

The Influence of Green Skepticism on Purchase Intention in Fast Fashion in Indonesia: The Role of Brand Loyalty as a Moderator

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Abstract. The fast fashion industry in Indonesia is growing rapidly but faces significant challenges related to environmental impact and greenwashing, which foster consumer skepticism toward environmental claims. This study examines the influence of green skepticism on purchase intention for fast fashion products and explores the role of brand loyalty as a moderating variable in this relationship. A quantitative approach was employed, utilizing a survey design with 385 fast fashion consumers in Indonesia, aged 18–45, selected through purposive sampling. Data were collected via an online questionnaire using a 5-point Likert scale and analyzed with Structural Equation Modeling (SEM) in SmartPLS 4.0. The results indicate that green skepticism has a significant negative effect on purchase intention ($\beta = -0.347$; $t = 8.924$; $p < 0.001$), implying that higher skepticism leads to lower purchase intention. Brand loyalty significantly moderates this relationship ($\beta = 0.285$; $t = 6.173$; $p < 0.001$), weakening the negative effect of skepticism. The model explains 68.4% of the variance in purchase intention, demonstrating strong predictive power. The findings suggest that greenwashing practices can backfire in an era of heightened environmental awareness, but strong brand loyalty can mitigate this negative impact. The study underscores the importance of authenticity and transparency in environmental communication. Fast fashion brands must build credibility through independent certification, transparent supply chains, and consistent practices. Moreover, developing and maintaining brand loyalty through product quality and effective loyalty programs is crucial to counteracting skepticism toward green claims in the fast fashion industry.

Keywords: Green skepticism; Purchase intention; Fast fashion; Brand loyalty Greenwashing.

INTRODUCTION

The fast fashion industry has emerged as a global phenomenon, transforming the fashion retail landscape by offering trendy products at affordable prices with rapid production cycles. In Indonesia, this industry is experiencing exponential growth, with a market value reaching USD 3.2 billion by 2023 and projected to grow at a compound annual growth rate (CAGR) of 8.5% until 2028. International brands such as Zara, H&M, and Uniqlo, alongside local brands like Cotton Ink and This Is April, dominate the market with affordable fashion strategies that appeal to young, urban consumers (Mao, 2023; Petroni, 2023; Su, 2020). However, despite its commercial success, the fast fashion industry faces intense criticism for its substantial environmental footprint, including excessive water consumption, high carbon emissions, and textile waste that pollutes ecosystems (Andreadakis & Owusu-Wiredu, 2023; Anguelov, 2015; Bailey et al., 2022; Maratos, 2023).

In response to public pressure and regulatory demands, many fast fashion brands have adopted green marketing strategies, claiming their products are “eco-friendly,” “sustainable,”

or “environmentally responsible.” Nevertheless, the phenomenon of greenwashing—the practice of disseminating misleading information about a product’s environmental benefits—has become a serious concern (de Freitas Netto et al., 2020; Santos et al., 2025; Schmuck et al., 2018; Tarabieh, 2021). Research by Delmas and Burbano (2011) indicates that 95% of products claiming to be “green” exhibit at least one aspect of greenwashing. In the fast fashion context, greenwashing often appears through “conscious” or “sustainable” collections that represent only a minor portion of total production, while core business practices remain unsustainable.

Such greenwashing practices trigger *green skepticism* among consumers—defined as a skeptical attitude and distrust toward environmental claims made by companies (Aji & Sutikno, 2015; Kovač et al., 2025; Nguyen et al., 2019). Green skepticism can negatively influence purchase intention by creating a trust deficit and cognitive dissonance (Aji & Sutikno, 2015; Balaskas et al., 2025; de Sio et al., 2022; Londaridze, 2024). However, research on how green skepticism affects purchase intention in the context of Indonesian fast fashion remains limited, despite Indonesia’s unique market characteristics, where consumers are price-sensitive yet increasingly environmentally aware (Li et al., 2023; Nofrizal & Martias, 2025; Rehman, 2023; Tan et al., 2025).

Conversely, brand loyalty—defined as a consumer’s emotional attachment and commitment to a brand—may mitigate the negative impact of skepticism. Highly loyal consumers tend to give brands the benefit of the doubt and are more tolerant of perceived shortcomings. Therefore, this study investigates the role of brand loyalty as a moderator in the relationship between green skepticism and purchase intention.

This research offers theoretical contributions by integrating Cognitive Dissonance Theory and Consumer Skepticism Theory within the context of green marketing in the fast fashion industry. Practically, the findings provide insights for fast fashion brands to design authentic and effective environmental communication strategies, as well as brand-building strategies that can sustain consumer purchase intention amid rising skepticism.

MATERIALS AND METHOD

This study employed a quantitative approach with an explanatory survey design aimed at examining causal relationships between variables and testing moderation effects. The population consists of fast fashion consumers in Indonesia aged 18–45 years who have purchased fast fashion products at least once in the past six months. Using the Slovin formula with a 5% margin of error, a sample of 385 respondents was determined. Participants were selected through purposive sampling based on the following criteria: (1) aged 18–45 years as the primary fast fashion target market, (2) having purchased fast fashion products at least twice in the last six months, (3) familiarity with at least three fast fashion brands (local or international), and (4) awareness of environmental issues in the fashion industry.

Data were collected via an online questionnaire distributed through Google Forms on social media platforms (Instagram, WhatsApp, Line) during October–November 2024. The questionnaire comprised four sections: (1) screening questions to ensure respondents met the criteria, (2) demographic profiles, (3) statements measuring research variables using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree), and (4) open-ended questions for qualitative insights. Green skepticism was measured using an adapted scale from Mohr et al.

(1998) with six indicators, including doubt about environmental claims, perceived deception, and distrust. Purchase intention was assessed using the Spears and Singh (2004) scale with four indicators: likelihood to purchase, willingness to buy, intention to try, and consideration to purchase. Brand loyalty was measured using the Chaudhuri and Holbrook (2001) scale with five indicators: repeat purchase intention, positive word-of-mouth, resistance to switching, and willingness to pay a premium.

Instrument validity was evaluated using convergent validity (Average Variance Extracted, AVE > 0.5) and discriminant validity (Fornell-Larcker criterion). Reliability was tested via Composite Reliability (CR > 0.7) and Cronbach's Alpha (α > 0.7). Data analysis was performed using Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) approach in SmartPLS 4.0. PLS-SEM was selected due to its ability to handle complex models with moderation effects, its flexibility regarding normal distribution assumptions, and robustness with moderate sample sizes. The analysis involved two stages: (1) outer model assessment to test the validity and reliability of the measurement model, and (2) inner model assessment to test structural hypotheses and moderation effects. Moderation effects were examined using the product indicator approach with bootstrapping (5000 samples) to determine the significance of path coefficients.

RESULTS AND DISCUSSION

Respondent Profile

Of the 385 respondents, the majority were women (68.3%), reflecting the primary target market for fast fashion. Age distribution shows a dominance of the 23-30 age group (52.7%), a millennial generation with high purchasing power and increasing environmental awareness. Most respondents had a bachelor's degree (61.3%), with an income of IDR 5-10 million/month (47.5%), indicating a middle-income segment that is price-conscious but quality-oriented. The most frequently purchased fast fashion brands were Uniqlo (72.5%), H&M (68.1%), and Zara (54.3%), indicating the dominance of international brands in the Indonesian market.

Table 1. Demographic Profile of Respondents (n=385)

Characteristics	Category	Frequency	Percentage
Gender	Female / Male	263 / 122	68.3% / 31.7%
Age	18-22 / 23-30 / 31-45	85 / 203 / 97	22.1% / 52.7% / 25.2%
Education	High School / Bachelor's / Master's Degree	102 / 236 / 47	26.5% / 61.3% / 12.2%
Income	<5 million / 5-10 million / >10 million	128 / 183 / 74	33.2% / 47.5% / 19.2%
Purchase Frequency	2-3x / 4-6x / >6x per 6 months	196 / 132 / 57	50.9% / 34.3% / 14.8%

Outer Model Evaluation

The convergent validity test results show that all indicators have outer loading >0.7 and AVE >0.5, indicating good convergent validity. Green skepticism has AVE = 0.687, purchase intention AVE = 0.734, and brand loyalty AVE = 0.698. The discriminant validity test using the Fornell-Larcker criterion shows that the square root of the AVE of each construct is greater than the correlation with other constructs, confirming that discriminant validity is met. The instrument reliability is excellent with Composite Reliability: green skepticism (CR = 0.929), purchase intention (CR = 0.917), and brand loyalty (CR = 0.921), all >0.7. Cronbach's Alpha also shows good internal consistency with values >0.85 for all variables.

Direct Effect Hypothesis Testing

The results of the PLS-SEM analysis show that green skepticism has a significant negative effect on purchase intention with a path coefficient of $\beta = -0.347$ (t-statistic = 8.924, $p < 0.001$). The negative value confirms that the higher consumers' skepticism towards environmental claims from fast fashion brands, the lower their intention to purchase the product. The effect size $f^2 = 0.237$ a medium-to-large effect according to Cohen's criteria. This finding is in line with cognitive dissonance theory where skepticism creates psychological discomfort that reduces favorable behavioral intention. Skeptical consumers tend to perceive green claims as misleading information, which leads to distrust and defensive reactions in the form of purchase avoidance.

Table 2. Results of Direct Effect Hypothesis Testing

Hypothesis	Path	Coefficient (β)	t-statistic	p-value	Decision
H1	GS \rightarrow PI	-0.347	8,924	<0.001	Accepted
H2	GS*BL \rightarrow PI	0.285	6,173	<0.001	Accepted

Testing the Moderation Effect of Brand Loyalty

The moderating effect of brand loyalty on the relationship between green skepticism and purchase intention was proven significant with an interaction coefficient of $\beta = 0.285$ ($t = 6.173$, $p < 0.001$). A positive value indicates that brand loyalty weakens the negative influence of green skepticism on purchase intention. In other words, in consumers with high brand loyalty, the negative impact of skepticism on purchase intention is not as strong as in consumers with low brand loyalty. Slope analysis shows that in the high brand loyalty group, the effect of green skepticism on purchase intention is $\beta = -0.198$ (not significant), while in the low brand loyalty group, the effect is $\beta = -0.496$ (highly significant). This confirms that brand loyalty functions as a psychological buffer that makes consumers more tolerant and gives the benefit of the doubt to their favorite brands even when facing environmental skepticism. Loyal consumers tend to experience motivated reasoning where they seek justification to maintain positive attitudes towards the brands they love.

This research model was able to explain 68.4% of the variance in purchase intention ($R^2 = 0.684$), indicating strong predictive power. Predictive relevance ($Q^2 = 0.523$) indicated the model had good predictive relevance. Goodness of Fit (GoF) of 0.617 indicated excellent overall model fit. These results confirm that green skepticism and brand loyalty (as moderators) are important predictors of purchase intention in the context of fast fashion.

The findings of this study provide several theoretical and practical implications. Theoretically, this study enriches the literature on green marketing and consumer behavior by demonstrating that in the context of a controversial industry like fast fashion, green claims can backfire and create a boomerang effect if not accompanied by substantive actions. This study also confirms the importance of brand loyalty as a protective factor that can mitigate the negative impact of skepticism, broadening our understanding of the boundary conditions of green skepticism effects.

Practically, fast fashion brands need to adopt an authentic and transparent environmental communication strategy by: (1) using third-party certifications from credible institutions such as GOTS, Fair Trade, or B-Corp to increase credibility, (2) providing supply

chain transparency through blockchain or tracking systems that allow consumers to verify claims, (3) avoiding vague terms such as "eco-friendly" and using specific claims with clear supporting data, (4) communicating trade-offs and limitations honestly rather than making exaggerated claims, and (5) demonstrating long-term commitment through concrete targets and independently verified progress reports. In addition, building brand loyalty through product quality consistency, superior customer experience, personalized engagement, and meaningful loyalty programs are crucial strategies for maintaining purchasing intentions amidst high skepticism.

CONCLUSION

This study confirms that green skepticism significantly negatively impacts purchase intention in Indonesia's fast fashion industry ($\beta = -0.347$; $p < 0.001$), as skeptical consumers show lower buying intentions due to greenwashing backfire, while brand loyalty moderates this effect ($\beta = 0.285$; $p < 0.001$) by weakening the negativity among loyal customers, with the model explaining 68.4% of variance. Managerially, brands should prioritize authentic green marketing via third-party certifications, supply chain transparency, verifiable claims, honest limitation disclosures, and verified commitments, alongside fostering loyalty through quality products, superior experiences, and programs. Limitations include the cross-sectional design's inability to track attitude dynamics and reliance on self-reported intentions over actual behavior. For future research, scholars could adopt longitudinal designs to trace evolving green skepticism and loyalty, employ experiments for causal rigor, test moderators like environmental knowledge or social influence, and compare local versus international brands in Indonesia.

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