





# “The influence of greenwashing perceptions on consumer purchase intentions in the Chinese fashion industry”

<b>AUTHORS</b>	Jiawei Yu  Yiting Yang  Hongyan Wang 
<b>ARTICLE INFO</b>	Jiawei Yu, Yiting Yang and Hongyan Wang (2025). The influence of greenwashing perceptions on consumer purchase intentions in the Chinese fashion industry. <i>Innovative Marketing</i> , 21(1), 65-74. doi: <a href="https://doi.org/10.21511/im.21(1).2025.06">10.21511/im.21(1).2025.06</a>
<b>DOI</b>	<a href="http://dx.doi.org/10.21511/im.21(1).2025.06">http://dx.doi.org/10.21511/im.21(1).2025.06</a>
<b>RELEASED ON</b>	Monday, 03 February 2025
<b>RECEIVED ON</b>	Sunday, 25 August 2024
<b>ACCEPTED ON</b>	Monday, 13 January 2025
<b>LICENSE</b>	 This work is licensed under a <a href="https://creativecommons.org/licenses/by/4.0/">Creative Commons Attribution 4.0 International License</a>
<b>JOURNAL</b>	"Innovative Marketing "
<b>ISSN PRINT</b>	1814-2427
<b>ISSN ONLINE</b>	1816-6326
<b>PUBLISHER</b>	LLC “Consulting Publishing Company “Business Perspectives”
<b>FOUNDER</b>	LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

**36**



NUMBER OF FIGURES

**2**



NUMBER OF TABLES

**5**

© The author(s) 2025. This publication is an open access article.



## BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"  
Hryhorii Skovoroda lane, 10,  
Sumy, 40022, Ukraine  
[www.businessperspectives.org](http://www.businessperspectives.org)

**Received on:** 25<sup>th</sup> of August, 2024

**Accepted on:** 13<sup>th</sup> of January, 2025

**Published on:** 3<sup>rd</sup> of February, 2025

© Jiawei Yu, Yiting Yang, Hongyan Wang, 2025

Jiawei Yu, PhD Candidate, Faculty of Economics and Management, The National University of Malaysia, Malaysia. (Corresponding author)

Yiting Yang, School of Business and Management, The Hong Kong University of Science & Technology, China.

Hongyan Wang, Faculty of Economics and Management, The National University of Malaysia, Malaysia.

Jiawei Yu (Malaysia), Yiting Yang (China), Hongyan Wang (Malaysia)

# THE INFLUENCE OF GREENWASHING PERCEPTIONS ON CONSUMER PURCHASE INTENTIONS IN THE CHINESE FASHION INDUSTRY

## Abstract

With increasing consumer awareness of environmental issues, green marketing has gained prominence in the fashion industry. However, the rise of greenwashing has raised concerns about its impact on consumer behavior. The study aims to investigate the influence of greenwashing perceptions on consumer purchase intention in the Chinese fashion industry, proposing green skepticism as a mediating factor and brand loyalty as a moderating variable. A moderated mediation model, grounded in the theory of planned behavior, was proposed. Data were collected through an online survey conducted in June 2024, using random sampling to select 350 consumers who interacted with merchants during live-streaming sessions on Douyin in the fast fashion sector. The results largely supported the proposed framework. Specifically, the findings indicate that greenwashing perceptions negatively impact consumer purchase intention ( $\beta = -0.43, p < 0.01$ ). Furthermore, green skepticism was found to partially mediate the relationship between greenwashing perception and purchase intention ( $\beta = -0.26, p < 0.01$ ). Finally, the moderating role of brand loyalty was confirmed, as it moderates the effect of greenwashing perceptions on green skepticism ( $\beta = -0.22, p < 0.01$ ), thereby buffering the indirect effect of greenwashing perceptions on purchase intention through green skepticism ( $\beta = 0.06, 95\% \text{ CI} = [0.028, 0.091]$ ). This study contributes to the growing body of green marketing literature by emphasizing the interplay between consumer greenwashing perceptions, green skepticism, and brand loyalty in shaping purchasing behavior in the fashion industry.

## Keywords

green marketing, greenwashing, purchase intentions, green skepticism, brand loyalty, fashion industry

## JEL Classification

M30, M31, M37

## INTRODUCTION

In recent years, growing awareness of social and environmental issues has driven substantial expansion in the green fashion market (Sailer et al., 2022). As consumers, particularly Generation Z and Millennials, increasingly express a willingness to invest in products with lower environmental impact (Amed et al., 2021), the entire fashion industry - from fast fashion to luxury - has vigorously engaged in green marketing to meet consumer demands. Concurrently, this has given rise to companies' greenwashing activities. Greenwashing involves the practice of using exaggerated, misleading, and unverified claims regarding the environmental benefits of a company's products to enhance its green and eco-friendly brand image (Sailer et al., 2022). Due to the potential of greenwashing to enable companies to gain reputational capital, reduce costs, or access potential benefits (Jonsen et al., 2015), many companies portray themselves as green companies through such means, despite not truly being environmentally friendly. As greenwashing incidents and irresponsible environmental practices become more frequent, consumers are increasingly scrutinizing the



This is an Open Access article, distributed under the terms of the [Creative Commons Attribution 4.0 International license](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.



### Conflict of interest statement:

Author(s) reported no conflict of interest

validity of companies' green claims and activities (Rausch & Kopplin, 2021). This growing consumer distrust regarding the truthfulness of green claims and suspicion of greenwashing practices is referred to as green skepticism. When consumers encounter or suspect greenwashing, they may express concerns and doubts about the authenticity of a company's environmental practices. This skepticism can lead to a pessimistic attitude towards the company, thereby affecting consumer purchasing intentions (Nguyen et al., 2019). Thus, the increasing prevalence of greenwashing and the resulting rise in consumer skepticism presents a problem: understanding the mechanisms through which greenwashing influences consumer purchase intentions.

## 1. LITERATURE REVIEW

Purchase intention refers to the consumers' tendency or willingness to purchase a specific brand's product or service (Shah et al., 2012). In this study, the Theory of Planned Behavior (TPB) serves as the theoretical foundation to investigate the mechanisms by which greenwashing perceptions influence consumers' purchase intentions. According to Ajzen (1991), TPB posits that an individual's intention to engage in a specific behavior is shaped by three primary factors: attitudes toward the behavior, subjective norms, and perceived behavioral control. These elements interact to shape behavioral intentions and, consequently, actual behavior. When applied to the context of greenwashing, TPB elucidates the mechanisms through which deceptive or exaggerated environmental claims by companies affect consumer purchase intentions.

Firstly, attitude toward the behavior represents an individual's assessment, either favorable or unfavorable, regarding the act of performing that behavior (Ajzen, 1991). When consumers perceive greenwashing, they often feel deceived and develop negative attitudes towards the product and brand (De Jong et al., 2018). This negative evaluation stems from the perceived dishonesty and unethical behavior of the company, leading to distrust. Consequently, such negative attitudes reduce the likelihood of consumers forming positive purchase intentions, as they do not wish to support companies engaged in misleading practices. Secondly, subjective norms pertain to the perceived social pressures that influence an individual's decision to either engage in or refrain from a behavior (Ajzen, 1991), which are adversely affected by greenwashing perceptions. Consumers are influenced by their social environment, including friends, family, and societal expectations (Cialdini & Trost, 1998). When companies become subjects

of social discussion and criticism regarding greenwashing activities, the social pressure against purchasing these products increases, thereby reducing consumers' purchase intentions. Lastly, perceived behavioral control indicates an individual's assessment of the relative ease or difficulty associated with executing a particular behavior (Ajzen, 2002). When consumers identify greenwashing, they may feel uncertain about their ability to make truly environmentally friendly choices (Ajzen, 2002). This uncertainty arises from the confusion and distrust caused by misleading claims, weakening consumers' perceived control over making environmentally responsible purchasing decisions. Thus, this reduces their purchase intention from companies suspected of greenwashing.

Recently, a growing body of research has empirically examined the relationship between greenwashing perceptions and consumer purchase intentions and behaviors. For instance, Chen et al. (2020) found that greenwashing negatively impacts consumers' green purchasing behaviors. Similarly, Sun and Shi (2022) observed that consumers in the fashion industry may reduce their purchase intentions when they realize that greenwashing mainly benefits brands without making a real contribution to environmental causes. Nonetheless, most existing studies have been conducted on greenwashing in sectors such as hospitality, automotive, and food (Duarte et al., 2022; Rahman et al., 2015; Siano et al., 2017; Speckemeier & Tsivrikos, 2022; Turna, 2022; Zhang et al., 2018), with research specifically focusing on greenwashing in the fashion industry being limited, particularly regarding its impact on consumer purchase behavior (Brandstrup et al., 2023). Moreover, most existing studies have predominantly been conducted in Western contexts, especially in the United States and Europe (Blome et al., 2017; Kim & Lyon, 2015; Nyilasy et al., 2014). However, with the rapid ex-

pansion of the fashion industry in China and a growing trend among Chinese consumers to prioritize environmentally friendly products (Jung et al., 2020), there is a pressing need to examine how perceptions of greenwashing affect consumer purchasing decisions within the Chinese fashion market.

Green skepticism is characterized as a phenomenon in which consumers express doubt or distrust regarding the environmental claims made by companies (Goh & Balaji, 2016). According to Goh and Balaji (2016), when consumers possess adequate evidence to support the authenticity of these green claims, their skepticism can be alleviated. However, on the one hand, the surge in instances of greenwashing in recent years has led to increased skepticism about company's green initiatives. On the other hand, due to a lack of transparency from companies, consumers are unable to verify the validity of their greenwashing concerns (Rausch & Kopplin, 2021), fostering green skepticism among consumers. Thus, greenwashing perceptions is an antecedent of green skepticism.

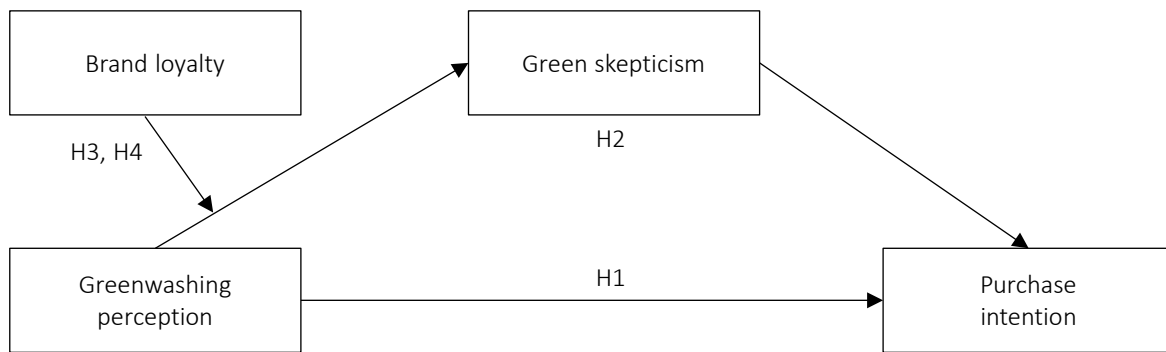
Consumer skepticism is a significant barrier influencing purchase decisions. Zhang et al. (2018) discovered that green skepticism directly and adversely affects consumer purchase intentions. According to Rausch and Kopplin (2021), green skepticism indirectly influences purchase intentions. When consumers adopt a skeptical attitude, they may find it challenging to discern whether products claimed by companies are genuinely sustainable or green. This confusion can lead to decision paralysis, where consumers opt to avoid purchasing rather than risking supporting potentially deceptive companies (Goh & Balaji, 2016). Therefore, based on this logic, consumer skepticism stemming from their perception of dishonest and unethical behavior by companies engaged in greenwashing makes consumers more cautious. This decreased trust in companies and their products ultimately reduces consumer willingness to purchase.

In the fashion industry, consumer brand loyalty is a key concern for businesses, as it significantly influences consumer purchasing intentions (Panda et al., 2020). Brand loyalty is defined as a consumer's consistent preference and com-

mitment to repurchase and support a particular brand over time (Atulkar, 2020). According to TPB, individuals' behavioral intentions are shaped by their attitudes, social norms, and perceived control over the behavior (Ajzen, 1991). When consumers perceive greenwashing, they often develop negative attitudes towards the brand, leading to increased green skepticism. However, brand loyalty, characterized by a consumer's consistent preference and commitment to a brand, is likely to buffer against the detrimental effect on green skepticism.

Consumers with high brand loyalty are more likely to trust the brand when confronted with potentially misleading environmental claims, attributing such claims to misunderstandings rather than deliberate deception (Carrington et al., 2010). This pre-existing trust and positive bias can mitigate the development of green skepticism. Under TPB, brand loyalty may influence subjective norms, thereby moderating the relationship between greenwashing perceptions and green skepticism. Loyal consumers typically engage within communities or social groups that hold positive views of the brand. This social reinforcement can reduce the impact of greenwashing perceptions, as loyal consumers may feel supported by their community, continuing to trust the brand (Delmas & Burbano, 2011).

In contrast, consumers with lower brand loyalty lack an emotional connection and positive experiences with the brand, making them more susceptible to green skepticism when they perceive greenwashing. This skepticism can lead to negative perceptions of the brand's credibility and authenticity on environmental issues, potentially causing consumers to disengage or turn to competitors perceived as more trustworthy (Copeland & Bhaduri, 2020). Therefore, based on the analysis above, brand loyalty may act as a boundary condition that buffer the detrimental effect on greenwashing perceptions on green skepticism. However, brand loyalty is typically considered a direct factor triggering consumer purchase intentions in previous studies (Panda et al., 2020), with few studies focusing on its moderating role. Additionally, based on the rationale that green skepticism mediates the relationship between greenwashing percep-



**Figure 1.** The conceptual framework

tions and purchase intentions, it is reasonable to hypothesize that brand loyalty could potentially influence the strength of this mediating process, resulting in a pattern of moderated mediation.

In summary, the primary objective of this study is to investigate the influence of greenwashing perceptions on consumer purchase intention in the Chinese fashion industry, with green skepticism as a mediating factor and brand loyalty as a moderating variable. Accordingly, the study examines the hypotheses formulated based on this framework (Figure 1 illustrates the research framework):

- H1: Greenwashing perceptions negatively impact consumer purchase intentions.*
- H2: Green skepticism mediates the relationship between greenwashing perceptions and consumer purchase intentions.*
- H3: Brand loyalty moderates the relationship between greenwashing perceptions and green skepticism.*
- H4: The indirect relationship between greenwashing perceptions and consumer purchase intentions through green skepticism is conditional on brand loyalty such that high brand loyalty tends to buffer this indirect relationship.*

## 2. METHODOLOGY

The primary method of data collection for this study was a survey questionnaire, targeting consumers as the unit of analysis. Considering the

emphasis and practices of fast fashion companies on green product marketing (Brandstrup et al., 2023), consumers of fast fashion companies are the primary focus of this study. Data were collected by contacting and inviting consumers who interacted with merchants in Douyin live streaming sessions to complete the survey. This approach was chosen because Douyin has become one of the largest sales platforms in China. A cover letter accompanied the survey, assuring participants of the anonymity of their responses and confirming that informed consent was obtained from all individuals involved in the study. Considering that the original scales were developed in English and the research context is situated in China, a back-to-back translation method was employed to translate the scales into Chinese. Ultimately, a total of 350 valid questionnaires were collected.

Table 1 presents the statistical profile of the participants. In the sample set, 60.9% were female and 39.1% were male participants. Regarding consumer age, 14.9% were under 20 years old, 23.7% were between 21 and 30 years old, 36.3% fell within the 31 to 40 age range, 17.1% were between 41 and 50 years old, and 8.0% were over 50 years old. Concerning educational background, 45.4% of respondents had a bachelor's degree or higher. About incomes, 17.4% of consumers had a monthly salary below 3000 RMB, 36.6% had a salary between 3000 and 7000 RMB, 26.3% had a salary between 7000 and 15000 RMB, and 19.7% had a salary above 15000 RMB. 64.0% of respondents have children.

As for measurements of constructs in this study. First, five items adopted from Zhang et al. (2018) to evaluate greenwashing perceptions of respon-



dents. Second, a total of four items were cited from Sun and Shi (2022) to measure purchase intentions. Besides, to measure green skepticism of consumer, four items were employed cited from Mohr (1998). Concerning the measurement of brand loyalty, there are six items were adapted from Algesheimer et al. (2005). Furthermore, as demographic characteristics may influence consumers greenwashing perceptions (Matthes & Wonneberger, 2014; Sun & Shi, 2022; Zhang et al., 2018). Therefore, this research considers gender, age, educational background, with or without children, and income as control variables.

**Table 1.** Respondents' demographic data

Variable	Indicator	Frequency	Percentage (%)
Gender	Male	137	39.1%
	Female	213	60.9%
Age	≤ 20 years old	52	14.9%
	21-30 years old	83	23.7%
	31-40 years old	127	36.3%
	41-50 years old	60	17.1%
	≥ 51 years old	28	8.0%
Educational background	High school or below	66	18.9%
	Tertiary's degree	125	35.7%
	Bachelor's degree	109	31.1%
Incomes	Master's degree or above	50	14.3%
	Below 3,000 RMB	61	17.4%
	3,000-7,000 RMB	128	36.6%
	7,000-15,000 RMB	92	26.3%
Having children	Above 15,000 RMB	69	19.7 %
	Yes	223	64.0%
	No	126	36.0%

### 3. RESULTS

Firstly, confirmatory factor analysis (CFA) was conducted to evaluate the convergent and discriminant validity of the proposed four-factor model. The results, detailed in Table 2, revealed that the model exhibits good fit indices, specifically:  $\chi^2 = 147.87$ ,  $\chi^2/df = 1.01$ , GFI = 0.96, CFI = 0.99, RMR = 0.04, RMSEA = 0.01. Notably, these fit indices are superior to those of other potential nested models. Additionally, Table 3 indicated that all standardized factor loadings (SFL) and composite reliability (CR) values exceed the 0.7 threshold, and all average variance extracted (AVE) values are above

the recommended criterion of 0.5. Therefore, this study has achieved convergent and discriminant validity.

**Table 2.** Comparison of alternative models in Confirmatory Factor Analysis

Model	$\chi^2$	$\chi^2/df$	GFI	CFI	RMR	RMSEA
Four-factor model	147.87	1.01	.96	.99	.04	.01
Three-factor model	581.26	3.90	.80	.88	.12	.09
Two-factor model	1003.41	6.65	.69	.76	.14	.13
Single-factor model	1545.96	10.17	.57	.61	.17	.16

**Table 3.** Results of SFL, CR, and AVE

Constructs	SFL	CR	AVE
Greenwashing	.763-.788	.884	.605
Purchase intentions	.748-.787	.857	.599
Green skepticism	.772-.798	.865	.616
Brand loyalty	.752-.809	.903	.607

Given the single-source nature of the data from consumers, this study acknowledges the potential for Common Method Bias (CMB). To mitigate this concern and enhance the validity and reliability of the findings, Harman's single-factor test was first performed. The results indicated that a single factor explained 21.313% of the variance, suggesting that significant CMB is not present. Furthermore, acknowledging the limitations inherent in Harman's single-factor test, this study supplemented with CFA analysis. The chi-squared value for the single latent factor model was 1545.96 ( $p < 0.001$ ), which reflects a markedly poorer fit compared to the chi-square value of 147.87 ( $p < 0.001$ ) for the proposed model. Consequently, these results suggest that this study does not encounter issues related to CMB.

Table 4 presents the means (M), standard deviations (SD), and correlations among the variables.

Hierarchical regression analysis was conducted to test the proposed hypotheses, with detailed results displayed in Table 5. First, examining the direct effect of greenwashing perception on purchase intentions, Model 6 shows that greenwashing perception significantly and negatively influences consumer purchase intentions ( $\beta = -0.43$ ,  $p < 0.01$ ), thereby supporting Hypothesis 1.

**Table 4.** Means, standard deviations, and correlations

Variables	M	SD	1	2	3	4	5	6	7	8	9
1. Age	1.61	.49	1								
2. Gender	2.80	1.13	.00	1							
3. Edu	2.41	.95	-.02	-.11*	1						
4. W/ or w/o children	1.36	.48	-.12*	-.44**	-.06	1					
5. Income	2.48	.99	-.05	.36**	.16**	-.39**	1				
6. GP	3.32	.96	-.06	-.01	-.07	.01	-.04	1			
7. PI	2.67	.96	.04	.02	.10	-.09	.02	-.44**	1		
8. GK	3.31	1.02	-.04	.03	-.08	-.04	.03	.46**	-.41**	1	
9. BL	2.65	.95	.07	.00	.05	.08	-.05	-.38**	.42**	-.49**	1

Note: \*p < .05; \*\*p < .01 (two-tailed). GP = Greenwashing Perceptions, PI = Purchase Intentions, GS = Green Skepticism, BL = Brand Loyalty.

Further analysis of the mediating effect of green skepticism is presented in Model 7 in Table 5. After including green skepticism, both greenwashing perception and green skepticism still have significant impacts on purchase intentions, with coefficients of -0.31 (p < 0.01) and -0.26 (p < 0.01), respectively. This indicates that green skepticism partially mediates the effect of greenwashing perception on consumer purchase intentions, thus supporting Hypothesis 2.

Hypothesis 3 proposes that brand loyalty acts as a boundary condition in the relationship between greenwashing perception and green skepticism. As indicated in Model 4 of Table 5, there was a positive correlation between greenwash-

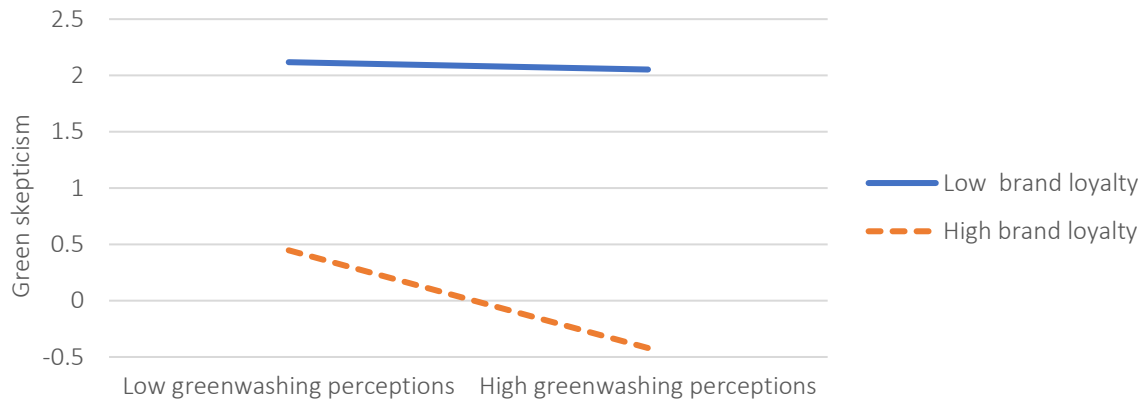
ing perception and green skepticism ( $\beta = 0.32$ ,  $p < 0.01$ ), while brand loyalty demonstrated a negative correlation with green skepticism ( $\beta = -0.36$ ,  $p < 0.01$ ). The interaction term between these two variables significantly influences green skepticism ( $\beta = -0.22$ ,  $p < 0.01$ ), suggesting that brand loyalty mitigates the adverse effects of greenwashing perception on green skepticism. Consequently, these findings provide support for Hypothesis 3. To further elucidate the moderating effect, Figure 2 presents a simple slope analysis.

For Hypothesis 4, this study used the PROCESS (Model 7) proposed by Hayes (2013) to test the moderated mediation effect. Using a bootstrap procedure with 5000 iterations, this study estimated the indi-

**Table 5.** Results of hierarchical regression analysis

Constants	Green Skepticism				Purchase Intentions		
	M1	M2	M3	M4	M5	M6	M7
	3.73	1.86	3.15	3.04	2.67	4.35	4.82
<b>Control variables</b>							
1. Age	-.10	-.03	.01	.00	.05	-.01	-.02
2. Gender	-.01	.00	.02	.01	.00	-.00	.00
3. Education	-.09	-.06	-.04	-.04	.10	.07	.05
W/ or w/o children	.03	.05	.03	.04	-.03	-.05	-.04
5. Income	-.08	-.06	.02	.02	-.19	-.20	-.22
<b>Independent variable</b>							
GP	-	.49**	.34**	.32**	-	-.43**	-.31**
<b>Mediator</b>							
GK	-	-	-	-	-	-	-.26**
<b>Moderator and interactor</b>							
BL	-	-	-.39**	-.36**	-	-	-
GP * BL	-	-	-	-.22**	-	-	-
$\Delta R^2$	.00	.21	.32	.36	.00	.19	.25
$R^2$	.01	.22	.33	.37	.02	.20	.26
F	.76	16.09**	24.36**	25.22**	1.29	14.55**	17.15**

Note: \*p < .05; \*\*p < .01 (two-tailed). GP = Greenwashing Perceptions, PI = Purchase Intentions, GK = Green Skepticism, BL = Brand Loyalty.



**Figure 2.** Moderating effect of brand loyalty

rect effect of greenwashing perception on purchase intention under different levels of brand loyalty. As shown in Table 6, the results indicate that brand loyalty moderates this indirect effect ( $\beta = 0.06$ , 95% CI = [0.028, 0.091]). Specifically, in the low brand loyalty group, green skepticism significantly mediates the relationship between greenwashing perception and purchase intention, with a significant indirect effect ( $\beta = -0.15$ , 95% CI = [-0.215, -0.084]). Conversely, in the high brand loyalty group, this indirect effect is relatively smaller ( $\beta = -0.02$ , 95% CI = [-0.124, -0.043]). Therefore, Hypothesis 4 is empirically supported.

#### 4. DISCUSSION

Based on TPB, this study proposed a moderated mediation model to investigate the mechanism through which greenwashing perception affects consumer purchase intention in the Chinese fashion industry. Overall, the findings offer substantial support for the proposed framework. First, the results demonstrated that greenwashing perceptions negatively affect purchase intentions, consistent with previous studies (Nguyen et al., 2019; Rejikumar, 2016; Sun & Shi, 2022; Zhang et al., 2018). This study enhances the explanatory logic of TPB in understanding consumer behavior by applying it to investigate how greenwashing perceptions shape purchase intentions within the Chinese fashion industry. In detail, when consumers perceive greenwashing, their trust and positive attitude towards the company’s environmental claims are undermined, thereby influencing their purchase intention.

Besides, this study revealed that green skepticism partially mediates the relationship between green-

washing perception and purchase intention, consistent with Nguyen et al. (2019). According to TPB, attitude reflects an individual’s evaluation of a particular behavior. This finding can be explained as follows: when consumers perceive greenwashing, their attitude towards the environmental claims becomes one of concern and skepticism. This skepticism is influenced by the authenticity of the environmental claims, subsequently affecting their intention to purchase products. Integrating green skepticism into the model of how greenwashing influences purchase intentions provides valuable insights into individual consumer decision-making processes, offering a new perspective on factors shaping consumer purchase intentions.

Third, this study confirmed the moderating role of brand loyalty, demonstrating that it buffers the adverse effect of greenwashing perception on green skepticism, thereby reducing consumers’ likelihood of doubting due to greenwashing perception. Additionally, the results indicated that brand loyalty also moderates the indirect effect of greenwashing perception on purchase intention through green skepticism, exhibiting a pattern of moderated mediation. While the moderating influence of brand loyalty on consumer purchase behavior has been well-documented in the literature (Ramachandran & Balasubramanian, 2020), limited research has examined its moderating role in the relationship between greenwashing perception and consumer purchase intention. This theoretical proposition underscores the dual role of brand loyalty: not only as a protective factor against consumer skepticism but also as a facilitator in prompting positive responses towards authentic environmental practices.



## CONCLUSIONS

This study aimed to explore the impact of greenwashing perceptions on consumer purchase intention in the Chinese fashion industry, with green skepticism as a mediator and brand loyalty as a moderator. The findings indicated that greenwashing perceptions have a significant negative effect on consumer purchase intentions. Given the rising consumer awareness of environmental issues and the increasing demand for green products, businesses should capitalize on the opportunities presented by green consumption. To foster and maintain consumer trust, companies should focus on genuinely fulfilling their environmental commitments. Moreover, green skepticism was found to partially mediate the relationship between greenwashing perception and purchase intention. As digital technologies continue to evolve, companies have the opportunity to enhance the transparency of their green marketing efforts through technological tools, such as blockchain technology. The research also confirmed the effect of brand loyalty. This emphasizes the importance of trust and consistency in sustainable practices. Companies can strengthen brand loyalty by demonstrating a long-term commitment to environmental responsibility.

Despite its contributions, this study has some limitations. First, the data rely solely on consumer self-reporting, which, although consumers are well-positioned to assess their perceptions of greenwashing and purchase intentions, may exaggerate relationships among variables. Future research could address this limitation by employing multiple measurement methods beyond self-reporting. Second, this study did not distinguish between different types of greenwashing, which could potentially impact consumer perceptions differently. Future research could expand the scope to include a more detailed examination of various types of greenwashing practices. Last, this study is cross-sectional, which may lead to instability in results due to recall biases among consumers. Future research could enhance understanding by adopting longitudinal study designs, which would allow for a more robust analysis of causal relationships among variables.

## AUTHOR CONTRIBUTIONS

Conceptualization: Jiawei Yu, Yiting Yang, Hongyan Wang.

Data curation: Jiawei Yu.

Formal analysis: Yiting Yang.

Funding acquisition: Jiawei Yu.

Investigation: Jiawei Yu, Hongyan Wang.

Methodology: Jiawei Yu, Yiting Yang, Hongyan Wang.

Project administration: Jiawei Yu.

Resources: Yiting Yang.

Software: Jiawei Yu, Yiting Yang, Hongyan Wang.

Supervision: Jiawei Yu.

Validation: Yiting Yang, Hongyan Wang.

Visualization: Yiting Yang.

Writing – original draft: Jiawei Yu, Yiting Yang, Hongyan Wang.

Writing – review & editing: Jiawei Yu, Yiting Yang, Hongyan Wang.

## DISCLOSURE STATEMENT

No potential conflict of interest was reported by the authors.

## DATA STATEMENT

The data are available on reasonable request from the corresponding author.

## REFERENCES

1. 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)
2. Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, 32(4), 665-683. <https://doi.org/10.1111/j.1559-1816.2002.tb00236.x>
3. Algesheimer, R., Dholakia, U. M., & Herrmann, A. (2005). The social influence of brand community: Evidence from European car clubs. *Journal of Marketing*, 69(3), 19-34. <https://doi.org/10.1509/jmkg.69.3.19.66363>
4. Amed, I., Berg, A., Balchandani, A., Hedrich, S., Jensen, J., Straub, M., Rolkens, F., Young, R., Brown, P., Le Merle, L., Crump, H., & Dargan, A. (2021). *The state of fashion 2022*. McKinsey & Company. Retrieved from <https://www.mckinsey.com/~media/mckinsey/industries/retail/our%20insights/state%20of%20fashion/2022/the-state-of-fashion-2022.pdf>
5. Atulkar, S. (2020). Brand trust and brand loyalty in mall shoppers. *Marketing Intelligence & Planning*, 38(5), 559-572. <https://doi.org/10.1108/MIP-02-2019-0095>
6. Blome, C., Foerstl, K., & Schleper, M. C. (2017). Antecedents of green supplier championing and greenwashing: An empirical study on leadership and ethical incentives. *Journal of cleaner production*, 152, 339-350. <https://doi.org/10.1016/j.jclepro.2017.03.052>
7. Brandstrup, M., Dana, L. P., Ryding, D., Vignali, G., & Caratù, M. (Eds.). (2023). *The Garment Economy: Understanding History, Developing Business Models, and Leveraging Digital Technologies*. Springer. <https://doi.org/10.1007/978-3-031-33302-6>
8. Carrington, M. J., Neville, B. A., & Whitwell, G. J. (2010). Why ethical consumers don't walk their talk: Towards a framework for understanding the gap between the ethical purchase intentions and actual buying behaviour of ethically minded consumers. *Journal of Business Ethics*, 97, 139-158. <https://doi.org/10.1007/s10551-010-0501-6>
9. Chen, Y. S., Huang, A. F., Wang, T. Y., & Chen, Y. R. (2020). Green-wash and green purchase behaviour: the mediation of green brand image and green brand loyalty. *Total Quality Management & Business Excellence*, 31(1-2), 194-209. <https://doi.org/10.1080/14783363.2018.1426450>
10. Cialdini, R. B., & Trost, M. R. (1998). Social influence: Social norms, conformity and compliance. In Gilbert, D. T., Fiske, S. T., & Lindzey, G. (Eds.), *The handbook of social psychology* (4th ed.) (pp. 151-192). McGraw-Hill. Retrieved from <https://psycnet.apa.org/record/1998-07091-021>
11. Copeland, L., & Bhaduri, G. (2020). Consumer relationship with pro-environmental apparel brands: effect of knowledge, skepticism and brand familiarity. *Journal of Product & Brand Management*, 29(1), 1-14. <https://doi.org/10.1108/JPBM-03-2018-1794>
12. De Jong, M. D., Harkink, K. M., & Barth, S. (2018). Making green stuff? Effects of corporate greenwashing on consumers. *Journal of Business and Technical Communication*, 32(1), 77-112. <https://doi.org/10.1177/1050651917729863>
13. Delmas, M. A., & Burbano, V. C. (2011). The drivers of greenwashing. *California Management Review*, 54(1), 64-87. <https://doi.org/10.1525/cm.2011.54.1.64>
14. Duarte, L. O., Vasques, R. A., Fonseca Filho, H., Baruque-Ramos, J., & Nakano, D. (2022). From fashion to farm: green marketing innovation strategies in the Brazilian organic cotton ecosystem. *Journal of Cleaner Production*, 360, 132196. <https://doi.org/10.1016/j.jclepro.2022.132196>
15. Goh, S. K., & Balaji, M. S. (2016). Linking green skepticism to green purchase behavior. *Journal of Cleaner Production*, 131, 629-638. <https://doi.org/10.1016/j.jclepro.2016.04.122>
16. Jonsen, K., Galunic, C., Weeks, J., & Braga, T. (2015). Evaluating espoused values: Does articulating values pay off? *European Management Journal*, 33(5), 332-340. <https://doi.org/10.1016/j.emj.2015.03.005>
17. Jung, J., Kim, S. J., & Kim, K. H. (2020). Sustainable marketing activities of traditional fashion market and brand loyalty. *Journal of Business Research*, 120, 294-301. <https://doi.org/10.1016/j.jbusres.2020.04.019>
18. Kim, E. H., & Lyon, T. P. (2015). Greenwash vs. brownwash: Exaggeration and undue modesty in corporate sustainability disclosure. *Organization Science*, 26(3), 705-723. <https://doi.org/10.1287/orsc.2014.0949>
19. Lee, J. S., & Back, K. J. (2009). An examination of attendee brand loyalty: Understanding the moderator of behavioral brand loyalty. *Journal of Hospitality & Tourism Research*, 33(1), 30-50. <https://doi.org/10.1177/1096348008329652>
20. 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>
21. 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>
22. Nguyen, T. T. H., Yang, Z., Nguyen, N., Johnson, L. W., & Cao, T. K. (2019). Greenwash and green purchase intention: The mediating role of green skepticism. *Sustainability*, 11(9), 2653. <https://doi.org/10.3390/su11092653>

23. Nyilasy, G., Gangadharbatla, H., & Paladino, A. (2014). Perceived greenwashing: The interactive effects of green advertising and corporate environmental performance on consumer reactions. *Journal of business ethics*, 125, 693-707. <https://doi.org/10.1007/s10551-013-1944-3>
24. Panda, T. K., Kumar, A., Jakhar, S., Luthra, S., Garza-Reyes, J. A., Kazancoglu, I., & Nayak, S. S. (2020). Social and environmental sustainability model on consumers' altruism, green purchase intention, green brand loyalty and evangelism. *Journal of Cleaner Production*, 243, 118575. <https://doi.org/10.1016/j.jclepro.2019.118575>
25. Rahman, I., Park, J., & Chi, C. G. Q. (2015). Consequences of "greenwashing": Consumers' reactions to hotels' green initiatives. *International Journal of Contemporary Hospitality Management*, 27(6), 1054-1081. <https://doi.org/10.1108/IJCHM-04-2014-0202>
26. Ramachandran, S., & Balasubramanian, S. (2020). Examining the moderating role of brand loyalty among consumers of technology products. *Sustainability*, 12(23), 9967. <https://doi.org/10.3390/su12239967>
27. Rausch, T. M., & Kopplin, C. S. (2021). Bridge the gap: Consumers' purchase intention and behavior regarding sustainable clothing. *Journal of Cleaner Production*, 278, 123882. <https://doi.org/10.1016/j.jclepro.2020.123882>
28. Rejikumar, G. (2016). Antecedents of green purchase behaviour: An examination of moderating role of green wash fear. *Global Business Review*, 17(2), 332-350. <https://doi.org/10.1177/0972150915619812>
29. Sailer, A., Wilfing, H., & Straus, E. (2022). Greenwashing and bluewashing in black Friday-related sustainable fashion marketing on Instagram. *Sustainability*, 14(3), 1494. <https://doi.org/10.3390/su14031494>
30. Shah, S. S. H., Aziz, J., Jaffari, A. R., Waris, S., Ejaz, W., Fatima, M., & Sherazi, S. K. (2012). The impact of brands on consumer purchase intentions. *Asian Journal of Business Management*, 4(2), 105-110.
31. Siano, A., Vollero, A., Conte, F., & Amabile, S. (2017). "More than words": Expanding the taxonomy of greenwashing after the Volkswagen scandal. *Journal of Business Research*, 71, 27-37. <https://doi.org/10.1016/j.jbusres.2016.11.002>
32. Speckemeier, L., & Tsivrikos, D. (2022). Evidence of greenwashing in talent attraction: is deceptive marketing an effective recruiting strategy? *European Journal of Business and Management Research*, 7(3), 14-25. <https://doi.org/10.24018/ejbmr.2022.7.3.1406>
33. Sun, Y., & Shi, B. (2022). Impact of greenwashing perception on consumers' green purchasing intentions: A moderated mediation model. *Sustainability*, 14(19), 12119. <https://doi.org/10.3390/su141912119>
34. Turna, G. B. (2022). How "dieselgate" changed Volkswagen: Rushing to erase the traces of greenwashing. In Bhattacharyya, J., Balaji, M. S., Jiang, Y., Azer, J., Hewege, C. R. (Eds.), *Socially responsible consumption and marketing in practice: Collection of case studies* (pp. 255-273). Singapore: Springer Nature Singapore. [https://doi.org/10.1007/978-981-16-6433-5\\_16](https://doi.org/10.1007/978-981-16-6433-5_16)
35. Upadhyay, A., Mukhuty, S., Kumar, V., & Kazancoglu, Y. (2021). Blockchain technology and the circular economy: Implications for sustainability and social responsibility. *Journal of Cleaner Production*, 293, 126130. <https://doi.org/10.1016/j.jclepro.2021.126130>
36. 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>