Institute for Advanced Science,
Social and Sustainable Future

MORALITY BEFORE KNOWLEDGE

Antecedents and outcomes of green brand image: Perspectives from guests of DOT-accredited hotels

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ABSTRACT

Background: Amid growing calls for environmental accountability in hospitality, this study explores how Green Brand Image mediates the relationship between perceived Green Brand Benefits both functional (e.g., eco-friendly operations) and emotional (e.g., environmental self-expression) and brand outcomes such as trust, loyalty, preference, and perceived sustainable corporate image. Drawing from associative network theory and the hierarchy of effects model, the study builds on recent literature emphasizing the cognitive and affective processes driving green consumer behavior. **Methods**: Data were collected from 260 guests who stayed at Department of Tourism (DOT)-accredited accommodations in Cebu City, Philippines. Using a structured survey and analyzed through Structural Equation Modeling (SEM). **Findings:** Study reveal that emotional benefits (β = 0.607, p <0.001) have a more substantial impact on Green Brand Image than functional benefits (β = 0.284, p <0.001). Green Brand Image significantly influences trust (β = 0.740), loyalty (β = 0.716), preference (β = 0.679), and sustainable corporate image (β = 0.743), all at p <0.001. Full mediation was confirmed across all pathways (H8a–H8h), suggesting that brand outcomes are realized only when green benefits are internalized through a credible and emotionally engaging brand image. These results validate the role of emotional engagement in sustainability marketing and highlight the image construct as a decisive conduit for influencing consumer behavior. **Conclusion**: The study concludes that hotels must combine authentic environmental initiatives with emotionally resonant storytelling to build consumer trust and long-term brand equity. **Novelty/Originality of this article:** The novelty of this study lies in empirically demonstrating the full mediating role of Green Brand Image in an emerging Southeast Asian tourism context, where green branding is still evolving.

KEYWORDS: brand loyalty; emotional benefits; green brand image; green marketing; sustainable hospitality.

1. Introduction

The global hospitality industry, a major driver of tourism and economic development, is increasingly under scrutiny due to its environmental footprint, particularly from energy consumption, water usage, and waste production (Diaz-Farina et al., 2023; Legrand et al., 2022). Tourism-related activities account for approximately 8% of global carbon emissions, with accommodation services being among the primary contributors (UNEP, 2023). This intensifying ecological pressure, combined with the rise of green consumerism, has prompted hotels to implement sustainability-driven brand strategies in an attempt to align with the values of environmentally conscious consumers (Mota et al., 2024; Velaoras et al., 2024).

As a result, Green Brand Image (GBI) defined as consumers' perception of a brand's genuine commitment to environmental responsibility has emerged as a strategic asset in influencing consumer attitudes and behaviors (Lin & Zhou, 2022; Majeed et al., 2022). Green brand benefits are commonly conceptualized in two dimensions: functional benefits, which involve tangible sustainability practices (e.g., energy efficiency and resource conservation), and emotional benefits, which reflect consumers' psychological identification with eco-friendly brands (Bashynska et al., 2024; Rizomyliotis et al., 2021). However, despite the growing body of green branding literature, limited empirical research has explored how these benefits interact to shape GBI and how GBI, in turn, affects brand trust, loyalty, preference, and perceived sustainable corporate image especially in the context of developing urban economies.

Compounding the issue is the rise of greenwashing, wherein brands exaggerate or misrepresent their environmental claims, thereby eroding consumer trust and undermining the legitimacy of sustainable marketing efforts (Malmlund, 2024; Netsai, 2023). This concern is particularly pressing in Southeast Asian hospitality markets, such as the Philippines, where regulatory frameworks like the Department of Tourism's (DOT) National Tourism Development Plan 2023–2028 seek to institutionalize sustainable practices, but implementation across local tourism businesses remains inconsistent (Cruz, 2022)

This study is grounded in two theoretical frameworks. Associative Network Theory of John Anderson which explains how consumers form brand knowledge structures through interconnected cognitive nodes, which in the case of green branding are activated by both functional and emotional environmental cues. The Hierarchy of Effects Model by Robert J. Lavidge, and Gary A. Steiner further supports this cognitive-affective-behavioral process, describing how consumers move from awareness (cognition) to attitude (affect) to behavior (conation). These frameworks together underpin the hypothesized mediating role of GBI in translating green brand benefits into brand-related outcomes.

Previous studies have examined green branding's influence on consumer attitudes (Ha, 2022; Luo et al., 2023), yet there remains a lack of integrated models assessing GBI's mediating role and its effect on broader brand equity metrics within developing urban hotel markets. In particular, there is a research gap in evaluating how perceived green brand benefits shape emotional and cognitive brand image and how this, in turn, affects consumer loyalty, trust, and perceptions of corporate sustainability.

Therefore, this study aims to investigate the mediating role of Green Brand Image in the relationship between perceived green brand benefits (functional and emotional) and brand outcomes (brand preference, trust, loyalty, and perceived sustainable corporate image) among guests of DOT-accredited hotels in Cebu City, Philippines. This study contributes to the existing literature by integrating theoretical perspectives with empirical validation in a Southeast Asian context and by emphasizing the strategic importance of Green Brand Image in enhancing brand equity and sustainable market positioning within the hospitality sector.

2. Methods

This study employed a quantitative research design using Structural Equation Modeling (SEM) to examine the mediating role of Green Brand Image (GBI) in the relationship between perceived green brand benefits (functional and emotional) and brand outcomes (brand preference, brand trust, brand loyalty, and sustainable corporate image) among guests of Department of Tourism (DOT)-accredited accommodations in Cebu City, Philippines. The methodology was chosen to empirically validate complex relationships between latent constructs grounded in Associative Network Theory and the Hierarchy of Effects Model.

2.1 Research location and rationale

Cebu City, a leading urban tourism destination in the Visayas region, was selected as the research site due to its dual identity as both an economic hub and an emerging player in sustainable tourism. The presence of numerous DOT-accredited accommodations in the city allowed access to a diverse pool of environmentally-aware guests. Despite the city's alignment with national tourism sustainability frameworks such as the DOT's National Tourism Development Plan 2023–2028, implementation remains inconsistent at the hotel level (DOT, 2023). Conducting the study in this location offers valuable insights into the operationalization of green branding in the context of a developing urban hospitality market.

2.2 Population and sample

The population included local and international tourists who had recently stayed in DOT-accredited hotels in Cebu City. The study utilized purposive sampling, selecting respondents who were at least 18 years old, had stayed at a DOT-accredited hotel within the past three months, and were able to comprehend the survey instrument written in English. A total of 400 questionnaires were distributed using an online platform and QR code-accessible links posted in hotel lobbies and guest areas. Of these, 260 valid responses were retained after data cleaning such as responses with o.oo SD, and those who do not qualify within the inclusion criteria.

Table 1. Demographic profile (N=260)

Items	Category	Frequency	Percentage
Gender	Male	62	25.6%
	Female	180	74.4%
Age	20-30 years old	187	77.3%
	31-40 years old	35	14.5%
	41-50 years old	17	7%
	51-59 years old	3	1.2%
Education	Undergraduate	148	56.93%
	Graduate	68	26.15%
	Post Graduate/Masters	44	16.92%
Income Level	Less than PHP 9,520	102	42.1%
	Between PHP 9,525 to PHP 19,040	57	23.6%
	Between PHP 19,040 to PHP 38,080	48	19.8%
	Between PHP 38,080 to PHP 66, 640	28	11.6%
	Between PHP 66,640 to PHP 114,240	4	1.7%
	Between PHP 114,240 to PHP 190,400	2	0.8%
	At least PHP 190,400	1	0.4%
Frequency of staying inside hotels during the last year	One time	91	37.6%
	Two times	92	38%
	Three Times	36	14.9%
	Above three times	23	9.5%

2.3 Research instruments and data collection procedure

A structured survey questionnaire was developed, comprising seven constructs; (1) perceived functional benefits, (2) perceived emotional benefits, (3) green brand image, (4) brand preference, (5) brand trust, (6) brand loyalty, and (7) sustainable corporate image. All items were adapted from validated scales in previous literature (Lin & Zhou, 2022; Luo et al., 2023; Majeed et al., 2022). Responses were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Data were collected from December 2024 to February 2025. Ethical clearance was obtained from the institutional review board of the researchers' affiliated institution. Hotel managers were contacted for

permission to conduct the study on their premises. Respondents provided informed consent prior to participation, and anonymity was maintained throughout the process.

2.4 Variables and measurement

Results of outerloadings as presented in Table 2, indicate that all measurement items exhibit strong relationships with their intended constructs, with no indicators falling below 0.70. The consistently high outer loadings across constructs affirm the model's strong item reliability and convergent validity, ensuring that the indicators adequately capture the dimensions they are intended to measure.

Table 2. Outer loadings

	Emotional benefits	Functional benefits	Green brand image	Green brand loyalty	Green brand preference	Green brand trust	Sustainable corporate image
EMB1	0.885						
EMB2	0.907						
EMB3	0.894						
EMB4	0.914						
FB1		0.911					
FB2		0.924					
FB3		0.843					
GBI1			0.848				
GBI2			0.853				
GBI3			0.864				
GBI4			0.878				
GBI5			0.882				
GBL1				0.829			
GBL2				0.861			
GBL3				0.906			
GBL4				0.873			
GBP1					0.905		
GBP2					0.893		
GBP3					0.914		
GBT1						0.908	
GBT2						0.855	
GBT3						0.894	
GBT4						0.879	
GBT5						0.876	
SIC1							0.84
SIC3							0.839
SIC4							0.798
SIC5							0.863

Reliability analysis was conducted to evaluate the internal consistency of the constructs, ensuring that the indicators consistently measured their respective latent variables. Three key coefficients were utilized: Cronbach's alpha, composite reliability (rho_a and rho_c), and average variance extracted (AVE), each providing complementary insights into the measurement quality. Cronbach's alpha, a traditional measure of internal consistency, indicated excellent reliability across constructs, with values ranging from 0.856 to 0.929, surpassing the recommended threshold of 0.70. Similarly, composite reliability values (rho$_a$ ranging from 0.866 to 0.931 and rho_c ranging from 0.902 to 0.946) further confirmed the strong internal consistency of the constructs. In terms of convergent validity, all constructs achieved AVE values between 0.698 and 0.817, exceeding the minimum acceptable threshold of 0.50. These findings affirm that the indicators adequately capture the variance of their respective constructs, thereby establishing strong reliability and convergent validity of the measurement model, supporting its suitability for further structural analysis.

Table 3. Reliability

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Emotional benefits	0.922	0.923	0.945	0.81
Functional benefits	0.875	0.906	0.922	0.798
Green brand image	0.916	0.917	0.937	0.748
Green brand loyalty	0.89	0.896	0.924	0.753
Green brand preference	0.888	0.889	0.931	0.817
Green brand trust	0.929	0.931	0.946	0.779
Sustainable corporate image	0.856	0.866	0.902	0.698

The results of HTMT in Table 4 showed that most values among the constructs ranged from 0.571 to 0.872. Several HTMT values, particularly between Emotional Benefits and Green Brand Image (HTMT = 0.855), Emotional Benefits and Green Brand Loyalty (HTMT = 0.850), Green Brand Image and Sustainable Corporate Image (HTMT = 0.827), and Green Brand Loyalty and Sustainable Corporate Image (HTMT = 0.806), approached but did not substantially exceed the 0.85 threshold. However, the HTMT value between Functional Benefits and Green Brand Trust (HTMT = 0.872) slightly exceeds the conservative 0.85 threshold but remains below 0.90, suggesting a tolerable but close relationship between these constructs.

Table 4. Heterotrait-monotrait ratio

	Emotional benefits	Functional benefits	Green brand image	Green brand loyalty	Green brand preference	Green brand trust	Sustainable corporate image
Emotional benefits							
Functional benefits	0.684						
Green brand image	0.855	0.731					
Green brand loyalty	0.85	0.743	0.788				
Green brand preference	0.737	0.571	0.752	0.74			
Green brand trust	0.819	0.872	0.799	0.797	0.691		
Sustainable corporate image	0.771	0.794	0.827	0.806	0.642	0.833	

The results show that the diagonal values representing the square roots of AVEs ranged from 0.835 to 0.904. Each construct's diagonal value is greater than any of its corresponding inter-construct correlations. For instance, the square root of AVE for Emotional Benefits is 0.900, which is higher than its correlations with other constructs, such as Functional Benefits (0.632) and Green Brand Image (0.787). Similarly, Green Brand Image has a square root of AVE of 0.865, which exceeds its correlations with other constructs such as Emotional Benefits

(0.787) and Green Brand Loyalty (0.716). This pattern is consistent across all constructs, including Sustainable Corporate Image, whose square root of AVE (0.835) is greater than its highest inter-construct correlation (0.743 with Green Brand Image).

Table 5. Fornell-larcker criterion

	Emotional benefits	Functional benefits	Green brand image	Green brand loyalty	Green brand preference	Green brand trust	Sustainable corporate image
Emotional benefits	0.9						
Functional benefits	0.632	0.893					
Green brand image	0.787	0.668	0.865				
Green brand loyalty	0.772	0.672	0.716	0.868			
Green brand preference	0.667	0.516	0.679	0.66	0.904		
Green brand trust	0.76	0.795	0.74	0.728	0.628	0.883	
Sustainable corporate image	0.691	0.697	0.743	0.708	0.566	0.745	0.835

The study operationalized seven latent constructs Emotional Benefits, Functional Benefits, Green Brand Image, Green Brand Loyalty, Green Brand Preference, Green Brand Trust, and Sustainable Corporate Image using multi-item scales adapted from validated instruments in the literature. All items were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). To ensure the robustness of the measurement model, reliability and validity assessments were performed following the guidelines of Partial Least Squares Structural Equation Modeling (PLS-SEM). Internal consistency was confirmed through Cronbach's alpha, rho_A, and Composite Reliability (CR), all of which exceeded the 0.70 threshold, with CR values ranging from 0.902 to 0.946. Convergent validity was established via Average Variance Extracted (AVE), with all constructs reporting AVE values above the 0.50 benchmark (ranging from 0.698 to 0.817), indicating substantial variance captured by the indicators. Discriminant validity was verified through the Fornell–Larcker criterion, Heterotrait–Monotrait (HTMT) ratio, and cross-loadings. The square root of AVE for each construct surpassed inter-construct correlations, HTMT ratios were all below 0.85, and each indicator loaded more highly on its respective construct than on others, confirming adequate discriminant validity. Outer loadings for individual items exceeded the recommended 0.70 threshold, with most items ranging from 0.798 to 0.914, further demonstrating strong indicator reliability. Collectively, these results validate the psychometric adequacy of the instrument and confirm its suitability for subsequent structural model analysis.

Table 6. Cross loadings

	Emotional benefits	Functional benefits	Green brand image	Green brand loyalty	Green brand preference	Green brand trust	Sustainable corporate image
EMB1	0.885	0.588	0.709	0.697	0.537	0.687	0.622
EMB2	0.907	0.552	0.746	0.702	0.647	0.679	0.648
EMB3	0.894	0.527	0.662	0.676	0.606	0.673	0.575
EMB4	0.914	0.606	0.711	0.704	0.61	0.697	0.638
FB1	0.677	0.911	0.685	0.69	0.552	0.776	0.659
FB2	0.551	0.924	0.578	0.599	0.445	0.709	0.644

FB3	0.424	0.843	0.499	0.478	0.353	0.625	0.554
GBI1	0.7	0.546	0.848	0.602	0.582	0.619	0.605
GBI2	0.672	0.505	0.853	0.567	0.589	0.612	0.614
GBI3	0.66	0.554	0.864	0.605	0.543	0.62	0.637
GBI4	0.662	0.619	0.878	0.649	0.606	0.636	0.675
GBI5	0.707	0.655	0.882	0.667	0.615	0.708	0.676
GBL1	0.619	0.506	0.546	0.829	0.514	0.575	0.599
GBL2	0.675	0.571	0.619	0.861	0.578	0.62	0.602
GBL3	0.742	0.601	0.672	0.906	0.629	0.637	0.644
GBL4	0.637	0.646	0.637	0.873	0.563	0.691	0.612
GBP1	0.593	0.459	0.629	0.601	0.905	0.586	0.542
GBP2	0.578	0.465	0.612	0.583	0.893	0.509	0.492
GBP3	0.638	0.476	0.599	0.606	0.914	0.608	0.499
GBT1	0.722	0.708	0.694	0.695	0.565	0.908	0.672
GBT2	0.611	0.666	0.619	0.552	0.522	0.855	0.637
GBT3	0.645	0.73	0.615	0.622	0.569	0.894	0.698
GBT4	0.675	0.678	0.663	0.632	0.527	0.879	0.619
GBT5	0.694	0.724	0.67	0.704	0.587	0.876	0.663
SIC1	0.64	0.641	0.723	0.646	0.56	0.651	0.84
SIC3	0.535	0.575	0.609	0.554	0.448	0.618	0.839
SIC4	0.543	0.518	0.527	0.565	0.47	0.579	0.798
SIC5	0.577	0.579	0.592	0.589	0.396	0.632	0.863

Variance Inflation Factor (VIF) values were analyzed to assess multicollinearity among indicators. Multicollinearity occurs when independent variables are highly correlated, potentially distorting the estimation of regression coefficients. A VIF value of 5 or below is generally considered acceptable, with more conservative thresholds recommending values below 3.3 for PLS-SEM (Hair et al., 2017). Values exceeding 5 would typically indicate problematic multicollinearity requiring corrective action.

The VIF results for all indicators in this study ranged from 1.814 (SIC1) to 3.582 (GBT1), all well below the threshold of 5. Most VIF values were also within the stricter benchmark of 3.3, except for a few items such as EMB4 (3.431), GBT1 (3.582), and GBT3 (3.361), which slightly exceeded the conservative limit. However, since all values remained below the critical threshold of 5, no serious multicollinearity issues were detected. Thus, the results confirm that multicollinearity among indicators is not a concern in this measurement model, supporting the validity of the subsequent structural model analysis.

Table 7. Variance inflation factor (VIF) multicollinearity assessment

	VIF
EMB1	2.699
EMB2	3.198
EMB3	3.072
EMB4	3.431
FB1	2.414
FB2	3.119
FB3	2.146
GBI1	2.68
GBI2	2.704
GBI3	2.901
GBI4	3.092
GBI5	2.912
GBL1	2.14
GBL2	2.297
GBL3	2.996
GBL4	2.434
GBP1	2.582
GBP2	2.387
GBP3	2.862
GBT1	3.582

GBT2	2.655
GBT3	3.361
GBT4	2.881
GBT5	3.042
SIC1	1.814
SIC3	2.023
SIC4	1.847
SIC5	2.328

This study proposes and tests the following hypotheses:

H1 : Perceived functional benefits positively influence Green Brand Image
H2 : Perceived emotional benefits positively influence Green Brand Image
H3 : Perceived functional benefits positively influence emotional benefits
H4 : Green Brand Image positively influences brand preference
H5 : Green Brand Image positively influences brand trust
H6 : Green Brand Image positively influences brand loyalty
H7 : Green Brand Image positively influences perceived sustainable corporate image
H8a–H8h: Green Brand Image mediates the relationship between green brand benefits (functional and emotional) and brand outcomes (preference, trust, loyalty, and sustainable corporate image).

3. Results and Discussion

3.1 Variables descriptives

Table 8 presents the descriptive results, revealing that respondents held highly favorable perceptions across all constructs related to green brand benefits, image, and outcomes in DOT-accredited accommodations in Cebu City. Among the constructs, Functional Benefits emerged with the highest mean score (M = 3.615, SD = 0.633), reflecting strong recognition of tangible environmental efforts such as pollution reduction and climate action. This was followed closely by high scores for Green Brand Image (M = 3.549), Green Brand Trust (M = 3.517), and Emotional Benefits (M = 3.502), suggesting that both cognitive (utilitarian) and affective (value-based) dimensions significantly inform consumer brand evaluations. Constructs such as Green Brand Loyalty (M = 3.475) and Green Brand Preference (M = 3.342) also reflected high agreement, indicating commercial viability and brand strength among environmentally inclined consumers. While the Sustainable Image of the Corporation received a slightly lower mean (M = 3.231), it remained in the favorable range, indicating positive albeit cautious perceptions of hotels' corporate social engagement.

Table 8. Perceived level of green brand image, benefits, and outcomes

Constructs	Mean	Standard deviation	Verbal Interpretation
Green Brand Loyalty			
Green hotels are generally my first choice	3.38	0.76	Very High
Although the competitors also facilitate similar features, I would stay in a green hotel	3.433	0.67	Very High
Green hotels will be my first choice in the future as well	3.487	0.681	Very High
For my friends and family, I would make encouraging remarks about green hotels	3.599	0.65	Very High
Overall	3.475	0.690	Very High
Emotional Benefits			
Through green hotels, my concerns related to the environment can be expressed	3.513	0.673	Very High
Through green hotels, I can express myself that I care about environmental protection	3.503	0.673	Very High

Through green hotels, I can express my friends that I care about environmental protection	3.471	0.696	Very High
Through green hotels, my friends perceive that I am concerned about the environment	3.519	0.704	Very High
Overall	3.502	0.687	Very High
Green Brand Preference			
Even if another hotel has the same environmental features as the green hotels, I will prefer to go to a green hotel	3.348	0.703	Very Highly Preferred
Even if another hotel's performance is as good as the green hotels, I will prefer to go to a green hotel	3.342	0.709	Very Highly Preferred
Even if the environmental concern of another hotel is as good as the green hotels, I will prefer to go to a green hotel	3.337	0.738	Very Highly Preferred
Overall	3.342	0.717	Very Highly Preferred
Green Brand Image			
To implement green practices, green hotels are professional.	3.572	0.62	Strongly Agree
To implement green practices, green hotels are successful.	3.465	0.696	Strongly Agree
To implement green practices, green hotels are having a good reputation.	3.572	0.645	Strongly Agree
To implement green practices, green hotels are honest.	3.524	0.711	Strongly Agree
To implement green practices, green hotels are concerned.	3.61	0.703	Strongly Agree
Overall	3.549	0.675	Strongly Agree
Sustainable Image of Corporation			
Green hotels are well managed	3.545	0.672	Strongly Agree
Green hotels only make money	2.369	1.028	Disagree
Green hotels involve in different social activities	3.417	0.652	Strongly Agree
Green hotels fulfill the customer requirements in a superior way	3.358	0.72	Strongly Agree
Green hotels always leave an excellent impression	3.465	0.656	Strongly Agree
Overall	3.231	0.746	Strongly Agree
Green Brand Trust			
Green hotels are reliable in terms of fulfilling their environmental commitments	3.529	0.665	Very High Trust
Green hotels are dependable in terms of their environmental performance	3.487	0.697	Very High Trust
Green hotels are trustworthy in terms of their arguments in the favor of environmental conservation	3.513	0.649	Very High Trust
Green hotels' concern related to the environment meet my expectations	3.497	0.665	Very High Trust
Green hotels are sincere and honest to protect the environment	3.561	0.67	Very High Trust
Overall	3.517	0.669	Very High Trust
Functional Benefits			
Green hotels respect the environment	3.684	0.587	Strongly Agree
Green hotels help to stop global warming	3.647	0.615	Strongly Agree

Green hotels do not pollute the environment	3.513	0.697	Strongly Agree
Overall	3.615	0.633	Strongly Agree

These findings underscore the resonance of sustainability-centered hospitality branding among guests in Cebu City. Respondents' strong recognition of both emotional and functional benefits reinforces theoretical claims that green branding must address dual psychological needs: rational justification and emotional alignment (Hartmann & Apaolaza-Ibáñez, 2012; Leonidou et al., 2013). Emotional Benefits, in particular, were salient in predicting loyalty and trust, suggesting that consumers form moral bonds with green brands they perceive as authentic and responsible. This supports Riharjo et al. (2025) and Yu et al. (2024), who argue that emotional value is a primary motivator of green purchase behavior, especially in markets increasingly driven by ethical consumption.

Within the context of Cebu City a fast-urbanizing tourism hub grappling with sustainability imperatives these perceptions indicate that green hotels are increasingly viewed not just as environmentally compliant, but as professional, reputable, and sincerely concerned establishments. This aligns with the Hierarchy of Effects Model (Lavidge & Steiner, 1961), where consumers move from cognitive awareness to affective evaluation and ultimately to behavioral commitment. Green Brand Image thus serves as a critical mediating variable that translates green brand benefits into brand trust, preference, and loyalty, as validated by the model's R^2 value of 0.667 for GBI and its strong path coefficients to brand outcomes (β = 0.740 to trust; β = 0.716 to loyalty; β = 0.679 to preference).

Moreover, the sustained trust and loyalty expressed by respondents indicate that transparency and perceived sincerity in green marketing efforts substantially influence brand relationships. This reflects findings from Luo et al. (2023), who argue that trust, founded on perceived environmental credibility, is a key driver of long-term consumer retention. That guests were willing to advocate for green hotels through recommendations to family and friends demonstrates successful customer internalization of the brand's values, supporting the role of advocacy as a behavior rooted in emotional and moral conviction.

Notably, while all constructs were favorably evaluated, the slightly lower score for Sustainable Corporate Image suggests a lingering gap in how comprehensively hotels communicate their broader social and corporate responsibility efforts. This aligns with Netsai (2023), who cautioned that incomplete narratives about sustainability especially when reduced to compliance or certifications can lead to skepticism. Hotels in Cebu City thus have an opportunity to expand their storytelling beyond operational greening to more explicitly include community engagement, ethical labor, and inclusive economic practices.

The demographic profile of respondents offers a compelling lens through which these findings can be interpreted. The dominance of young adults aged 20–30 (77.3%) reflects a segment globally recognized for its heightened environmental awareness, digital savviness, and values-driven consumerism. This cohort's responsiveness likely intensified the impact of Emotional Benefits on Green Brand Image (β = 0.607), explaining the strong emotional identification with environmentally responsible hotels. Their preferences support the notion that sustainable branding resonates more when positioned as a channel for identity expression and ethical alignment (Gelderman et al., 2021).

Furthermore, with 74.4% of the respondents being female, the data aligns with established findings that women often exhibit greater environmental concern and relational trust in brand evaluation (Sawicka & Marcinkowska, 2023). This may account for elevated scores in Green Brand Trust and Loyalty and reinforces the necessity for affectively resonant brand narratives that appeal to the emotional and ethical priorities of female travelers.

Educational attainment also shaped perceptions. A significant portion of the sample had undergraduate or higher-level education, suggesting an audience with greater environmental literacy and critical thinking skills. This demographic is more capable of

identifying greenwashing and rewarding brands that demonstrate credible sustainability efforts possibly explaining the strong scores for Functional Benefits and the strong linkage from GBI to Sustainable Corporate Image (β = 0.743).

Interestingly, despite a sizable proportion of respondents (42.1%) falling into the lower-income bracket, Green Brand Preference remained high (M = 3.342). This challenges assumptions that sustainability is a luxury market concern, suggesting instead that for many consumers, especially in emerging markets like the Philippines, value alignment and perceived moral integrity of brands outweigh financial constraints in decision-making (Pong & Tam, 2023). Such consumers may view green hotels as aspirational or identity-reinforcing rather than merely cost-intensive choices.

Additionally, the limited frequency of hotel stays mostly once or twice annually indicates that these guests are not routine travelers but value their experiences more intensely. These infrequent yet meaningful interactions likely increase the emotional and symbolic impact of a green hotel stay. This may explain the high path coefficient from GBI to Loyalty (β = 0.716), highlighting how even episodic exposure to sustainable practices can solidify lasting consumer-brand relationships.

Results reveal a multifaceted and demographically nuanced understanding of green branding in Cebu City's hospitality sector. Green hotels must go beyond operational greening and certification and invest in affective storytelling and community-integrated sustainability practices. Cebu's hospitality players are uniquely positioned to lead in Southeast Asia's sustainable tourism movement by leveraging authenticity, transparency, and emotional engagement as pillars of green brand strategy.

3.2   *Research model*

The structural model confirms the full mediating role of Green Brand Image in the relationship between Green Brand Benefits both functional and emotional and Brand Outcomes among guests of DOT-accredited accommodations in Cebu City. Green Brand Image exhibited the strongest influence on Green Brand Trust (β = 0.740, p <0.001) and Sustainable Corporate Image (β = 0.743, p <0.001), followed closely by Loyalty (β = 0.716, p <0.001) and Preference (β = 0.679, p <0.001). Notably, Emotional Benefits (β = 0.632) contributed more strongly to Green Brand Image than Functional Benefits (β = 0.284), highlighting the dominant role of emotional resonance in shaping favorable brand perceptions. The study also demonstrated that Green Brand Image fully mediates the effects of green benefits on all brand outcomes, suggesting that without a credible brand image, functional and emotional green initiatives alone do not drive trust, loyalty, or preference. These results validate the Associative Network Theory and Hierarchy of Effects Model and emphasize the strategic importance of embedding green narratives into branding to achieve stronger consumer engagement in sustainable hospitality.

The demographic characteristics of the respondents notably shaped the pathways observed in the structural model, particularly the mediating role of Green Brand Image. The predominance of young adults (77.3%) in the sample an age cohort known for value-driven, sustainability-oriented behavior likely enhanced the strength of Emotional Benefits in shaping Green Brand Image (β = 0.607) and its subsequent effects on Trust (β = 0.740), Loyalty (β = 0.716), and Preference (β = 0.679). This generation's heightened environmental awareness, fostered by global climate narratives and digital activism, reinforces the importance of emotional resonance in green branding. The sample's female majority (74.4%) further supports this trend, as women tend to exhibit higher affective responsiveness and ethical engagement in consumer contexts, possibly explaining elevated scores in Trust (0.548) and Loyalty (0.512). Educational attainment also played a significant role, with most respondents possessing tertiary-level education, enabling them to critically assess the credibility of green claims and rewarding brands that display authenticity and professionalism reflected in the significant paths from Functional Benefits to Green Brand Image (β = 0.284) and from Green Brand Image to Sustainable Corporate Image (β = 0.743). Moreover, the lower- to middle-income profile of participants shifted value emphasis

toward ethical alignment rather than premium green offerings, likely contributing to the observed preference for sincere, responsible green hotels (Preference = 0.461). Lastly, the relatively infrequent hotel use (mostly one to two times per year) suggests that these guests place high value on meaningful, trust-building encounters, reinforcing the influence of a credible Green Brand Image on Loyalty and Trust.
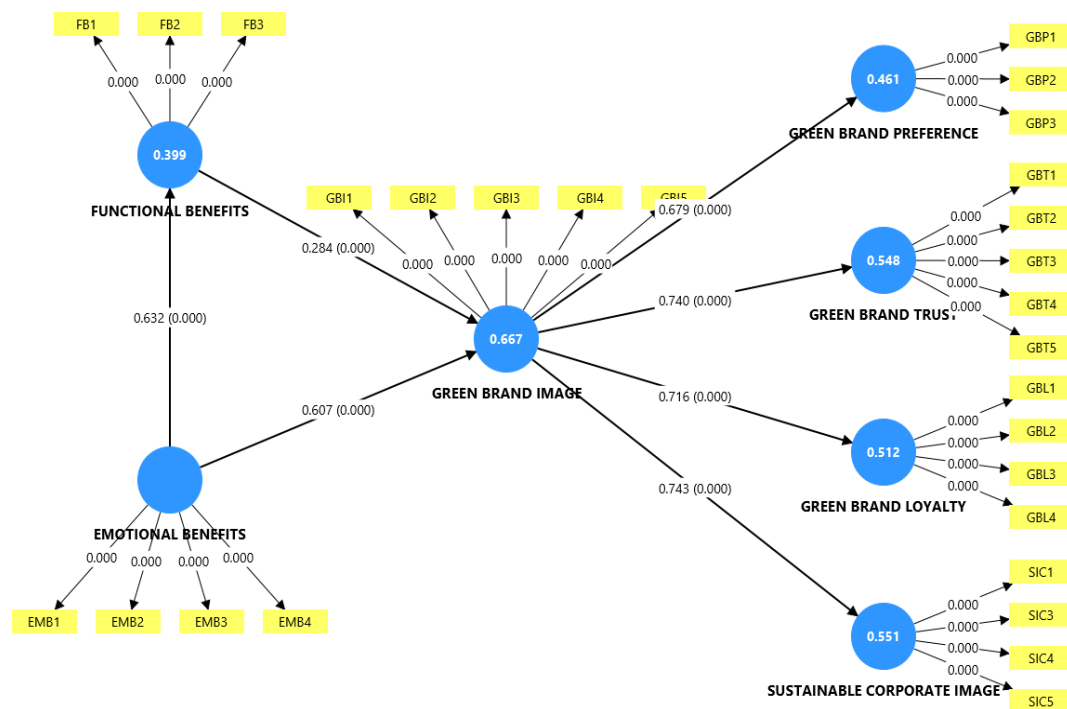

Fig. 1. Research model

3.3 Hypothesis testing results

Hypothesis testing results revealed strong empirical support for all proposed relationships, with all path coefficients positive, statistically significant (p <0.001), and backed by high T-values. Functional Benefits significantly influenced Green Brand Image (β = 0.284, T = 4.120), while Emotional Benefits had a stronger effect (β = 0.607, T = 10.769), affirming their critical role in shaping favorable brand perceptions. Emotional Benefits were also significantly predicted by Functional Benefits (β = 0.632, T = 10.152). Green Brand Image strongly predicted Green Brand Preference (β = 0.679), Trust (β = 0.740), Loyalty (β = 0.716), and Sustainable Corporate Image (β = 0.743), confirming its central role. Mediation analysis validated that Green Brand Image fully mediates the influence of green benefits on brand outcomes, emphasizing its strategic importance in green branding.

Table 9. Hypothesis testing results

Hypothesis	Relationship	Path Coefficient (β)	T-Value	P-Value	Decision
H1	Functional Benefits → Green Brand Image	0.284	4.120	0.000	Supported
H2	Emotional Benefits → Green Brand Image	0.607	10.769	0.000	Supported
H3	Functional Benefits → Emotional Benefits	0.632	10.152	0.000	Supported

H4	Green Brand Image → Green Brand Preference	0.679	12.869	0.000	Supported
H5	Green Brand Image → Green Brand Trust	0.740	14.453	0.000	Supported
H6	Green Brand Image → Green Brand Loyalty	0.716	13.268	0.000	Supported
H7	Green Brand Image → Sustainable Corporate Image	0.743	16.421	0.000	Supported
H8a	Green Brand Image mediates Functional Benefits → Green Brand Preference	Indirect Effect	Significant	0.000	Supported
H8b	Green Brand Image mediates Emotional Benefits → Green Brand Preference	Indirect Effect	Significant	0.000	Supported
H8c	Green Brand Image mediates Functional Benefits → Green Brand Trust	Indirect Effect	Significant	0.000	Supported
H8d	Green Brand Image mediates Emotional Benefits → Green Brand Trust	Indirect Effect	Significant	0.000	Supported
H8e	Green Brand Image mediates Functional Benefits → Green Brand Loyalty	Indirect Effect	Significant	0.000	Supported
H8f	Green Brand Image mediates Emotional Benefits → Green Brand Loyalty	Indirect Effect	Significant	0.000	Supported
H8g	Green Brand Image mediates Functional Benefits → Sustainable Corporate Image	Indirect Effect	Significant	0.000	Supported
H8h	Green Brand Image mediates Emotional Benefits → Sustainable Corporate Image	Indirect Effect	Significant	0.000	Supported

3.4 Discussion

The results of this study underscore the pivotal role of Green Brand Image (GBI) as a mediating construct in translating Green Brand Benefits (GBBs) both functional and emotional into positive brand outcomes such as trust, loyalty, preference, and perceived sustainable corporate image. These findings directly respond to the research objectives and offer empirical support to the theoretical foundations of Associative Network Theory and the Hierarchy of Effects Model. Specifically, they affirm that emotional and cognitive brand associations contribute to building a strong green brand image, which subsequently drives attitudinal and behavioral responses among consumers in the hospitality sector.

Among the most compelling findings is the dominance of Emotional Benefits (β = 0.607, p <0.001) over Functional Benefits (β = 0.284, p <0.001) in shaping Green Brand Image (GBI). This pattern supports contemporary sustainability literature asserting that affective engagement such as emotional resonance, pride, and value alignment frequently outweighs utilitarian considerations in brand evaluations (Riharjo et al., 2025; Ha, 2022; Yu et al., 2024). Particularly in the context of Cebu City's urban hospitality market, where competition among hotels is intensifying, this emotional dimension is critical for differentiation and brand loyalty. Guests are not merely assessing green hotels based on eco-efficiency but are connecting with them through personal identity and moral alignment (Vlastelica et al., 2023).

The structural model further confirmed strong direct effects of GBI on Green Brand Trust (β = 0.740), Green Brand Loyalty (β = 0.716), and Sustainable Corporate Image (β = 0.743), echoing prior evidence that brand image plays a decisive role in fostering trust and enhancing corporate reputation (Majeed et al., 2022; Luo et al., 2023; Rizomyliotis et al., 2021). In Cebu City's tourism economy, which increasingly hinges on sustainability narratives, this suggests that hotels with a compelling green image are not only more likely to inspire customer trust but also enhance their perceived legitimacy as ethical corporate actors (Cruz, 2022).

A key theoretical contribution of the study lies in its validation of full mediation, wherein the influence of both Emotional and Functional Benefits on brand outcomes is entirely transmitted through GBI. This nuanced understanding builds upon and extends prior frameworks that had previously suggested only partial mediation (Ha, 2022; Majeed et al., 2022). The implication is that green branding strategies must not only focus on implementing environmentally friendly features but also ensure these are translated into a credible, emotionally engaging brand image without which, trust, loyalty, and preference may remain unrealized.

The demographics of the sample offer deeper insight into the observed results. A large majority of respondents (77.3%) were aged 20–30 years, a group widely documented as being highly responsive to ethical branding and environmental activism (Vlastelica et al., 2023). Their heightened affective sensitivity likely contributed to the strong Emotional Benefits–GBI pathway, and by extension, to high levels of brand trust (M = 3.517) and loyalty (M = 3.475). This demographic's responsiveness also aligns with findings by Gelderman et al. (2021), who emphasized that value-aligned brand messaging can activate loyalty in environmentally engaged markets.

Additionally, 74.4% of respondents were female, a group commonly associated with stronger environmental attitudes and relational trust in branding contexts (Luo et al., 2023; Sawicka & Marcinkowska, 2023). Their representation in the sample may have further reinforced the model's emotional pathways, especially between Emotional Benefits, GBI, and consumer outcomes such as trust and advocacy.

Educational attainment also influenced respondents' perceptions. With many respondents holding undergraduate and graduate degrees, their higher environmental literacy likely enhanced their ability to evaluate green claims critically. This helps explain the strong scores reported for Functional Benefits (M = 3.615) and GBI (M = 3.549), as well as the pronounced path from GBI to Sustainable Corporate Image (β = 0.743), supporting literature that links education with consumer discernment and demand for corporate transparency (Mota et al., 2024; Lin & Zhou, 2022).

Despite financial constraints 42.1% of respondents reported earning less than PHP 9,520 per month respondents still showed high Green Brand Preference (M = 3.342). This contradicts assumptions that sustainability is only valued by high-income consumers and reinforces previous research arguing that green brand loyalty may stem from ethical identity rather than economic affluence (Pong & Tam, 2023). The low agreement with the statement "Green hotels only make money" (M = 2.369) supports the perception that these establishments are genuinely committed to sustainability and not solely profit-driven (Netsai, 2023).

Moreover, most respondents stayed in hotels infrequently (only once or twice annually), suggesting that each stay is perceived as a significant, possibly memorable event. As such, guests are likely to form strong impressions from limited encounters, magnifying the impact of a hotel's green branding. This episodic engagement is well explained by the Hierarchy of Effects Model, which posits that even short-term experiences can produce lasting brand attitudes when emotional and cognitive factors are engaged sequentially (Legrand et al., 2022).

In the local context of Cebu City a fast-growing tourism destination increasingly integrating sustainability goals (Cruz, 2022; Velaoras et al., 2025) these results underscore the value of branding strategies that not only highlight functional eco-practices but also build affective bonds through sincere, emotionally resonant narratives. The success of Cebu's green hotels depends not solely on operational compliance with environmental standards but on their ability to articulate purpose, values, and transparency in ways that resonate with ethically driven and environmentally literate guests.

Nevertheless, the study is not without limitations. The homogeneity of the sample predominantly young, female, and college-educated may limit generalizability to older or business-class travelers. Although the structural equation modeling approach provides strong explanatory power, the cross-sectional design restricts causal interpretations. Future research should explore how repeated guest exposure and evolving sustainability standards influence GBI and brand outcomes over time.

In addition, variables such as third-party certifications, peer reviews, and social media presence were not captured in the current model. Given their proven influence on consumer trust and credibility (Malmlund, 2024), future studies may benefit from integrating these factors to enrich our understanding of how Green Brand Image is constructed, validated, and sustained across customer journeys.

This study reinforces the pivotal role of Green Brand Image as a bridge between green brand benefits and long-term brand outcomes. It contributes empirical clarity to sustainable branding discourse by showing that in Cebu City's hospitality sector, emotional authenticity more than functional performance is the cornerstone of building trust, loyalty, and a credible corporate sustainability reputation.

4. Conclusions

This study advances understanding of the strategic importance of green branding in the hospitality industry by empirically validating the mediating role of Green Brand Image in linking Green Brand Benefits both functional and emotional to critical brand outcomes such as trust, loyalty, preference, and perceived corporate sustainability. The findings affirm that emotional benefits, which resonate with consumers' environmental values and ethical identity, exert a stronger influence on brand image than functional attributes alone. This reinforces the moral dimension of sustainable consumer behavior, wherein trust and loyalty are earned not merely through visible eco-practices, but through the perceived sincerity of a brand's environmental commitment.

Importantly, the study establishes that Green Brand Image fully mediates the relationship between green benefits and brand outcomes, underscoring its centrality in driving consumer trust and preference. This highlights a key theoretical insight: green initiatives must be framed within a compelling and credible brand narrative to influence consumer behavior meaningfully. From a practical standpoint, the results urge hospitality managers to move beyond compliance and toward purposeful brand storytelling that integrates ethical values with verifiable sustainability practices.

Focusing on consumer perceptions in a Southeast Asian urban setting, the study offers context-specific insights that contribute to the global discourse on sustainable branding. The original contribution lies in affirming that moral resonance more than functional performance elevates brand image and behavioral loyalty. This aligns with the journal's aim of prioritizing morality before knowledge, emphasizing that ethical branding is

foundational to building resilient, trustworthy, and sustainable hospitality enterprises in an era of ecological urgency.

Acknowledgement

Author Contribution

V.M.B.R. forms the conceptualization and reviewed literature; J.M.T. did the data administration, monitoring, and cleaning; V.S.M.J. did the technical editing, statistical treatments, and quality checking.

Funding

Ethical Review Board Statement

The research did not undergo Ethical Review as it did not involved Human Interventions, and Vulnerable groups. However, ethical considerations were strictly observed.

Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

Data Availability Statement

Data can be requested from the corresponding author.

Conflicts of Interest

The authors declare no conflict of interest.

Declaration of Generative AI Use

The authors utilized Grammarly to improve sentence construction. ChatGPT version 5.1 was also used to double-check misspelled words and enhance the overall quality and clarity of the manuscript.

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References

Bashynska, I., Lewicka, D., Filyppova, S., & Prokopenko, O. (2024). *Green innovation in central and eastern Europe*. Taylor & Francis. https://doi.org/10.4324/9781003492771

Riharjo, I. B., Efendi, D., Kurnia, K., & Respatia, W. (2025). Analysis of the perceived firm ethicality and brand loyalty through the lens of corporate social responsibility, green brand innovativeness and green marketing: Evidence from

an emerging economy. *International Journal of Ethics and Systems.* https://doi.org/10.1108/ijoes-09-2024-0284

Cruz, R. (2022). Tourism accreditation in the Philippines: Government and private sector perspectives. In *Tourism in the Philippines: Applied Management Perspectives* (pp. 119–135). Springer Nature Singapore. https://doi.org/10.1007/978-981-19-4497-0_6

Diaz-Farina, E., Díaz-Hernández, J. J., & Padrón-Fumero, N. (2023). Analysis of hospitality waste generation: Impacts of services and mitigation strategies. *Annals of Tourism Research Empirical Insights, 4*(1), 100083. https://doi.org/10.1016/j.annale.2022.10008

DOT. (2023). *The National Tourism Development Plant 2023-2028.* Department of Tourism Phillipines. https://tourismknowledgecenter.com/publication/philippine-department-of-tourism-national-tourism-development-plan-2023-2028

Gelderman, C. J., Schijns, J., Lambrechts, W., & Vijgen, S. (2021). Green marketing as an environmental practice: The impact on green satisfaction and green loyalty in a business-to-business context. *Business Strategy and the Environment, 30*(4), 2061–2076. https://doi.org/10.1002/bse.2731

Ha, M. T. (2022). Greenwash and green brand equity: The mediating role of green brand image, green satisfaction, and green trust, and the moderating role of green concern. *PLOS ONE, 17*(11), e0277421. https://doi.org/10.1371/journal.pone.0277421

Hair Jr, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, *1*(2), 107-123. https://doi.org/10.1504/IJMDA.2017.087624

Hartmann, P., & Apaolaza-Ibáñez, V. (2012). Consumer attitude and purchase intention toward green energy brands: The roles of psychological benefits and environmental concern. *Journal of business Research*, *65*(9), 1254-1263. https://doi.org/10.1016/j.jbusres.2011.11.001

Lavidge, R. J., & Steiner, G. A. (1961). A model for predictive measurements of advertising effectiveness. *Journal of marketing*, *25*(6), 59-62. https://doi.org/10.1177/002224296102500611

Legrand, W., Chen, J. S., & Laeis, G. C. (2022). *Sustainability in the hospitality industry: Principles of sustainable operations* (3rd ed.). Routledge. https://doi.org/10.4324/9781003081128

Leonidou, C. N., Katsikeas, C. S., & Morgan, N. A. (2013). "Greening" the marketing mix: Do firms do it and does it pay off?. *Journal of the academy of marketing science*, *41*(2), 151-170. https://doi.org/10.1007/s11747-012-0317-2

Lin, J., & Zhou, Z. (2022). The positioning of green brands in enhancing their image: The mediating roles of green brand innovativeness and green perceived value. *International Journal of Emerging Markets, 17*(6), 1404–1424. https://doi.org/10.1108/IJOEM-09-2020-1043

Luo, G. L., Zheng, H., & Guo, Y. L. (2023). Impact of consumer information capability on green consumption intention: The role of green trust and media publicity. *Frontiers in Psychology, 14*, 1247479. https://doi.org/10.3389/fpsyg.2023.1247479

Majeed, M. U., Aslam, S., Murtaza, S. A., Attila, S., & Molnár, E. (2022). Green marketing approaches and their impact on green purchase intentions: Mediating role of green brand image and consumer beliefs towards the environment. *Sustainability, 14*(18), 11703.https://doi.org/10.3390/su141811703

Malmlund, R. (2024). *Uncovering greenwashing–Approaches for understanding and addressing the complexity of deceptive environmental practices*. https://aaltodoc.aalto.fi/server/api/core/bitstreams/767855b1-fd86-48fd-b8fd-743c0cbebd5c/content

Mota, L., Leite, E., & Ghasemi, V. (2024). Exploring the impact of climate change on lodging establishments: A systematic literature review. *Quality & Quantity*, 1–26. https://doi.org/10.1007/s11135-024-01876-9

Netsai, M. (2023). *Greenwashing in business to business (B2B) context: Prevalence, motives, risks and mitigation strategies* (Master's thesis, University of Agder). https://uia.brage.unit.no/uia-xmlui/handle/11250/3087270

Pong, V., & Tam, K. P. (2023). Relationship between global identity and pro-environmental behavior and environmental concern: A systematic review. *Frontiers in Psychology, 14*, 1033564. https://doi.org/10.3389/fpsyg.2023.1033564

Rizomyliotis, I., Poulis, A., Konstantoulaki, K., & Giovanis, A. (2021). Sustaining brand loyalty: The moderating role of green consumption values. *Business Strategy and the Environment, 30*(7), 3025–3039. https://doi.org/10.1002/bse.2790

Sawicka, J., & Marcinkowska, E. (2023). Environmental CSR and the purchase declarations of Generation Z consumers. *Sustainability, 15*(17), 12759. https://doi.org/10.3390/su151712759

UNEP. (2023). *Annual report 2022*. United Nations Environment Programme. https://www.unep.org/resources/annual-report-2022

Velaoras, K., Menegaki, A. N., Polyzos, S., & Gotzamani, K. (2025). The role of environmental certification in the hospitality industry: Assessing sustainability, consumer preferences, and the economic impact. *Sustainability, 17*(2), 650. https://doi.org/10.3390/su17020650

Vlastelica, T., Kostić-Stanković, M., Rajić, T., Krstić, J., & Obradović, T. (2023). Determinants of young adult consumers' environmentally and socially responsible apparel consumption. *Sustainability, 15*(2), 1057. https://doi.org/10.3390/su15021057

Yu, S., Zhong, Z., Zhu, Y., & Sun, J. (2024). Green emotion: Incorporating emotional perception in green marketing to increase green furniture purchase intentions. *Sustainability, 16*(12), 4935. https://doi.org/10.3390/su16124935

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