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Counterproductive persuasion: exploring the dual pathways of affective and cognitive resistance in sustainable fashion communication

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Abstract. While the fashion industry severely impacts the ecological environment, a persistent discrepancy between consumer attitude and behavior regarding environmentally friendly consumption remains prevalent. Inappropriate corporate communication strategies characterized by directive messaging often trigger psychological resistance. This study aims to elucidate how brand message framing induces psychological reactance and drives information avoidance. Drawing upon the Stimulus Organism Response framework, this research constructs a dual pathway model and conducts empirical analyses to test how external stimuli activate internal defense mechanisms. The results confirm that perceived threat to freedom and perceived persuasive intent significantly induce both affective reactance and cognitive reactance. These two reactance pathways positively predict information avoidance, with cognitive reactance exhibiting a more pronounced impact. Consequently, brands must abandon indoctrinating communication with high persuasive intent. They should instead mitigate utilitarian motives by respecting consumer freedom of choice and ensuring objective data transparency. This approach effectively lowers psychological defenses and is crucial for achieving effective communication in sustainable fashion.

Keywords: sustainable fashion, perceived threat to freedom, perceived persuasive intent, affective reactance, cognitive reactance, information avoidance

1. Introduction

The unsustainable production paradigms of the fashion industry have inflicted a profound burden on the ecological environment, accounting for a substantial proportion of global greenhouse gas emissions and massive water consumption [1]. Concurrently, although societal environmental consciousness has widely awakened and consumers generally exhibit heightened levels of environmental concern, a persistent disconnect between pro-environmental intentions and actual behaviors frequently emerges in purchasing decisions. This incongruity has culminated in a pronounced "attitude-behavior gap" in green consumption [2].

The continuous widening of this gap is inextricably linked to the increasingly rampant phenomenon of greenwashing within the consumer market. In the absence of substantive eco-friendly initiatives, some brands attempt to cultivate a green image through ambiguous rhetoric or coercive advocacy. This practice not only

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significantly elevates consumers' perceived risk but also inflicts profound damage on brand trust [3]. Under a climate of stringent scrutiny, once audiences detect a brand's attempt to exert influence via specific tactical maneuvers, they promptly activate their internal persuasion knowledge as a defensive mechanism [4]. Within the marketing context, any element accentuating utilitarian motives triggers profound skepticism regarding the brand's authentic intentions [5]. Such skepticism readily activates consumers' defense mechanisms, thereby inducing psychological reactance. Consequently, persuasive messages originally designed to foster sustainable development not only fall short of their intended effect but paradoxically backfire, further exacerbating the predicament of the attitude-behavior disconnect.

However, extant literature has predominantly focused on the facilitative role of positive message stimuli in fostering green purchase intentions, largely overlooking the negative mechanisms through which inappropriate communication elicits consumer resistance and disengagement. To bridge this gap, the current study adopts the Stimulus-Organism-Response (S-O-R) framework to construct a dual-pathway model that explains the persuasion backfire effect.

Specifically, we operationalize perceived threat to freedom and perceived persuasive intent within sustainable fashion communication as external negative stimuli. This research aims to dissect how these antecedents activate individuals' internal affective and cognitive reactance, ultimately precipitating the behavioral response of information avoidance. While prior research on psychological reactance has frequently emphasized distal behavioral consequences such as negative word-of-mouth or outright purchase refusal, these variables fail to capture the most immediate defensive response in today's digital information overload environment. In the context of digital sustainable fashion communication, information avoidance acts as the primary and most destructive manifestation of resistance. It serves as the 'first line of defense' that terminates the persuasion process before any cognitive evaluation of the product can even occur, thereby fundamentally cutting off the pathway from green attitudes to actual purchase behaviors. By unpacking these underlying psychological mechanisms, this study endeavors to offer theoretical foundations for fashion brands to rebuild green trust and formulate more empathetic communication strategies.

2. Theoretical background and hypothesis development

2.1. The S-O-R model and psychological reactance theory

The Stimulus-Organism-Response (S-O-R) paradigm provides a systematic logical foundation for delineating the consumer decision-making process. Within the research context of sustainable fashion, external environmental stimuli typically encompass the various green messages disseminated by brands. Ideally, the framing of these messages should serve as the primary catalyst driving audiences to engage in actual pro-environmental behaviors [6]. However, when the communication content exhibits overt coercive or manipulative overtones, the audience's internal psychological processing mechanisms undergo a fundamental qualitative shift.

To elucidate this counterproductive phenomenon in communication, the current study integrates Psychological Reactance Theory (PRT) to extend the classical S-O-R paradigm. In a highly complex digital information environment, source credibility has emerged as a critical moderating variable in audience decision-making [7]. Audiences are by no means passive information receptacles; rather, they actively mobilize their intrinsic persuasion knowledge to rigorously scrutinize and cope with brands' persuasive attempts [8]. Within the sustainability context, once external stimuli with strong directive orientations are perceived as restrictions on personal freedom of choice, individuals instinctively generate a reactance motivation aimed at restoring that freedom. This theoretical integration explicitly conceptualizes psychological

reactance as an internal defensive processing mechanism within the organism. Consequently, it rigorously delineates the dynamic causal chain: from the intervention of negative stimuli, through the activation of internal defenses, to the ultimate elicitation of avoidance behavior.

2.2. The dual-pathway mechanism of affective and cognitive reactance

Serving as the critical nexus bridging external informational stimuli and subsequent behavioral outcomes, the "organism" encapsulates the internal psychological states elicited upon stimulus reception. Drawing upon Cognitive-Affective System Theory, an individual's defensive responses are co-driven by cognitive evaluation and affective processing systems [6]. Within the specific context of sustainable fashion, operationalizing the organismic state into the two distinct dimensions of affective and cognitive reactance is anchored in profound theoretical underpinnings.

First, fashion consumption is characterized by an exceptionally high degree of personal involvement, functioning as a core vehicle for identity construction and aesthetic expression. Extant research substantiates that strongly directive persuasive messages in social marketing frequently threaten audiences' autonomy of choice, thereby provoking affective reactance predominantly characterized by anger [9, 10]. Consequently, when brands attempt to seize the moral high ground to preach, audiences perceive a direct challenge to their autonomy and swiftly generate immediate affective aversion, such as anger or disgust.

Second, sustainability issues are frequently imbued with strong moral evaluative overtones and are deeply intertwined with personal responsibility [11]. Confronted with such sensitive topics, audiences equipped with mature persuasion knowledge subject a brand's communication strategies and authentic motives to rigorous rational scrutiny [4]. Furthermore, because sustainable products typically entail price premiums or specific quality considerations, this pragmatic context compels consumers to exercise greater caution in their decision-making, objectively exacerbating the attitude-behavior gap [2]. Under the dual pressures of moral scrutiny and pragmatic costs, once inappropriate messaging triggers an audience's perception of greenwashing, individuals proactively seek out logical flaws within the information to execute cognitive defenses. Ultimately, this instinctual aversion at the affective level and logical counterarguing at the cognitive level intertwine, constituting a dual defensive barrier against inept persuasion.

2.3. Perceived threat to freedom and perceived persuasive intent

To precisely delineate the internal mechanisms inducing psychological reactance, this study meticulously operationalizes the core variables within the stimulus stage to differentiate external negative antecedents across various dimensions. Perceived threat to freedom centers on discursive power conflicts during the communication process, reflecting the sense of coercion audiences experience upon receiving information. When brands attempt to restrict audiences' rights to autonomously choose their lifestyles through coercive or prescriptive heavy-handed messaging, such interventions constitute either soft threats or hard manipulation of an individual's decision-making space [9, 10]. Once the communication content is judged to bear excessive moralizing overtones, audiences develop psychological reactance against being forced to act prosocially, thereby swiftly activating the intrinsic motivation aimed at restoring their decision-making freedom [9].

On the other hand, perceived persuasive intent focuses on the audience's rigorous scrutiny regarding the authenticity of a brand's communication motives. Given the information overload and concomitant greenwashing crises within the realm of sustainable fashion, source credibility has emerged as a decisive moderating variable in consumers' pro-environmental decision-making [7]. This intricate trust environment compels audiences to rely heavily on their intrinsic persuasion knowledge, utilizing it as a core psychological mechanism to cope with brands' persuasive attempts and to evaluate the messaging's tactical strategies and

genuine objectives [4]. When brands exhibit excessive profit-driven motives or manipulative tendencies, such exposed intent rapidly undermines the inherently fragile foundation of trust [5]. Once audiences detect that a brand is exploiting environmental issues for utilitarian marketing, this perception of ulterior motives directly translates into a critical trigger activating cognitive reactance. Ultimately, perceived persuasive intent and perceived threat to freedom operate in parallel along both affective and cognitive routes, jointly constituting the external drivers that precipitate the failure of sustainable communication.

2.4. Information avoidance behavior

Serving as the ultimate behavioral response at the output stage of the research model, information avoidance constitutes a substantive evasive action undertaken by audiences following their internal defensive processing. It is not merely the distal outcome of psychological reactance elicited by highly directive persuasion [9]; rather, it represents a proactive defensive strategy adopted by individuals to preserve psychological equilibrium and autonomous choice when confronted with morally oppressive sustainability issues [12]. Within the theoretical framework of this study, such avoidance behavior is posited as the inevitable consequence jointly propelled by the affective and cognitive reactance pathways.

In the affective dimension, when a brand's heavy-handed communication elicits audience displeasure, the instinct for emotion regulation drives individuals to engage in information avoidance through physical or psychological attentional shifts [12]. In the cognitive dimension, once the audience's rational scrutiny uncovers the brand's utilitarian motives and triggers concerns of being deceived, they fundamentally discount the value of the information source, subsequently employing resistance strategies to actively discard the messaging [13]. Whether manifested as affective anger or negative cognitive appraisals [9], when these internal defenses accumulate to a critical threshold, they compel the audience to form a strong avoidance intention, thereby severing contact with such information [14]. This dynamic transmission mechanism effectively elucidates why high-intensity sustainability advocacy that imposes excessive behavioral demands frequently results in audience alienation and pushback [15]. Although extant literature has widely corroborated the existence of a salient attitude-behavior gap in the realm of sustainable consumption [2], the current study advances this dialogue by positing that it is precisely these psychological defense barriers, triggered by inappropriate external stimuli, that obstruct the effective dissemination of green concepts. More fundamentally, they stifle the translation of pro-environmental attitudes into actual consumption behaviors, ultimately rendering this gap increasingly insurmountable.

2.5. Research model

Building upon the aforementioned theoretical deductions, the current study deeply integrates the classical Stimulus-Organism-Response (S-O-R) framework with Psychological Reactance Theory to construct a comprehensive theoretical model elucidating the persuasion backfire effect. Centered on the defensive mechanisms at the information-receiving end, the model conceptualizes perceived threat to freedom and perceived persuasive intent as external negative stimuli triggered by the communication content. These dual stimuli activate the audiences' internal organismic reactance along two parallel pathways, respectively inducing affective reactance at the emotional level and cognitive reactance at the rational level. Ultimately, these two intertwined internal defensive states jointly drive the audiences to manifest information avoidance as an evasive behavioral response. The specific research model is depicted in Figure 1.

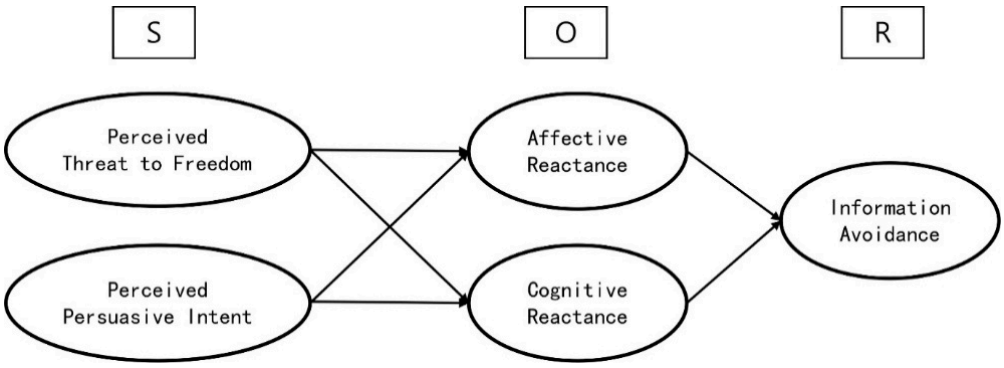


Figure 1. Research model

2.6. Research hypotheses

2.6.1. The relationship between external stimuli (S) and the organismic state (O)

In sustainable fashion communication, the coercive nature of the messaging frequently serves as a direct trigger for consumers' defensive mechanisms. Grounded in Psychological Reactance Theory, when consumers perceive that a brand is forcefully imposing moral standards or restricting their latitude of autonomous choice, a perceived threat to freedom emerges. This sense of coercion swiftly disrupts the individual's psychological equilibrium, provoking negative emotional fluctuations and rational skepticism. Concurrently, when consumers detect the strong persuasive intent underlying the brand's messaging, they determine that the communication is not a purely altruistic environmental initiative, but rather a purpose-driven, utilitarian endeavor. This recognition of ulterior motives further fortifies the audience's psychological defenses, compelling them to exhibit intense aversion at the affective level and engage in profound counterarguing at the cognitive level. Building upon the aforementioned logical deductions, this study posits the following hypotheses:

H1: Perceived threat to freedom (S) exerts a significant positive effect on consumers' affective reactance (O).

H2: Perceived threat to freedom (S) exerts a significant positive effect on consumers' cognitive reactance (O).

H3: Perceived persuasive intent (S) exerts a significant positive effect on consumers' affective reactance (O).

H4: Perceived persuasive intent (S) exerts a significant positive effect on consumers' cognitive reactance (O).

2.6.2. The relationship between internal states (O) and information avoidance (R)

An individual's internal state of reactance serves as the core antecedent determining their subsequent behavioral responses, functioning as the pivotal bridge connecting external negative stimuli to ultimate evasive actions. As an intense negative affective experience, affective e reactance compels individuals to proactively block the information source to mitigate displeasure, thereby seeking psychological comfort. Conversely, cognitive reactance manifests as individuals engaging in mental counterarguing against the message and rigorously questioning its veracity. This thorough rational rejection leads them to deem the associated advocacy devoid of reference value, consequently generating substantive information avoidance behavior. Whether through emotional repulsion at the affective level or logical disbelief at the cognitive level, the activation of internal defenses ultimately renders the communication ineffective. Drawing upon these logical deductions, the current study posits the following hypotheses:

- H5: Consumers' affective reactance (O) exerts a significant positive effect on information avoidance (R).
- H6: Consumers' cognitive reactance (O) exerts a significant positive effect on information avoidance (R).

3. Research design

3.1. Questionnaire design

This study employed a questionnaire survey method for data collection. Building upon Psychological Reactance Theory (PRT) and established validated scales, the questionnaire was adapted and refined to fit the specific context of sustainable fashion communication. The primary sections of the instrument encompass all focal variables within the conceptual model: the independent variables (perceived threat to freedom and perceived persuasive intent), the mediating variables (affective reactance and cognitive reactance), and the dependent variable (information avoidance). All measurement items were scored using a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Furthermore, the final section of the questionnaire collected respondents' demographic information, specifically including gender, age, educational background, and monthly income.

3.2. Data collection and analytical approach

The data collection for this study was conducted between November 8 and November 20, 2025, primarily utilizing an online survey platform to target cohorts with prior sustainable fashion consumption experience. During the survey period, a total of 263 responses were gathered. Following a rigorous data screening process, 5 invalid questionnaires were excluded due to excessively short completion times, evident patterned responses, or excessive missing values. Consequently, 258 valid responses were retained, yielding a valid response rate of 98.1%.

This study employed SPSS version 27.0 statistical software to process and analyze the valid data. The analytical procedures encompassed the following steps: first, reliability and validity tests were executed to ensure the trustworthiness and effectiveness of the instrument; second, a correlation analysis was performed to preliminarily explore the relationships among the variables; finally, linear regression analyses were utilized to empirically test the proposed theoretical model and hypotheses.

4. Data analysis and results

4.1. Demographic characteristics of the sample

To ascertain the profile of the respondents, a frequency analysis was performed on the data from the 258 valid questionnaires. Regarding gender composition, female respondents constituted the majority, totaling 153 individuals (59.3%). In terms of age distribution, the 30-to-40 age cohort represented the core demographic, forming the bulk of the sample (N = 119, 46.12%). From the perspective of educational background, the sample exhibited a notably high level of education; respondents holding a bachelor's degree (N = 109, 42.25%) and those with a master's degree or above (N = 87, 33.72%) collectively accounted for over 70%. Furthermore, concerning income levels, more than 60% of the participants reported a monthly income exceeding 5,000 RMB (N = 157, 60.85%).

4.2. Reliability and validity analysis

To ensure the reliability and validity of the measurement instrument, these analyses were conducted prior to hypothesis testing. To rigorously assess the relationships involving consumers' affective and cognitive reactance within the context of sustainable fashion communication, the reliability and validity of each underlying construct were evaluated. In this study, Cronbach's α was calculated to measure internal consistency and establish reliability. The analytical results confirm that the reliability and validity of all variables were robustly established, as detailed in Table 1, 2, and 3.

Table 1. Reliability and validity assessment of perceived threat to freedom and perceived persuasive intent

Construct		Factor Loadings		Communalities	Variance Explained (%)	Cumulative Variance (%)	Eigenvalue	Cronbach's α
		①	②					
Perceived Threat to Freedom	Q1	0.795		0.675	35.734	35.734	3.216	0.881
	Q2	0.798		0.700				
	Q3	0.786		0.728				
	Q4	0.640		0.688				
	Q5	0.720		0.654				
Perceived Persuasive Intent	Q6		0.654	0.574	33.602	69.336	3.024	0.855
	Q7		0.834	0.752				
	Q8		0.729	0.663				
	Q9		0.860	0.806				
KMO = .907, Bartlett's test of sphericity: Approx. χ^2 = 1336.027, df = 36, p = .000								

Note: ①Perceived Threat to Freedom ②Perceived Persuasive Intent

Table 2. Reliability and validity assessment of affective and cognitive reactance

Construct		Factor Loadings		Communalities	Variance Explained (%)	Cumulative Variance (%)	Eigenvalue	Cronbach's α
		①	②					
Affective Reactance	Q10	0.706		0.634	35.812	35.812	3.223	0.868
	Q11	0.679		0.638				
	Q12	0.776		0.642				
	Q13	0.827		0.739				
	Q14	0.633		0.652				
Cognitive Reactance	Q15		0.620	0.663	32.361	68.172	2.912	0.858
	Q16		0.708	0.675				
	Q17		0.828	0.776				
	Q18		0.827	0.718				
KMO = .890, Bartlett's test of sphericity: Approx. χ^2 = 1350.231, df = 36, p = .000								

Note: ①Affective Reactance ②Cognitive Reactance

Table 3. Reliability and validity assessment of information avoidance

Construct		Factor Loadings	Communalities	Variance Explained (%)	Cumulative Variance (%)	Eigenvalue	Cronbach's α
Information Avoidance	Q19	0.796	0.634	66.255	66.255	3.313	0.872
	Q20	0.842	0.709				
	Q21	0.855	0.732				
	Q22	0.831	0.691				
	Q23	0.74	0.547				
KMO = .861, Bartlett's test of sphericity: Approx. χ^2 = 604.725, df = 10, p = .000							

4.3. Correlation analysis

A Pearson correlation analysis was conducted to examine the relationships among the focal variables, with the results summarized in Table 4. Specifically, significant positive correlations were observed between perceived threat to freedom and affective reactance (r = .706, p < .001), as well as between perceived threat to freedom and cognitive reactance (r = .654, p < .001). Similarly, perceived persuasive intent exhibited strong positive correlations with both affective reactance (r = .755, p < .001) and cognitive reactance (r = .711, p < .001). Furthermore, both affective reactance (r = .595, p < .001) and cognitive reactance (r = .681, p < .001) were significantly and positively associated with information avoidance. Overall, statistically significant associations exist among all core variables, indicating a robust internal structure of the model and establishing a solid foundation for subsequent hypothesis testing.

Table 4. Correlation analysis

	Perceived Threat to Freedom	Perceived Persuasive Intent	Affective Reactance	Cognitive Reactance	Information Avoidance
Perceived Threat to Freedom	1 (0.000***)				
Perceived Persuasive Intent	0.708 (0.000***)	1 (0.000***)			
Affective Reactance	0.706 (0.000***)	0.755 (0.000***)	1 (0.000***)		
Cognitive Reactance	0.654 (0.000***)	0.711 (0.000***)	0.74 (0.000***)	1 (0.000***)	
Information Avoidance	0.576 (0.000***)	0.554 (0.000***)	0.595 (0.000***)	0.681 (0.000***)	1(0.000***)

Note: *** p < 0.001.

4.4. Hypothesis testing

To empirically validate the impact of external stimuli (perceived threat to freedom and perceived persuasive intent) on consumers' affective reactance within the research model, a multiple regression analysis was

conducted. The results indicate that the overall regression model is highly significant (F = 215.905, p < .001), with the independent variables explaining 62.9% of the variance in affective reactance (R^2 = .629). At the .001 significance level, both dimensions exert a significant positive effect on affective reactance (Table 5). Regarding perceived threat to freedom, the analysis reveals a significant positive effect on affective reactance (β = .343, t = 6.356, p < .001). This suggests that when consumers perceive a threat to their freedom in sustainable fashion communication, a higher degree of affective reactance is triggered. Therefore, Hypothesis 1 (H1) is supported. As for perceived persuasive intent, the analysis similarly demonstrates a significant positive effect on affective reactance (β = .512, t = 9.475, p < .001). This implies that the more conspicuous the persuasive intent exhibited by the brand, the more intense the negative emotional pushback generated by the audience. Hence, Hypothesis 3 (H3) is supported. Furthermore, as illustrated in Table 5, the Variance Inflation Factor (VIF) values for the variables are all 2.004, which fall well below the critical threshold of 10. This confirms the absence of severe multicollinearity issues within the model, thereby ensuring the high reliability of the analytical results.

Table 5. Verification of hypothesis 1 and 3

	Unstandardized Coefficients		Standardized Coefficients	t	P	VIF	R^2	Adjusted R^2	F
	B	Std. Error	Beta						
Constant	0.645	0.141	-	4.591	0.000***	-			
Perceived Threat to Freedom	0.336	0.053	0.343	6.356	0.000***	2.004	0.629	0.626	F = 215.905, P = 0.000***
Perceived Persuasive Intent	0.487	0.051	0.512	9.475	0.000***	2.004			
Dependent: Affective Reactance									

Note: *** p < 0.001.

To empirically examine the impact of external stimuli (perceived threat to freedom and perceived persuasive intent) on consumers' cognitive reactance within the research model, a multiple regression analysis was conducted. The results indicate that the overall regression model is highly significant (F = 156.171, p < .001), with the independent variables explaining 55.1% of the variance in cognitive reactance (R^2 = .551). At the .001 significance level, both predictor variables in the model exert a significant positive effect on cognitive reactance (Table 6).Regarding perceived threat to freedom, the analysis reveals a significant positive effect on cognitive reactance (β = .302, t = 5.083, p < .001). This indicates that in sustainable fashion communication, the higher the degree of restricted freedom perceived by consumers, the more intense the cognitive reactance they generate, which manifests as rational counterarguing and skepticism. Therefore, Hypothesis 2 (H2) is supported. Concerning perceived persuasive intent, the analysis similarly demonstrates a significant positive effect on cognitive reactance (β = .497, t = 8.358, p < .001). This implies that when consumers detect conspicuous persuasive motives from a brand, their cognitive defense mechanisms are significantly elevated. Hence, Hypothesis 4 (H4) is supported. Additionally, as shown in Table 6, the Variance Inflation Factor (VIF) values for the predictors are all 2.004, indicating the absence of multicollinearity issues within the model and confirming that the regression results are robust and reliable.

Table 6. Verification of hypothesis 2 and 4

	Unstandardized Coefficients		Standardized Coefficients	t	P	VIF	R^2	Adjusted R^2	F
	B	Std. Error	Beta						
Constant	0.947	0.147	-	6.455	0.000***	-			
Perceived Threat to Freedom	0.28	0.055	0.302	5.083	0.000***	2.004	0.551	0.547	F = 156.171 P = 0.000***
Perceived Persuasive Intent	0.449	0.054	0.497	8.358	0.000***	2.004			
Dependent: Cognitive Reactance									

Note: *** p< 0.001.

Table 7. Verification of hypothesis 5 and 6

	Unstandardized Coefficients		Standardized Coefficients	t	P	VIF	R^2	Adjusted R^2	F
Constant	0.587	0.181	-	3.25	0.001***	-			
Affective Reactance	0.206	0.069	0.201	3.001	0.003**	2.212	0.482	0.478	F = 118.752 P = 0.000***
Cognitive Reactance	0.575	0.072	0.532	7.943	0.000***	2.212			
Dependent: Information Avoidance									

Note: *** p < 0.001.

To empirically validate the impact of the organismic reactant states (affective and cognitive reactance) on consumers' final behavioral response of information avoidance, a multiple regression analysis was conducted. The results indicate that the overall regression model demonstrates strong explanatory power (F = 118.752, p < .001), with the independent variables accounting for 48.2% of the variance in information avoidance (R^2= .482). As shown in Table 7, both dimensions within the model exhibit a positive predictive effect on information avoidance at significant levels. Regarding affective reactance, the analysis reveals a significant positive effect on information avoidance (β = .201, t = 3.001, p = .003). This indicates that when consumers experience negative emotions, such as aversion and anger, toward sustainable fashion communication, the likelihood of them proactively avoiding related information significantly increases. Therefore, Hypothesis 5 (H5) is supported. Concerning cognitive reactance, the analysis demonstrates a highly significant positive effect on information avoidance (β = .532, t = 7.943, p < .001). This implies that the counterarguing and skepticism generated at the rational level by the audience constitute the primary antecedent driving information avoidance. Hence, Hypothesis 6 (H6) is supported. Furthermore, the VIF value for this model is 2.212, indicating the absence of multicollinearity issues within the model and confirming that the data analysis results are authentic and valid.

5. Conclusion

Drawing upon the S-O-R framework and Psychological Reactance Theory (PRT), this study investigated the underlying mechanisms through which information presentation formats in sustainable fashion communication elicit audience avoidance behaviors. Empirical results corroborate that consumers generate systematic defensive responses to inappropriate brand communication strategies. Specifically, perceived threat to freedom and perceived persuasive intent serve as the external antecedents triggering these psychological defenses. When communication content exhibits a strong prescriptive tone or conspicuous utilitarianism, these two negative stimuli swiftly activate the audiences' dual reactance at both the affective and cognitive levels. The analytical results indicate an asymmetrical impact of the two reactance pathways on information avoidance. Cognitive reactance ($\beta = 0.532$) demonstrates a stronger predictive effect than affective reactance ($\beta = 0.201$). This statistical difference aligns with the specific decision-making mechanisms in sustainable fashion consumption. Sustainable products inherently involve higher financial costs and functional trade-offs compared to conventional apparel. These elevated decision costs prompt consumers to adopt a systematic cognitive processing mode rather than relying solely on immediate affective responses. Furthermore, the high prevalence of greenwashing in the market activates consumer persuasion knowledge. Confronted with highly prescriptive communication, the primary consumer defense shifts from emotional aversion to logical counterarguing. Consumers systematically scrutinize brand motives and identify logical flaws to discount source credibility. Consequently, cognitive refutation constitutes the dominant driver of information avoidance. This cognitive resistance pathway translates internal skepticism into evasive behavior and directly explains the counterproductive nature of current sustainable persuasion strategies. Ultimately, triggered by maladroit informational stimuli, this dual psychological barrier fundamentally obstructs the translation of pro-environmental attitudes into actual consumption behaviors, thereby providing a critical theoretical lens for unpacking the attitude-behavior gap within the realm of sustainable consumption.

In light of the aforementioned mechanisms, it is imperative for brands to abandon traditional didactic propaganda in their sustainable communication and reconstruct their strategies to breach the audience's psychological defenses. Regarding discourse framing, brands should implement soft-guidance strategies to eliminate the oppressive nature of prescriptive messaging, thereby transforming coercive moral imperatives into heuristic, autonomous choices. Instead of framing the rejection of fast fashion as an absolute moral obligation, brands should empower consumers with full decision-making autonomy by showcasing the aesthetics of sustainable fabrics across diverse lifestyle scenarios. This approach effectively circumvents the emotional reactance triggered by coerced altruism. Simultaneously, given the decisive role of cognitive reactance in driving information avoidance, brands must pivot their communication focus from emotional slogans to rational evidence. Enterprises should establish traceable digital information systems and proactively disclose concrete data regarding raw material sourcing, processing, and carbon footprints. When the audience's rigorous scrutiny is met with objective corroboration, their suspicions of ulterior motives or greenwashing will dissipate, thereby dismantling the defensive barriers at the cognitive level.

Additionally, to mitigate the audience's deep-seated persuasion knowledge defenses, brands should not be confined to one-way information indoctrination; instead, they should leverage social media platforms to construct real-time, two-way communication networks. When brands exhibit an open, transparent posture and a willingness to engage in dialogue, the audience's perceived manipulative intent decreases substantially. This egalitarian interactive model facilitates a shift in the communication process from adversarial defense to collaborative identification. Fundamentally, to genuinely bridge the attitude-behavior gap, communication content must integrate stakeholder perspectives and precisely address consumers' pragmatic demands. Brands can concretely articulate the tangible personal benefits of sustainable products, such as durability and health

benefits. By intricately binding abstract pro-environmental attributes with concrete product utility, brands can provide audiences with robust purchasing motivations. This reciprocity-based communication strategy can thoroughly neutralize the audience's vigilance against unilateral corporate profiteering, eventually unblocking the core pathway that translates pro-environmental attitudes into actual consumption behaviors.

Although the present study yields valuable insights, several limitations warrant acknowledgment and provide avenues for future research. Methodologically, the reliance on a cross-sectional survey design precludes the establishment of definitive causal inferences among the variables. Future research could adopt experimental designs to manipulate brand discourse, thereby providing a more direct and rigorous examination of how the audiences' psychological defenses are activated. Regarding theoretical extension, the current model has yet to fully account for consumers' individual traits and brand familiarity. Subsequent studies are encouraged to incorporate these factors as moderating variables to elucidate how the reactance effects vary across distinct consumer segments.

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References

[1] United Nations Environment Programme (UNEP). (2023, June 27). *UNEP and UN Climate Change provide fashion communicators with practical guide to contribute to sustainable change.* https://www.unep.org/news-and-stories/press-release/unep-and-un-climate-change-provide-fashion-communicators-practical

[2] Cascavilla, A., Caferra, R., & Morone, A. (2025). Experimental evidence on consumers' willingness to pay in the sustainable fashion industry. *Scientific Reports, 15*, 38752 . https: //doi.org/10.1038/s41598-025-23008-9

[3] Li, G., & Sun, X. (2022). The Impact of Green Brand Crises on Green Brand Trust: An Empirical Study. *Sustainability, 14*(2), 611. https: //doi.org/10.3390/su14020611

[4] Beckert, J. (2024). Friestad & Wright (1994): The Persuasion Knowledge Model. In: Hoffjann, O., Sandhu, S. (eds) *Schlüsselwerke für die Strategische Kommunikationsforschung*. Springer VS.

[5] Eisend, M., & Tarrahi, F. (2022). Persuasion Knowledge in the Marketplace: A Meta-Analysis. *Journal of Consumer Psychology, 32*(1), 3-22. https: //doi.org/10.1002/jcpy.1258

[6] Chen, L., Haider, M. J., & He, J. (2024). Should "green information" be interactive? The influence of green information presentation on consumers' green participation behavior for driving sustainable consumption of fashion brands. *Journal of Cleaner Production, 470*, 143329.

[7] Yang, X., & Yu, Z. (2024). Interplay of network information dissemination in the era of big data on environmental sustainable development and agricultural consumers' purchase decisions. *Journal of King Saud University - Science, 36*(4), 103117.

[8] Friestad, M., & Wright, P. (1994). The Persuasion Knowledge Model: How people cope with persuasion attempts. *Journal of Consumer Research, 21*(1), 1–31.

[9] Dillard, J. P., & Shen, L. (2005). On the Nature of Reactance and its Role in Persuasive Health Communication. *Communication Monographs, 72*(2), 144–168. https: //doi.org/10.1080/03637750500111815

[10] Rains, S.A. (2013), The Nature of Psychological Reactance Revisited: A Meta-Analytic Review. *Human Communication Research, 39*, 47-73. https: //doi.org/10.1111/j.1468-2958.2012.01443.x

[11] Antonetti, P., & Maklan, S. (2014). Feelings that make a difference: How guilt and pride convince consumers of the effectiveness of sustainable consumption choices. *Journal of Business Ethics, 124*(1), 117–134. https: //doi.org/10.1007/s10551-013-1841-9

[12] Sweeny, K., Melnyk, D., Miller, W., & Shepperd, J. A. (2010). Information Avoidance: Who, What, When, and Why. *Review of General Psychology, 14*(4), 340-353.

[13] Fransen, M. L., Smit, E. G., & Verlegh, P. W. J. (2015). Strategies and motives for resistance to persuasion: An integrative framework. *Frontiers in Psychology, 6*, Article 1201. https: //doi.org/10.3389/fpsyg.2015.01201

[14] Ma, X., Xu, M., Huang, L., & Md Nor, K. (2026). Understanding sustainable purchase and avoidance intentions in green influencer marketing: The role of perceived pressure and consumer reactance. *Sustainability, 18*(3), Article 1431. https://doi.org/10.3390/su18031431

[15] Yan, Z., Arpan, L. M., & Clayton, R. B. (2024). Assessing the Role of Self-Efficacy in Reducing Psychological Reactance to Guilt Appeals Promoting Sustainable Behaviors. *Sustainability, 16*(17), 7777. https: //doi.org/10.3390/su16177777