delice Akca, T. (2023). The role of environmental concern in purchasing decision on organic food and the link to greenwashing. *Environment, Development and Sustainability*. <https://doi.org/10.1007/s10668-023-04150-8>
- Leonidou, L. C., Kvasova, O., Leonidou, C. N., & Chari, S. (2013). Business unethically as an impediment to consumer trust: The moderating role of demographic and cultural characteristics. *Journal of Business Ethics*, 112(3), 397–415. <https://doi.org/10.1007/s10551-012-1267-9>
- Liu, C., Li, W., Chang, L., & Ji, Q. (2024). How to govern greenwashing behaviors in green finance products: A tripartite evolutionary game approach. *Financial Innovation*, 10(1), Article 34. <https://doi.org/10.1186/s40854-023-00549-4>
- Lopes, J. M., Gomes, S., & Trancoso, T. (2023). The dark side of green marketing: How greenwashing affects circular consumption? *Sustainability*, 15(15), Article 11649. <https://doi.org/10.3390/su151511649>
- Lu, X., Sheng, T., Zhou, X., Shen, C., & Fang, B. (2022). How does young consumers' greenwashing perception impact their green purchase intention in the fast fashion industry? An analysis from the perspective of perceived risk theory. *Sustainability*, 14(20), Article 13473. <https://doi.org/10.3390/su142013473>
- 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>
- Moran, M. B., Ibrahim, M., Czaplicki, L., Pearson, J., Thrul, J., Lindblom, E., Robinson-Mosley, S., Kennedy, R. D., Balaban, A., & Johnson, M. (2024). Greenwashed cigarette ad text and imagery produce inaccurate harm, addictiveness, and nicotine content perceptions: Results from a randomized online experiment. *Nicotine and Tobacco Research*, ntae200. <https://doi.org/10.1093/ntr/ntae200>
- Natasya, R., Ngatno, M. M., & Prabawani, B. (2023). The effect of greenwashing perception, green word of mouth, and green marketing on H&M purchase intentions in Jakarta. *Teorija in praksa*, 60(3), 460–474. <https://doi.org/10.51936/tip.60.3.460>
- Nekmahmud, Md., & Fekete-Farkas, M. (2020). Why not green marketing? Determinates of consumers' intention to green purchase decision in a new developing nation. *Sustainability*, 12(19), Article 7880. <https://doi.org/10.3390/su12197880>
- Nekmahmud, Md., Ramkissoon, H., & Fekete-Farkas, M. (2022). Green purchase and sustainable consumption: A comparative study between European and non-European tourists. *Tourism Management Perspectives*, 43, Article 100980. <https://doi.org/10.1016/j.tmp.2022.100980>
- Nemes, N., Scanlan, S. J., Smith, P., Smith, T., Aronczyk, M., Hill, S., Lewis, S. L., Montgomery, A. W., Tubiello, F. N., & Stabinsky, D. (2022). An integrated framework to assess greenwashing. *Sustainability*, 14(8), Article 4431. <https://doi.org/10.3390/su14084431>
- Nguyen, T. T. H., Nguyen, K. O., Cao, T. K., & Le, V. A. (2021). The impact of corporate greenwashing behavior on consumers' purchase intentions of green electronic devices: An empirical study in Vietnam. *The Journal of Asian Finance, Economics and Business*, 8(8), 229–240. <https://doi.org/10.13106/JAFEB.2021.VOL8.NO8.0229>
- Nguyen-Viet, B. (2022). Understanding the influence of eco-label, and green advertising on green purchase intention: The mediating role of green brand equity. *Journal of Food Products Marketing*, 28(2), 87–103. <https://doi.org/10.1080/10454446.2022.2043212>
- Papagiannakis, G. E., Vlachos, P. A., Koritos, C. D., & Kassinis, G. I. (2024). Are publicly traded tourism and hospitality providers greenwashing? *Tourism Management*, 103, Article 104893. <https://doi.org/10.1016/j.tourman.2024.104893>
- Pham, T. H. (2019). Evaluating the purchase behaviour of organic food by young consumers in an emerging market economy. *Journal of Strategic Marketing*, 27(6), 540–556. <https://doi.org/10.1080/0965254X.2018.1447984>
- Promaleesy, R., & Handriana, T. (2024). How does greenwashing affect green word of mouth through green skepticism? Empirical research for fast fashion business. *Cogent Business & Management*, 11(1), Article 2389467. <https://doi.org/10.1080/23311975.2024.2389467>
- Román-Augusto, J. A., Garrido-Lecca-Vera, C., Lodeiros-Zubiria, M. L., & Mauricio-Andia, M. (2022). Green marketing: Drivers in the process of buying green products – the role of green satisfaction, green trust, green WOM and green perceived value. *Sustainability*, 14(17), Article 10580. <https://doi.org/10.3390/su141710580>
- Santos, C., Coelho, A., & Marques, A. (2024a). A systematic literature review on greenwashing and its relationship to stakeholders: State of art and future research agenda. *Management Review Quarterly*, 74(3), 1397–1421. <https://doi.org/10.1007/s11301-023-00337-5>
- Santos, C., Coelho, A., & Marques, A. (2024b). Greenwashing effects inside organizations: How does it affect organizational citizenship behaviours for the environment (OCBEs)? *Social Responsibility Journal*. <https://doi.org/10.1108/SRJ-05-2023-0303>
- Santos, C., Coelho, A., & Marques, A. M. A. (2024c). Unmasking supplier greenwashing: How information sharing and green trust shape clients' sustainability. *Baltic Journal of Management*, 19(4), 455–472. <https://doi.org/10.1108/BJM-01-2024-0032>
- Seberíni, A., Izáková, K., & Tokovská, M. (2024). Greenwashing – the dark side of eco-friendly marketing. A case study from Slovakia. *Studia Ecologiae et Bioethicae*, 22(1), 83–95. <https://doi.org/10.21697/seb.5800>
- Sensharma, S., Sinha, M., & Sharma, D. (2022). Do Indian firms engage in greenwashing? Evidence from Indian firms. *Australasian Business, Accounting and Finance Journal*, 16(5), 67–88. <https://doi.org/10.14453/abfj.v16i5.06>
- Sharma, N. K., & Kushwaha, G. S. (2019). Eco-labels: A tool for green marketing or just a blind mirror for consumers. *Electronic Green Journal*, 1(42). <https://doi.org/10.5070/G314233710>
- Sun, Y., & Shi, B. (2022). Impact of greenwashing perception on consumers' green purchasing intentions: A moderated mediation model. *Sustainability*, 14(19), Article 12119. <https://doi.org/10.3390/su141912119>
- Timmons, S., Whelan, A., & Kelly, C. (2024). An experimental test of a greenwashing inoculation intervention in Ireland: Effects of 'pre-bunking' on identification, consumer trust and purchase intentions. *Sustainable Production and Consumption*, 47, 318–328. <https://doi.org/10.1016/j.spc.2024.03.030>
- Volschenk, J., Gerber, C., & Santos, B. A. (2022). The (in)ability of consumers to perceive greenwashing and its influence on purchase intent and willingness to pay. *South African Journal of Economic and Management Sciences*, 25(1), a4553. <https://doi.org/10.4102/sajems.v25i1.4553>
- Wang, H., Ma, B., & Bai, R. (2020). The spillover effect of greenwashing behaviours: An experimental approach. *Marketing Intelligence & Planning*, 38(3), 283–295. <https://doi.org/10.1108/MIP-01-2019-0006>
- Wu, T. (2024). Green finance reform policy increases corporate hypocritical business strategies: Evidence from the greenwashing behavior. *Mitigation and Adaptation Strategies for Global*

Change, 29(7), Article 63.

<https://doi.org/10.1007/s11027-024-10162-0>

Yu, E. P., Luu, B. V., & Chen, C. H. (2020). Greenwashing in environmental, social and governance disclosures. *Research in International Business and Finance*, 52, Article 101192.

<https://doi.org/10.1016/j.ribaf.2020.101192>

Zhang, L., Li, D., Cao, C., & Huang, S. (2018). The influence of greenwashing perception on green purchasing intentions: The mediating role of green word-of-mouth and moderating role of green concern. *Journal of Cleaner Production*, 187, 740–750.

<https://doi.org/10.1016/j.jclepro.2018.03.201>