

Does Sustainability Drive Loyalty: A Structural Equation Modeling of Tourist Behavior in Outdoor Recreation Destinations

Aura Bulan Andhara Prawira¹, Jacob Ganef Pah² Andar Danova L. Goeltom³

¹⁻³Politeknik Pariwisata NHI Bandung

Abstract

This study investigates the structural mechanisms through which perceived sustainability influences tourist loyalty in the outdoor recreation sector. Drawing upon the Stimulus-Organism-Response (S-O-R) framework and the Natural-Resource-Based View (NRBV), a research model was developed to examine the sequential mediating roles of Experiential Value (EV), Destination Image (DI), and Tourist Satisfaction (TS) in the relationship between Perceived Destination Sustainability (PDS) and two distinct loyalty outcomes: Revisit Intention (RI) and Word-of-Mouth (WOM). Data were collected from 401 outdoor recreationists in Indonesia using a purposive sampling technique and analyzed via Partial Least Squares Structural Equation Modeling (PLS-SEM). The empirical results provide support for all eleven hypothesized relationships. The findings reveal that PDS serves as a potent primary catalyst, significantly enhancing EV and DI. Furthermore, the model demonstrates a robust sequential mediation chain, where sustainability perceptions translate into loyalty primarily by fostering mental restoration and personal growth (EV) and reinforcing a safe, credible brand image (DI). The model exhibits high explanatory power, accounting for 68.7% of the variance in Revisit Intention and 64.5% in Word-of-Mouth. Notably, the total indirect effect of sustainability on loyalty underscores that substantive sustainability practices are essential for long-term visitor advocacy. Theoretically, this research advances the S-O-R theory by validating a hierarchical Organism stage and decouples the satisfaction-loyalty link by showing a stronger propensity for digital advocacy over repetitive visitation among modern travelers. Managerially, the study suggests that destination operators should prioritize experience curation that facilitates mental renewal to bridge the gap between green branding and behavioral loyalty.

Keywords: Sustainable Tourism, Outdoor Recreation, PLS-SEM, Experiential Value, S-O-R Framework, Tourist Loyalty.

A. INTRODUCTION

Outdoor recreation and nature-based tourism have witnessed exponential growth in recent decades, reflecting a global surge in travelers seeking authentic and meaningful experiences within sustainable settings (Conti et al., 2023; Usep Suhud et al., 2025; Uslu et al., 2024; Zulvianti et al., 2023). This phenomenon—encompassing activities such as geopark tourism, camping, and adventure sports—has positioned destination sustainability as a central axis in tourism marketing strategy, influencing how destinations are perceived and marketed beyond their mere physical attributes (X. Chang et al., 2024; Conti et al., 2023; Fuchs, 2024; Usep Suhud et al., 2025). In today's highly competitive landscape, outdoor destinations are evaluated not only on their natural features but also on the tourists' perceptions of their commitment to environmental, socio-cultural, and economic sustainability (Fuchs, 2024; Zulvianti et al., 2023).

While the significance of sustainability is widely acknowledged, a primary challenge in contemporary tourism marketing lies in understanding how these perceptions translate into concrete experiential value for visitors. Previous literature has established that experiential dimensions, such as arousal and vivid memories, play critical roles in shaping satisfaction (Shen et al., 2024). In specific contexts like camping, elements of personal growth and mental restoration emerge as dominant drivers of the experience (Ridwanudin et al., 2025), while broader research highlights that authenticity and experiential quality are pivotal in creating value (Maulina et al., 2023; Uslu et al., 2024). However, a theoretical gap remains

* Corresponding author

regarding how perceived sustainability is integrated as an exogenous driver into this experiential value chain to foster long-term loyalty.

The dynamics between risk and satisfaction in extreme outdoor activities, such as paragliding, further illustrate that behavioral relationships are complex and require sophisticated structural analysis (Akbulut et al., 2024). This complexity is heightened in post-crisis or pandemic-era settings, where perceived risk and resilience significantly alter the strength of paths leading to loyalty (Cruz-Milán, 2023; Kusumawati et al., 2023). Despite existing studies exploring destination image and revisit intentions, there is limited integration of perceived sustainability into behavioral models that leverage the Stimulus-Organism-Response (S-O-R) logic—where sustainability acts as a stimulus shaping internal experiential states and subsequent loyalty responses (Keni et al., 2024; Soliman et al., 2023). Decoding these interconnections is essential for Destination Management Organizations (DMOs) to design green marketing strategies that ensure retention through high-quality, value-driven experiences (Conti et al., 2023; Suprina et al., 2024).

This study aims to bridge this gap by examining a comprehensive structural model that links perceived destination sustainability to tourist loyalty through the mediating roles of experiential value, destination image, and satisfaction. Utilizing a Partial Least Squares Structural Equation Modeling (PLS-SEM) approach—a method increasingly adopted in tourism research to unravel complex indirect effects—this research seeks to address a fundamental question: Does perceived sustainability act as the primary driver of loyalty within the outdoor recreation sector? The findings are expected to offer significant theoretical contributions to tourism consumer behavior literature and provide practical guidance for destination managers in optimizing experience-based sustainable marketing strategies.

B. LITERATURE REVIEW

Theoretical Framework: The Stimulus-Organism-Response (S-O-R) Model

The Stimulus-Organism-Response (S-O-R) framework, originally proposed by (Mehrabian & Russell, 1974), provides a robust theoretical foundation for understanding how environmental cues influence human behavior through internal psychological processes. In the realm of tourism marketing and consumer behavior, this model has been extensively utilized to explain how destination attributes act as external stimuli that trigger a tourist's internal cognitive and affective states, which subsequently drive behavioral responses (Keni et al., 2024; Usep Suhud et al., 2025).

In this study, the Stimulus (S) is represented by Perceived Destination Sustainability (PDS). Within the context of outdoor recreation, sustainability is no longer merely a management objective but a critical environmental cue that travelers perceive and evaluate (Conti et al., 2023). When tourists observe a destination's commitment to environmental preservation, socio-cultural respect, and economic integrity, these cues serve as the primary marketing stimuli that initiate the decision-making process (Fuchs, 2024; Usep Suhud et al., 2025).

The Organism (O) component refers to the internal evaluations and emotional states of the tourist following exposure to the stimuli. This study conceptualizes the Organism through three interconnected latent constructs: Experiential Value (EV), Destination Image (DI), and Tourist Satisfaction (TS). As tourists interact with the natural setting, they derive value from the quality and authenticity of the experience—often manifested through personal growth and mental restoration (Ridwanudin et al., 2025; Shen et al., 2024). These internal processes, alongside the cognitive-emotional formation of the destination's image, culminate in a state of satisfaction or dissatisfaction (Uslu et al., 2024; Zulvianti et al., 2023).

Finally, the Response (R) constitutes the behavioral outcomes resulting from the internal processing of the stimuli. In the current model, this is operationalized through Tourist Loyalty, specifically Revisit Intention and Word-of-Mouth (WOM). Consistent with the S-O-R logic, high levels of perceived value and

satisfaction (O) derived from a sustainable destination (S) lead to positive behavioral intentions (R), such as the desire to return and the willingness to recommend the destination to others (R. Chang et al., 2024; Muntean et al., 2023). By employing this framework, the study systematically unravels the complex pathways through which sustainability marketing drives economic and behavioral loyalty in the outdoor recreation sector.

Perceived Destination Sustainability (PDS)

In the realm of outdoor recreation and nature-based tourism, Perceived Destination Sustainability (PDS) is increasingly conceptualized as a tourist-facing construct, reflecting how visitors evaluate a destination's environmental stewardship, socio-cultural respect, and economic integrity (Haldane et al., 2023; Usep Suhud et al., 2025). Rather than relying solely on objective management metrics, this perceptual lens emphasizes that sustainability is experienced and assessed through visible cues, such as conservation practices, community engagement, and transparent green marketing (Fan et al., 2023; Zhang & Song, 2023). For nature-based destinations, PDS operates as a foundational stimulus that shapes cognitive and affective responses, serving as a signal that can either strengthen or weaken the experiential value chain (Basrawi, 2024; M. Wang et al., 2026; Yoon & Yoo, 2023).

PDS acts as a powerful amplifier of quality and authenticity in outdoor settings. When visitors perceive a destination as environmentally responsible, they engage more deeply and meaningfully with the natural environment (Yang et al., 2023). These sustainability signals validate the authenticity of the site, elevating the perceived quality of experiences through a blend of functional environmental quality and the emotional fulfillment of responsible consumption (Aliyah et al., 2023; Yang et al., 2023). In mountain and adventure destinations, experiential value (EV) emerges from both tangible factors—such as well-managed trails and habitat integrity—and the intangible meaning derived from ethical participation in outdoor activities, including conservation learning and cultural respect (ALIYAH et al., 2023; Zhang & Song, 2023). As sustainability-driven benefits enhance the experience quality, they contribute to higher overall value perceptions (Maulina et al., 2023; Uslu et al., 2024).

The formation of a destination's image (DI) is closely tied to visible sustainability cues and green marketing efforts. In outdoor contexts, explicit attention to resource stewardship and environmental quality—consistent with the Natural-Resource-Based View (NRBV)—contributes to a favorable green image and a sustainable competitive advantage (Soucy et al., 2025; X. Wang et al., 2024). These signals act as differentiators that strengthen mental representations of the destination, conveying a sense of trust and aligned values between the traveler and the brand (Fan et al., 2023; Yoon & Yoo, 2023). Particularly in post-crisis or climate-sensitive settings, a destination's reputation for resilience and environmental stewardship becomes a central component of its cognitive and affective image (Haldane et al., 2023; Zhang & Song, 2023). Consequently, a strong PDS enhances the overall attractiveness and credibility of the destination's brand image.

The alignment between a destination's sustainable practices and the personal values of the visitor is a critical determinant of post-visit satisfaction (Fuchs, 2024). When environmental and socio-cultural priorities are perceived as being upheld, visitors' ethical and experiential expectations are met, resulting in higher satisfaction levels (ALIYAH et al., 2023; Zhang & Song, 2023). Conversely, perceptions of environmental degradation or mismanagement can create cognitive dissonance, leading to reduced satisfaction (Conti et al., 2023). In nature-based settings, perceived environmental quality and green cues—such as those found in well-managed green spaces—directly contribute to a state of satisfaction, which subsequently supports loyalty behaviors (Faraj et al., 2024; Soucy et al., 2025). Furthermore, the resilience and sustainability of a destination in the face of external shocks influence visitors' evaluative satisfaction

through experiential channels (Dargahov et al., 2023; Haldane et al., 2023). Thus, the following hypothesis is suggested:

- H1: Perceived Destination Sustainability positively influences Experiential Value.
- H2: Perceived Destination Sustainability positively influences Destination Image.
- H3: Perceived Destination Sustainability positively influences Tourist Satisfaction.

Experiential Value (EV) in Outdoor Recreation

Experiential Value (EV) in nature-based settings is a multidimensional construct that emerges from the dynamic interaction between visitors and a destination's distinctive environment (ALIYAH et al., 2023; Shen et al., 2024). In the context of outdoor recreation, EV encompasses both cognitive-utilitarian facets, such as environmental quality and safety, and affective-hedonic facets, including authenticity, emotional engagement, and mental restoration (Shen et al., 2024; Uslu et al., 2024). Within the S-O-R framework, EV is conceptualized as the Organism state that interprets external stimuli from a sustainable destination into meaningful internal value (Keni et al., 2024; X. Wang et al., 2024). A robust body of literature positions EV as a pivotal antecedent in the experiential-value-image-satisfaction-loyalty chain, driving favorable downstream psychological and behavioral outcomes (Shen et al., 2024; Usep Suhud et al., 2025).

High experiential value acts as a powerful signal that reinforces a destination's image, particularly its perceived authenticity and engagement value. When EV is high, tourists cognitively and affectively encode the destination as authentic, well-managed, and worthy of trust, which strengthens the destination's image in their memory and attitudes. In ecotourism and heritage contexts, authentic experiences and strong engagement with the place contribute to credible branding and a favorable image representation (Satrya et al., 2023; Yuliarni et al., 2023). Specifically, experiential dimensions such as personal growth and renewal contribute to a more robust destination image, as the personal benefits gained are mentally associated with the destination's excellence (Maulina et al., 2023; Ridwanudin et al., 2025). Empirical evidence further suggests that experiential quality and perceived value are central to shaping a favorable destination image (Lu et al., 2023; Sana et al., 2023).

The relationship between EV and satisfaction is a cornerstone of tourism behavior, where high value delivered through arousal, memorable experiences, and emotional fulfillment directly translates into post-visit satisfaction (Shen et al., 2024; Zhu et al., 2025). In outdoor activities like camping or mountain tourism, the ability of a destination to provide mental restoration and unique engagement serves as a primary driver of visitor satisfaction (ALIYAH et al., 2023; Ridwanudin et al., 2025). Authenticity and meaningful engagement ensure that tourists' expectations are not only met but exceeded. This EV-satisfaction linkage is repeatedly observed in nature-based contexts, where authentic encounters strengthen the overall evaluative state of the tourist (Sana et al., 2023; Satrya et al., 2023).

EV is a core propellant of behavioral loyalty, as high-value experiences create durable affective bonds and a sense of place attachment that motivates return visits (Sana et al., 2023). Tourists who derive significant value from their engagement with nature—particularly those experiencing transformative personal growth—develop a strong desire to return (Ridwanudin et al., 2025). High-quality experiences that blend functional environmental benefits with emotional co-creation foster the future visit propensity (ALIYAH et al., 2023; Maulina et al., 2023). In experience-based marketing, the sustainability and authenticity inherent in the experiential value chain catalyze long-term retention. Evidence from ecotourism sites also confirms that perceived authenticity and value are fundamental to shaping revisit intentions (Lu et al., 2023; Zhu et al., 2025). Based on these arguments, the following hypothesis is suggested:

- H4: Experiential Value positively influences Destination Image.
- H5: Experiential Value positively influences Tourist Satisfaction.
- H6: Experiential Value positively influences Revisit Intention.

Destination Image (DI)

Destination image in the context of outdoor recreation is conceptualized as a comprehensive mental representation consisting of cognitive evaluations—referring to the knowledge and beliefs about a destination’s physical attributes—and affective evaluations, which encompass the feelings and emotional attachments toward the site (U Suhud et al., 2025). Within the S-O-R framework, destination image serves as a critical Organism component, where the mental impressions formed by sustainability stimuli and experiential value determine post-visit evaluations and future behavioral intentions (Keni et al., 2024; Usep Suhud et al., 2025). A robust and positive image, particularly regarding green imagery and credibility, acts as a primary competitive differentiator for nature-based destinations (Soliman et al., 2023; X. Wang et al., 2024).

The relationship between destination image and satisfaction is rooted in the expectancy-confirmation theory, where a positive image functions as a benchmark for the quality expected by the traveler. A favorable destination image significantly enhances tourist satisfaction by reducing perceived risks and reinforcing the congruence between pre-visit expectations and the reality of the on-site experience (Uslu et al., 2024; Zulvianti et al., 2023). In outdoor recreation and heritage settings, images that reflect authenticity and effective management are found to have a direct influence on elevating overall satisfaction levels.

Destination image is a primary antecedent of behavioral loyalty, specifically the intention to revisit. Tourists who hold a strong and positive mental representation of a destination are more likely to include it in their future travel plans (LE et al., 2023; Usep Suhud et al., 2025). Images associated with safety, landscape uniqueness, and commitment to sustainability create a cognitive bond that triggers the desire to replicate the experience (Fan et al., 2023; Usep Suhud et al., 2025). Empirical evidence suggests that destination image plays a critical role in shaping visit intentions for both first-time and repeat visitors in nature-based tourism.

The reputation and image of a destination in a tourist’s mind largely determine their willingness to serve as a brand advocate. A positive destination image encourages tourists to disseminate favorable information and recommend the site to others, both through face-to-face interactions and digital platforms (Yoon & Yoo, 2023; Zulvianti et al., 2023). In outdoor activities with high emotional involvement, such as adventure tourism or camping, a credible destination image strengthens the tourist’s confidence in recommending the location as a worthwhile destination (Akbulut et al., 2024; Zulvianti et al., 2023).

Based on these arguments, the following hypothesis is suggested:

H7: Destination Image positively influences Tourist Satisfaction.

H8: Destination Image positively influences Revisit Intention.

H9: Destination Image positively influences Word-of-Mouth.

Tourist Satisfaction and Loyalty

Tourist satisfaction (TS) in the outdoor recreation sector is conceptualized as a comprehensive post-visit evaluative judgment, representing the degree to which a destination’s performance meets or exceeds the traveler’s initial expectations (Usep Suhud et al., 2025; Suprina et al., 2024). Within the Stimulus-Organism-Response (S-O-R) framework, satisfaction serves as the final Organism state, synthesizing the cumulative psychological effects of perceived sustainability, experiential value, and destination image before manifesting into behavioral Responses (R. Chang et al., 2024; Keni et al., 2024). In this study, behavioral loyalty is operationalized through two primary constructs: Revisit Intention and Word-of-Mouth (WOM) (Cruz-Milán, 2023; Ridwanudin et al., 2025).

Revisit intention is a fundamental indicator of loyalty, reflecting the probability that a tourist will choose the same destination for future travel plans. Tourism literature consistently identifies satisfaction as a robust predictor of the intention to return (R. Chang et al., 2024; Suprina et al., 2024). In the context of nature-

based tourism and eco-friendly hospitality, satisfaction driven by service quality and green practices significantly fosters visitor retention (R. Chang et al., 2024; Usep Suhud et al., 2025). Tourists who derive both functional and emotional fulfillment from their outdoor experiences are more likely to prioritize the destination in their subsequent travel itineraries (Akbulut et al., 2024).

Word-of-Mouth (WOM) represents a behavioral manifestation of loyalty where tourists voluntarily disseminate positive information and recommend a destination to their social circles (Muntean et al., 2023). The psychological fulfillment gained during outdoor activities—such as camping or geopark visits—acts as a catalyst for tourists to share their positive encounters. Satisfied tourists do not merely report positive experiences but often evolve into destination brand advocates, a role that is increasingly critical in the era of social media marketing (Maulina et al., 2023; Yoon & Yoo, 2023). Empirical evidence suggests that the intensity of WOM is directly shaped by the quality of the experiential journey and the resulting satisfaction (Ridwanudin et al., 2025). Based on these arguments, it is hypothesized:

H10: Tourist Satisfaction positively influences Revisit Intention.

H11: Tourist Satisfaction positively influences Word-of-Mouth.

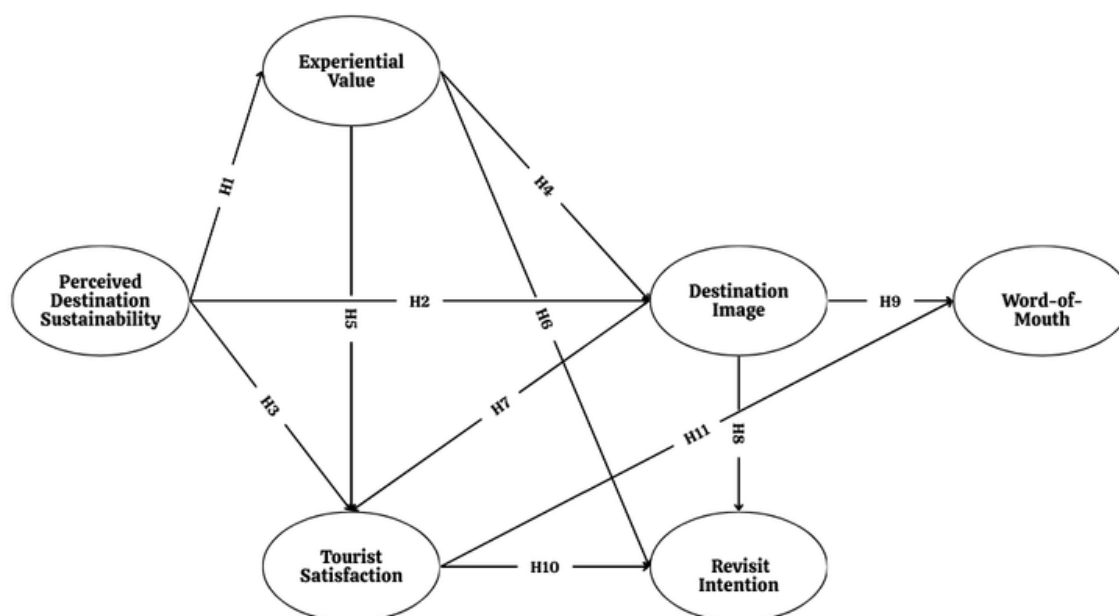


Figure 1. Proposed Framework

Source: Research data, 2025

C. METHODS

This study employs a quantitative research design with a cross-sectional survey approach to empirically validate the proposed structural model in the outdoor recreation context. A purposive sampling technique was utilized to ensure that all respondents were tourists who had actively engaged in activities at the target destination (Suhud et al., 2025). Based on the complexity of the model, which includes multiple mediation paths ($X \rightarrow M1 \rightarrow M2 \rightarrow M3 \rightarrow Y1/Y2$), a sample size of 350 to 450 respondents was targeted to meet the requirements for statistical power and predictive relevance in PLS-SEM analysis.

The research instrument consists of multi-item scales adapted from validated tourism and sustainable marketing literature. All latent constructs are measured using a five-point Likert scale (1 = Strongly

Disagree to 5 = Strongly Agree). To ensure model stability, each variable is operationalized with at least three reflective indicators.

Table 1. Measurement Items

Latent Variable	Code	Measurement Items	Primary Source(s)
Perceived Destination Sustainability (PDS)	PDS1	The destination actively preserves its natural ecosystems.	(Fuchs, 2024; Usep Suhud et al., 2025)
	PDS2	The destination respects and involves the local culture.	
	PDS3	Tourism activities provide tangible economic benefits to locals.	
Experiential Value (EV)	EV1	The experience provides mental restoration and renewal.	(Ridwanudin et al., 2025; Shen et al., 2024)
	EV2	I feel a sense of personal growth through the activities.	
	EV3	The interaction with nature here feels authentic and genuine.	
Destination Image (DI)	DI1	The destination is perceived as a credible outdoor recreation site.	(Usep Suhud et al., 2025; Zulvianti et al., 2023)
	DI2	The environment is safe, reliable, and well-managed.	
	DI3	The destination possesses unique and iconic natural landscapes.	
Tourist Satisfaction (TS)	TS1	My visit met or exceeded my initial expectations.	(Shen et al., 2024; Suprina et al., 2024)
	TS2	I am highly satisfied with the overall quality of the experience.	
	TS3	Visiting this destination was the right decision for me.	
Revisit Intention (RI)	RI1	I intend to return to this destination in the future.	(R. Chang et al., 2024; Usep Suhud et al., 2025)
	RI2	I will prioritize this place for my next outdoor recreation trip.	
	RI3	I plan to return specifically for similar outdoor activities.	
Word-of-Mouth (WOM)	WOM1	I will recommend this destination to others.	(Muntean et al., 2023; Ridwanudin et al., 2025)
	WOM2	I will tell positive stories about this destination.	
	WOM3	I will share positive reviews/experiences on social media.	

Source: Research data, 2025

Data were collected via self-administered questionnaires distributed to tourists immediately following their outdoor recreation activities. A rigorous data cleaning protocol was implemented to eliminate incomplete responses or those exhibiting straight-lining patterns. This process ensures that the dataset is robust and free from common biases before proceeding to structural analysis.

The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). This technique is particularly effective for testing complex models with sequential mediation paths, as illustrated in the proposed framework. The analysis followed a two-stage evaluation: First, Measurement Model Evaluation (Outer Model): This included assessments of indicator reliability (factor loadings > 0.70), construct reliability (Composite Reliability > 0.70), convergent validity (AVE > 0.50), and discriminant validity using the Fornell-Larcker criterion or the Heterotrait-Monotrait (HTMT) ratio. Second, Structural Model Evaluation (Inner Model): The 11 direct hypotheses were tested using a bootstrapping procedure (5,000 sub-samples) to determine the significance of path coefficients, t-statistics, and p-values. Furthermore, the model's explanatory power was assessed using R² values for each endogenous variable, and its predictive relevance was verified through Q² values.

D. RESULTS AND ANALYSIS

Respondent Profile and Descriptive Analysis

The final sample (N=401) consists of a diverse range of outdoor recreationists, primarily characterized by a young, well-educated, and group-oriented demographic. Table 2 synthesizes the demographic and trip-related characteristics, facilitating a side-by-side comparison of the key segments.

Table 2. Consolidated Profile of Respondents (N = 401)

Demographic Attribute	n	%	Trip Characteristics	n	%
Gender			Primary Activity		
Female	224	55.86	Camping	158	39.40
Male	177	44.14	Geopark Tours	141	35.16
Generation			Adventure Sports	102	25.44
Gen Z (18–29)	128	31.92	Frequency of Visit		
Millennials (30–45)	185	46.13	Once a month	40	9.98
Gen X & Older (>45)	88	21.95	Every 3 months	140	34.91
Education			Every 6 months	160	39.90
High School	60	14.96	Once a year	61	15.21
Bachelor's Degree	242	60.35	Duration of Stay		
Master's / PhD	99	24.69	Short (1–2 days)	152	37.91
Monthly Income			Medium (3–4 days)	173	43.14
< 5 Million IDR	120	29.93	Long (5 days)	76	18.95
5 – 10 Million IDR	161	40.15	Group Size		
10 – 15 Million IDR	80	19.95	Small (1–3 people)	108	26.93
> 15 Million IDR	40	9.97	Medium (4–7 people)	157	39.15
Occupation			Large (>7 people)	136	33.92
Student	80	19.95			
Private Employee	161	40.15			
Civil Servant	60	14.96			
Entrepreneur / Others	100	24.94			

Source: Research data, 2025

The descriptive analysis reveals several critical insights that underscore the suitability of the sample for the proposed structural model. The profile is predominantly characterized by a youth-centric market, with Gen Z and Millennial cohorts accounting for over 78% of the total respondents. As digital natives, these young professionals—largely private employees (40.15%) with stable mid-range incomes—demonstrate a strong predisposition toward authentic and sustainable experiences. This inclination is further reinforced by their high educational attainment, where 85.04% of participants hold at least a Bachelor's degree, suggesting a sophisticated capacity to perceive and value destination sustainability (PDS) as the study's primary stimulus.

From a behavioral perspective, the social nature of outdoor recreation is highly evident, as 73.07% of respondents travel in medium-to-large groups. This communal dynamic highlights the pivotal role of word-of-mouth (WOM) as a key loyalty response, as satisfied group members are likely to act as brand advocates within their social networks. Furthermore, the popularity of camping and a consistent visit frequency of every three to six months signify a high level of routine engagement, making the investigation of revisit intention (RI) particularly relevant. Collectively, these demographic and behavioral patterns confirm that the respondents possess the necessary exposure and maturity to evaluate the complex pathways between sustainability perceptions, experiential value, and long-term loyalty in the outdoor recreation sector.

Measurement Model Assessment

The measurement model was evaluated based on factor loadings, Cronbach's Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE). As shown in Table 3, all item loadings range from 0.909 to 0.948, significantly exceeding the recommended threshold of 0.707, indicating high indicator reliability. Internal consistency was confirmed as Cronbach's Alpha, and CR values for all constructs were between 0.903 and 0.956, well above the 0.70 benchmark. Furthermore, the AVE values range from 0.838 to 0.879, surpassing the 0.50 requirement, which confirms robust convergent validity for all latent variables.

Table 3. Reliability and Convergent Validity Results

Construct	Item	Loadings	Cronbach's α	CR	AVE
Perceived Destination Sustainability (PDS)	PDS1	0.928	0.931	0.956	0.879
	PDS2	0.936			
	PDS3	0.948			
Experiential Value (EV)	EV1	0.920	0.908	0.942	0.845
	EV2	0.915			
	EV3	0.923			
Destination Image (DI)	DI1	0.919	0.905	0.941	0.841
	DI2	0.919			
	DI3	0.912			
Tourist Satisfaction (TS)	TS1	0.909	0.909	0.943	0.846
	TS2	0.926			
	TS3	0.924			
Revisit Intention (RI)	RI1	0.921	0.922	0.951	0.865
	RI2	0.930			
	RI3	0.939			
Word-of-Mouth (WOM)	WOM1	0.918	0.903	0.939	0.838
	WOM2	0.913			
	WOM3	0.915			

Source: Research data, 2025

Discriminant validity was assessed using the Heterotrait-Monotrait (HTMT) ratio, which is considered a more stringent criterion than the Fornell-Larcker test in contemporary PLS-SEM research. As presented in Table 4, all HTMT values are below the conservative threshold of 0.85, with the highest correlation being 0.844 (between TS and WOM). These results confirm that each construct is empirically distinct from the others.

Table 4. Discriminant Validity (HTMT Ratio)

	DI	EV	PDS	RI	TS
Experiential Value	0.657				
Perceived Destination Sustainability	0.724	0.525			
Revisit Intention	0.806	0.746	0.610		
Tourist Satisfaction	0.829	0.706	0.680	0.838	
Word-of-Mouth	0.814	0.646	0.663	0.771	0.844

Source: Research data, 2025

To check for potential multicollinearity issues, the Inner Variance Inflation Factor (VIF) was analyzed. All VIF values are below 3.0 (ranging from 1.000 to 2.659), indicating that multicollinearity does not bias the structural estimates. Finally, the model fit indices were examined. The Standardized Root Mean Square Residual (SRMR) for the estimated model is 0.035, which is well below the 0.08 threshold, indicating a good fit. Additionally, the Normed Fit Index (NFI) of 0.909 (exceeding 0.90) confirms that the proposed model represents the data adequately.

Structural Model Assessment

The model's explanatory power was assessed using the R^2 values for the endogenous constructs. As shown in Table 5, the model explains 68.7% of the variance in Revisit Intention and 64.5% in Word-of-Mouth, indicating a substantial explanatory power. Tourist Satisfaction ($R^2 = 0.642$) and Destination Image ($R^2 = 0.540$) also show moderate-to-strong explanatory power. Furthermore, all Q^2 values are greater than zero, confirming the model's predictive relevance for all endogenous variables.

Table 5. Explanatory Power and Predictive Relevance

Construct	R ² Adjusted	Predictive Relevance (Q ²)
Experiential Value (EV)	0.232	0.195
Destination Image (DI)	0.538	0.447
Tourist Satisfaction (TS)	0.639	0.534
Revisit Intention (RI)	0.684	0.587
Word-of-Mouth (WOM)	0.643	0.535

Source: Research data, 2025

The results of the hypothesis testing are summarized in Table 6 and Figure 2. All eleven hypothesized direct paths were found to be statistically significant at the $p < 0.001$ level. Notably, Perceived Destination Sustainability (PDS) significantly influences Experiential Value ($\beta = 0.484$, $t = 12.246$) and Destination Image ($\beta = 0.491$, $t = 12.455$), supporting H1 and H2. The findings also confirm that Tourist Satisfaction is a powerful predictor of loyalty, particularly for Word-of-Mouth ($\beta = 0.488$, $t = 10.646$) and Revisit intention ($\beta = 0.372$, $t = 7.521$), supporting H10 and H11. The effect sizes (f^2) indicate that PDS has a large effect on Destination Image ($f^2 = 0.401$) and Experiential Value ($f^2 = 0.306$).

Table 6. Direct Effects and Hypothesis Testing

Hyp	Relationship	β	T-Statistics	P-Values	f^2	Result
H1	PDS → Experiential Value	0.484	12.246	0.000	0.306	Supported
H2	PDS → Destination Image	0.491	12.455	0.000	0.401	Supported
H3	PDS → Tourist Satisfaction	0.183	4.856	0.000	0.051	Supported
H4	Experiential Value → Destination Image	0.359	9.222	0.000	0.215	Supported
H5	Experiential Value → Tourist Satisfaction	0.275	7.240	0.000	0.133	Supported
H6	Experiential Value → Revisit Intention	0.268	6.898	0.000	0.128	Supported
H7	Destination Image → Tourist Satisfaction	0.467	11.241	0.000	0.280	Supported
H8	Destination Image → Revisit Intention	0.296	6.281	0.000	0.116	Supported
H9	Destination Image → Word-of-Mouth	0.369	8.448	0.000	0.166	Supported
H10	Tourist Satisfaction → Revisit Intention	0.372	7.521	0.000	0.166	Supported
H11	Tourist Satisfaction → Word-of-Mouth	0.488	10.646	0.000	0.290	Supported

Source: Research data, 2025

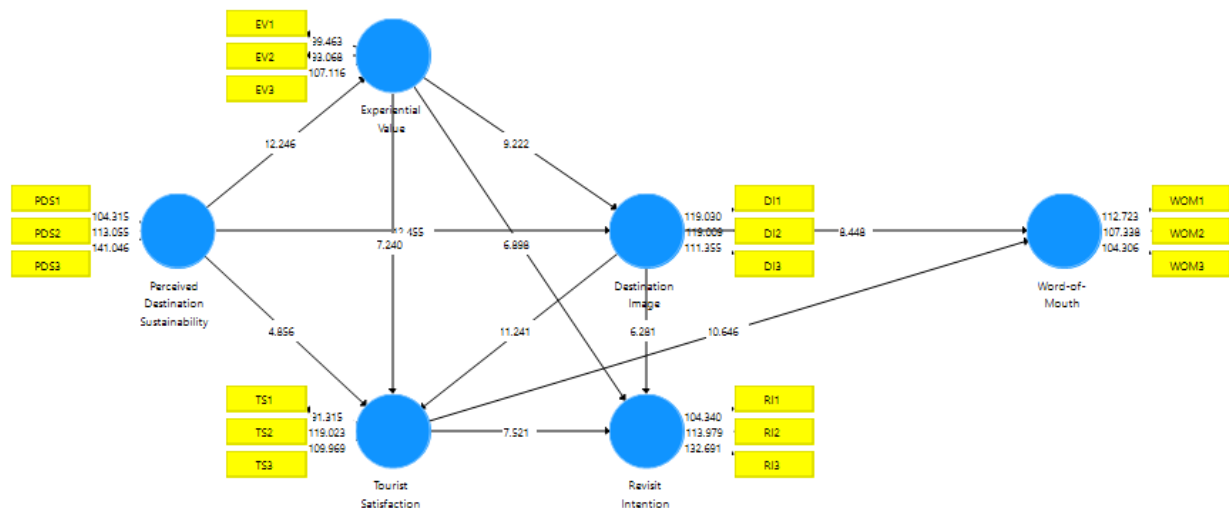


Figure 2. Evaluated Structural Model

Source: Research data, 2025

The analysis of specific indirect effects (Table 7) reveals the complex mediation mechanisms within the model. The total indirect effect of PDS on Revisit Intention ($\beta = 0.560$, $t = 19.666$) and Word-of-Mouth ($\beta = 0.551$, $t = 19.012$) is highly significant, confirming that the impact of sustainability on loyalty is heavily

mediated by experiential value, destination image, and satisfaction. These results demonstrate a robust sequential mediation chain.

Table 7. Specific Indirect Effects

Mediation Pathway	Original Sample (O)	T-Statistics	P-Values	Result
PDS → Revisit Intention	0.560	19.666	0.000	Significant
PDS → Word-of-Mouth	0.551	19.012	0.000	Significant
PDS → Tourist Satisfaction	0.443	15.100	0.000	Significant
EV → Word-of-Mouth	0.348	12.172	0.000	Significant
EV → Revisit Intention	0.271	9.903	0.000	Significant
DI → Word-of-Mouth	0.228	8.797	0.000	Significant
DI → Revisit Intention	0.174	5.962	0.000	Significant
PDS → Destination Image	0.174	7.362	0.000	Significant
EV → Tourist Satisfaction	0.168	6.963	0.000	Significant

Source: Research data, 2025

Discussion

The structural analysis confirms that all eleven hypotheses are supported, validating the comprehensive sequential mediation model. These results strongly endorse the application of the Stimulus-Organism-Response (S-O-R) framework in the context of outdoor recreation, where perceived sustainability serves as the primary environmental catalyst. The findings reveal that Perceived Destination Sustainability (PDS) acts as a robust stimulus, significantly influencing Experiential Value ($\beta = 0.484$, $p < 0.001$) and Destination Image ($\beta = 0.491$, $p < 0.001$). This confirms that when tourists perceive a destination as environmentally, culturally, and economically responsible, it elevates their psychological perception of the visit's value. Dialectically, these findings explain why sustainability serves as such a potent primary catalyst in this specific sector. For outdoor recreationists, sustainability is not a mere add-on but a prerequisite for the authenticity and integrity of the nature-based product itself. This aligns with (U Suhud et al., 2025), who argued that sustainability signals in nature-based tourism are no longer mere extras but core components of the tourism product that shape the Organism (internal state). The significant path to Tourist Satisfaction ($\beta = 0.183$), though smaller in direct effect, suggests that sustainability directly contributes to fulfillment, echoing (Fuchs, 2024) regarding the warm glow effect of sustainable consumption.

A critical insight from this study is the validation of the internal psychological value chain. Experiential Value (EV)—focusing on restoration and personal growth—significantly predicts Destination Image ($\beta = 0.359$) and Tourist Satisfaction ($\beta = 0.275$). Viewed through the Natural-Resource-Based View (NRBV), these findings provide evidence that sustainably managed natural resources are strategic capabilities that generate a competitive advantage by facilitating superior psychological outcomes. This mechanism suggests that when tourists interact with preserved ecosystems, they harvest meaningful benefits of mental restoration and personal renewal that conventional, less-sustainable destinations cannot offer. Furthermore, the strength of the PDS-to-EV link directly addresses the greenwashing skepticism prevalent in emerging markets like Indonesia; it suggests that modern travelers can distinguish substantive sustainability commitments from symbolic marketing because the psychological healing and restorative benefits can only be truly derived from engagement with a genuine, well-preserved environment. Thus, the value derived from nature is not static; it actively constructs the destination's brand image in the tourist's mind. Dialecting with (Prawira & Prawira, 2025; Ridwanudin et al., 2025), these results emphasize that for outdoor recreationists, the authenticity of the experience (EV) is the lens through which they evaluate destination quality. Furthermore, the strong path from Destination Image to Satisfaction ($\beta = 0.467$) indicates that a credible and safe image is a prerequisite for high satisfaction levels, supporting the findings of (Zulvianti et al., 2023).

The results demonstrate that Tourist Satisfaction (TS) is the most potent direct precursor to behavioral loyalty, particularly for Word-of-Mouth ($\beta = 0.488$) and Revisit intention ($\beta = 0.372$). This confirms that

while sustainability and value initiate the journey, the Response (loyalty) is ultimately governed by the degree of fulfillment. Notably, the model shows that satisfaction has a significantly stronger influence on advocacy (WOM) than on the intention to return (RI). This reveals a paradigm shift in loyalty among modern novelty-seeking travelers, where satisfaction is more likely to be channeled into digital advocacy than repetitive visitation. For Gen Z and Millennial segments, sharing positive sustainable experiences on social media serves as a social signal to project their identity and environmental values. This behavior effectively bridges the value-action gap by allowing tourists to act as sustainable brand advocates even if their future travel plans remain diversified to seek new experiences. This can be interpreted through the lens of (Muntean et al., 2023), suggesting that modern tourists, especially Gen Z and Millennials, are highly motivated to share positive sustainable experiences digitally, even if their future travel plans are diversified.

Theoretical Implications

The findings of this study offer several profound theoretical contributions to the body of knowledge in sustainable tourism and consumer behavior within the outdoor recreation sector. Traditionally, the S-O-R model in tourism research often treats the Organism (O) as a single, homogenous mediating state. This study advances the framework by demonstrating a sequential and hierarchical Organism stage. The results prove that the internal state of the tourist follows a logical progression from Cognitive Value (EV) to Affective Destination Image (DI) and finally to Evaluative Satisfaction (TS). By validating this Organism chain, this research provides a more granular understanding of the psychological transition that occurs between perceiving an environmental stimulus (PDS) and manifesting behavioral loyalty (RI/WOM). It suggests that satisfaction does not emerge in a vacuum but is the culmination of a value-building process.

This research contributes to the Natural-Resource-Based View (NRBV) by positioning destination sustainability (PDS) not merely as an ethical obligation but as a strategic resource that generates a competitive advantage. While NRBV has been widely applied in corporate strategy, its application in destination marketing has been less common. This study proves that sustainability is a critical capability of a destination that directly enhances its brand equity (Destination Image). The strong path from PDS to Experiential Value ($\beta = 0.484$) suggests that environmental and socio-cultural preservation are the raw materials from which tourists manufacture their personal growth and restorative experiences.

A significant theoretical contribution of this study lies in the granularity of the Response (R) stage. By treating Revisit Intention (RI) and Word-of-Mouth (WOM) as distinct constructs, the model reveals that different intensities of satisfaction drive them. The findings show that Tourist Satisfaction has a more substantial impact on Word-of-Mouth ($\beta = 0.488$) than on Revisit Intention ($\beta = 0.372$). Theoretically, this indicates that in the modern outdoor recreation landscape—characterized by a novelty-seeking Gen Z and Millennial demographic—satisfaction is more likely to be channeled into advocacy and digital social signaling than into repetitive visitation. This decouples the traditional assumption that a satisfied tourist is necessarily a returning tourist.

The study deepens the conceptualization of Experiential Value in outdoor recreation. By linking EV (restoration and growth) to Destination Image, the results suggest that the utility of the experience is what defines the reputation of the destination. This provides a theoretical link between Environmental Psychology (Restorative Environments Theory) and Marketing (Brand Image). It proves that for nature-based destinations, the brand is constructed internally through the psychological healing or growth the tourist perceives during their stay.

Managerial Implications

The structural findings of this research offer actionable insights for Destination Management Organizations (DMOs) and outdoor recreation practitioners, particularly in navigating the shifting

preferences of the modern traveler. The primary managerial takeaway is the necessity of transitioning from symbolic green marketing to substantive sustainability practices. Since perceived sustainability (PDS) is the foundational driver of the entire value chain, managers must ensure that environmental, socio-cultural, and economic initiatives are not only implemented but are also made observable and verifiable to the tourist. This could involve transparent communication of conservation efforts or the integration of local community members as facilitators of the recreation experience, thereby reinforcing the authenticity that leads to higher destination image scores.

Furthermore, the significant role of Experiential Value (EV) as a mediator suggests that managers should move beyond providing simple recreation facilities and instead focus on experience curation. Because restoration and personal growth were identified as critical indicators of value, destination offerings should be designed to foster mental renewal. This might include the creation of designated quiet zones in camping areas, educational trails that encourage mindful interaction with nature, or guided adventure sports that emphasize self-discovery rather than mere physical exertion. By intentionally designing touchpoints that trigger these specific psychological outcomes, practitioners can more effectively bridge the gap between sustainability perceptions and tourist satisfaction.

In addressing the Response stage of the model, the high coefficient for Word-of-Mouth (WOM) relative to Revisit Intention (RI) requires a specialized marketing strategy tailored to a novelty-seeking demographic. Given that satisfied Gen Z and Millennial travelers are more inclined to act as brand advocates than to return for repetitive visits, DMOs should leverage this propensity by facilitating digital advocacy. This involves creating shareable moments that align with sustainability values—such as eco-friendly photo points or digital badges for participating in conservation activities—which allow tourists to signal their sustainable lifestyle to their social networks. Consequently, even if a tourist does not return immediately, their high satisfaction is converted into a powerful, low-cost marketing tool that attracts new visitor segments.

Finally, the integrity of the sequential mediation chain implies that a destination's management must be holistic rather than fragmented. A failure in any part of the chain—whether it be a lack of authentic value in the experience or a safe and credible brand image—will disrupt the flow from sustainability to loyalty. Therefore, practitioners should implement an integrated quality management system that monitors every stage of the tourist journey, ensuring that the promise of a sustainable and restorative destination is consistently met across all functional and emotional touchpoints. By reinforcing the links between value, image, and satisfaction, managers can secure the long-term resilience of outdoor recreation sites in an increasingly competitive and environmentally conscious global market.

E. CONCLUSION

This research successfully validates a comprehensive structural framework that explains the journey from sustainability perceptions to long-term tourist loyalty in the outdoor recreation sector. By applying the Stimulus-Organism-Response (S-O-R) theory, the study proves that Perceived Destination Sustainability (PDS) is the primary catalyst that initiates a sequential psychological value chain. The results demonstrate that for the modern traveler—particularly the Gen Z and Millennial segments—sustainability is not an isolated attribute but a foundational requirement that enhances Experiential Value and solidifies Destination Image.

The findings confirm that while sustainability and value-driven experiences are essential, Tourist Satisfaction remains the final arbiter of behavioral responses. Notably, the study reveals that the impact of a high-quality, sustainable experience is more intensely reflected in a tourist's willingness to act as a digital advocate (Word-of-Mouth) than in their immediate Revisit Intentions. Ultimately, this research underscores that for nature-based destinations to remain resilient, management must focus on an integrated

approach where environmental stewardship is seamlessly translated into personal growth and mental restoration for the visitor.

Limitations and Future Research Directions

Despite the robustness of the findings, this study is subject to several limitations that offer fertile ground for future investigation. First, the use of a cross-sectional survey captures a snapshot of tourist perceptions at a single point in time. Future research could employ a longitudinal approach to observe how loyalty evolves over multiple seasons or years, particularly as tourists move through different life stages. Second, the current model focuses on a single destination type in Indonesia; therefore, the generalizability of the findings could be strengthened by conducting comparative studies across diverse geographic regions or different outdoor recreation categories, such as high-intensity adventure tourism versus low-impact wellness retreats.

Furthermore, while the model explains a substantial amount of variance in loyalty, there are likely other influential factors at play. Future studies should consider incorporating moderating variables, such as Digital Engagement or Environmental Concern (EC), to determine if the strength of these pathways differs among various psychographic segments. Given the high propensity for word-of-mouth advocacy found in this study, exploring the role of social media influencers or virtual communities in amplifying the effects of perceived sustainability would also be a valuable extension. Finally, moving beyond self-reported data by integrating big data analytics from travel platforms or social media sentiment analysis could provide a more objective measure of actual behavioral loyalty, further enriching the theoretical and practical discourse in sustainable tourism management.

REFERENCES

- Akbulut, O., Çelik, T., Ekin, Y., & Yetim, A. Ç. (2024). A research on Fethiye Babadag commercial tandem paragliding participants within the scope of experiential tourism. *Journal of Outdoor Recreation and Tourism*, 47, 100806. <https://doi.org/10.1016/j.jort.2024.100806>
- ALIYAH, I., SUGIARTI, R., & YUDANA, G. (2023). Typologies of Tourism Visits to Mountain Destinations. A Case Study: Mount Lawu Area, Karanganyar Regency, Indonesia. *Geojournal of Tourism and Geosites*, 46(1), 46–54. <https://doi.org/10.30892/gtg.46105-999>
- Aliyah, Lukita, C., Pangilinan, G. A., Chakim, M. H. R., & Saputra, D. B. (2023). Examining the Impact of Artificial Intelligence and Internet of Things on Smart Tourism Destinations: A Comprehensive Study. *Aptisi Transactions on Technopreneurship (Att)*, 5(2sp), 135–145. <https://doi.org/10.34306/att.v5i2sp.332>
- Basrawi, M. S. (2024). Study the Impact of Tourism on the Environment and Local Culture. *المجلة العربية* 50–1, (68)7, للنشر العلمي. <https://doi.org/10.36571/ajsp681>
- Chang, R., Chanda, R. C., Zadeh, A. V., Hanifah, H., & Gui, A. (2024). Assessing Green Practices on Eco-Friendly Hotel Customer Loyalty: A Partial Least Squares Structural Equation Modeling and Fuzzy-Set Qualitative Comparative Analysis Hybrid Approach. *Sustainability*, 16(9), 3834. <https://doi.org/10.3390/su16093834>
- Chang, X., Chen, H., Li, J., Fei, X., Xu, H., & Xiao, R. (2024). Travel Characteristics of Urban Residents Based on Taxi Trajectories in China: Beijing, Shanghai, Shenzhen, and Wuhan. *Sustainability*, 16(7), 2694. <https://doi.org/10.3390/su16072694>
- Conti, S., Dias, Á., & Pereira, L. (2023). Perceived City Sustainability and Tourist Behavioural Intentions. *Smart Cities*, 6(2), 692–708. <https://doi.org/10.3390/smartcities6020033>
- Cruz-Milán, O. (2023). Loyalty in the time of COVID-19: A review of the literature in tourism destination settings. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1119737>
- Dargahov, V. S., Mammadov, Q. V., Nuriyeva, I. F., & Ahmadov, R. I. (2023). Prospects of using the tourism potential of the liberated territories from the point of view of ecotourism. *Journal of Geology, Geography and Geoecology*, 32(2), 224–232. <https://doi.org/10.15421/112321>
- Fan, X., Lu, J., Qiu, M., & Xiao, X. (2023). Changes in Travel Behaviors and Intentions During the COVID-19 Pandemic and Recovery Period: A Case Study of China. *Journal of Outdoor Recreation and Tourism*, 41, 100522. <https://doi.org/10.1016/j.jort.2022.100522>

- Faraj, M., Siow, M. L., & Maruthaveeran, S. (2024). Therapeutic Environment Design Elements in Malaysia's Medical Tourism Accommodations: An Observation Study. *International Journal of Sustainable Development and Planning*, 19(3), 917–930. <https://doi.org/10.18280/ijstdp.190310>
- Fuchs, K. (2024). An Inductive Study with Travellers About the Perceived Barriers and Drivers to Sustainable Tourism Development in a Nature-Based Destination. *Academica Turistica*, 17(3), 219–230. <https://doi.org/10.26493/2335-4194.17.219-230>
- Haldane, E., MacDonald, L. A., Kressin, N., Furlotte, Z., Kinay, P., Guild, R., & Wang, X. (2023). Sustainable Tourism in the Face of Climate Change: An Overview of Prince Edward Island. *Sustainability*, 15(5), 4463. <https://doi.org/10.3390/su15054463>
- Keni, K., Wilson, N., Adrianto, F., Dharmawan, P., & Teoh, A. P. (2024). Leveraging the S-O-R Framework to Determine Tourists' Willingness to Revisit Riau Island. *Jurnal Komunikasi*, 16(1), 257–287. <https://doi.org/10.24912/jk.v16i1.28668>
- Kusumawati, A., Dewantara, R. Y., Azizah, D. F., & Supriono, S. (2023). Determining Outcome Factors of City Branding Post-Covid-19: Roles of Brand Satisfaction, Brand Experience And perceived Risk. *Journal of Tourism Futures*, 10(2), 350–371. <https://doi.org/10.1108/jtf-03-2022-0080>
- LE, T. D., Tuấn, L. A., Vo, H. T., HO, V. T., & PHAM, S. X. (2023). Antecedents of Tourists' Loyalty: The Role and Influence of Tourism Products, Destination Image in Hoian World Cultural Heritage Site. *Geojournal of Tourism and Geosites*, 47(2), 573–583. <https://doi.org/10.30892/gtg.47225-1057>
- Lu, Y., Hu, X., Lee, H. M., Zhang, Y., Yang, L., Hu, X., Lee, H. M., Zhang, Y., Lu, Y., Hu, X., Lee, H. M., Zhang, Y., Yang, L., Hu, X., Lee, H. M., Zhang, Y., Lu, Y., Hu, X., Lee, H. M., & Zhang, Y. (2023). The Impacts of Ecotourists' Perceived Authenticity and Perceived Values on Their Behaviors: Evidence From Huangshan World Natural and Cultural Heritage Site. *Sustainability*, 15(2), 1551. <https://doi.org/10.3390/su15021551>
- Maulina, A., Sukoco, I., Hermanto, B., & Kostini, N. (2023). Tourists' Revisit Intention and Electronic Word-of-Mouth at Adaptive Reuse Building in Batavia Jakarta Heritage. *Sustainability*, 15(19), 14227. <https://doi.org/10.3390/su151914227>
- Mehrabian, A., & Russell, J. A. (1974). The Basic Emotional Impact of Environments. *Perceptual and Motor Skills*, 38(1), 283–301. <https://doi.org/10.2466/pms.1974.38.1.283>
- Muntean, M., Șorcaru, I. A., & Manea, L. (2023). Empirical Evidence of Tourist Satisfaction and Loyalty in the Case of Bucharest—A Partial Least Squares Structural Equation Modelling Approach. *Journal of Consumer Behaviour*, 22(4), 985–999. <https://doi.org/10.1002/cb.2136>
- Prawira, M. F. A., & Prawira, A. B. A. (2025). Mapping Power and Interests: Stakeholder Dynamics in Sustainable Outdoor Recreation Governance in Pangandaran, Indonesia. *Journal of Tourism, Hospitality and Travel Management*, 2(1), 14–26. <https://doi.org/10.58229/jthtm.v2i1.301>
- Ridwanudin, O., Gaffar, V., Arissaputra, R., Adi, L., Khaerani, R., & Purnomo, E. (2025). Exploring The Physical Activity in Camping Tourism: A Confirmatory Factor Analysis of Tourist Experiences. *Annals of Applied Sport Science*, 13(Special-Issue), 367–371. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-105004296411&partnerID=40&md5=e1bb217ab76e1a4f03e2e7f48cee7d24>
- Sana, Chakraborty, S., Adil, M., & Sadiq, M. (2023). Ecotourism experience: A systematic review and future research agenda. *International Journal of Consumer Studies*, 47(6), 2131–2156. <https://doi.org/10.1111/ijcs.12902>
- Satrya, I. D. G., Kaihatu, T. S., Budidharmanto, L. P., Karya, D. F., & Rusadi, N. W. P. (2023). The role of ecotourism in preserving environmental awareness, cultural and natural attractiveness for promoting local communities in Bali, Indonesia. *Journal of Eastern European and Central Asian Research (JEECAR)*, 10(7), 1063–1075. <https://doi.org/10.15549/jeecar.v10i7.1386>
- Shen, S., Yang, F., & Sotiriadis, M. D. (2024). Experiential Consumption Dimensions and Pro-Environment Behaviour by Gen Z in Nature-Based Tourism: A Chinese Perspective. *Tourism Review*, 79(4), 877–902. <https://doi.org/10.1108/tr-04-2023-0207>
- Soliman, M., Gulvady, S., Elbaz, A. M., Mosbah, M., & wahba, marwa. (2023). Robot-Delivered Tourism and Hospitality Services: How to Evaluate the Impact of Health and Safety Considerations on Visitors' Satisfaction and Loyalty? *Tourism and Hospitality Research*, 24(3), 393–409. <https://doi.org/10.1177/14673584231153367>
- Soucy, A., Pellecer Rivera, E., Siwek, N., Martin, L., Jackson, S., Venne, G., Stockman, A., & De

- Urioste-Stone, S. (2025). Opportunities and challenges within green spaces during COVID-19: Perspectives of visitors and managers in Maine, USA. *PLOS One*, 20(4), e0320800. <https://doi.org/10.1371/journal.pone.0320800>
- Suhud, U, Allan, M., Wong, W. C., Fafurida, F., & Azinuddin, M. (2025). BOOSTING COFFEE TOURISM: LINKING VISIT INTENTION AND STORYTELLING ENGAGEMENT IN HOLIDAY CONTEXTS. *Geojournal of Tourism and Geosites*, 62(4), 2316–2328. <https://doi.org/10.30892/gtg.62428-1594>
- Suhud, Usep, Allan, M., & Hoo, W. C. (2025). Destination Sustainability of Ijen Geopark As Perceived By Tourists: How Far Its Impact on Visit Intention? *GeoJournal of Tourism and Geosites*, 58(1), 146–160. <https://doi.org/10.30892/gtg.58113-1398>
- Suprina, R., Dhana, I. R. W., Gaffar, V., Disman, D., & Galihkusumah, A. H. (2024). Destination Quality and Tourist Loyalty: The Role of Destination Value as Mediating Variable. *TRJ Tourism Research Journal*, 8(2), 299. <https://doi.org/10.30647/trj.v8i2.262>
- Uslu, A., Virto, N. R., Eren, R., & López, M. F. B. (2024). The Role of Authenticity, Involvement and Experience Quality in Heritage Destinations. *Tourism & Management Studies*, 20(3), 79–91. <https://doi.org/10.18089/tms.20240306>
- Wang, M., Li, P., Xiao, X., Zhang, H., Lu, J., & Xu, Y. (2026). Tourists' visual attention to cultural landscapes under crowding stimuli: An eye-tracking approach. *Journal of Vacation Marketing*, 32(1), 168–185. <https://doi.org/10.1177/13567667241268918>
- Wang, X., Kim, J., Kim, J., & Koh, Y. (2024). Application of Natural-Resource-Based View to Nature-Based Tourism Destinations. *Sustainability*, 16(6), 2375. <https://doi.org/10.3390/su16062375>
- Yang, Y., Sun, X., Hu, L., Ma, Y., & Bu, H. (2023). How Ski Tourism Involvement Promotes Tourists' Low-Carbon Behavior? *Sustainability*, 15(13), 10277. <https://doi.org/10.3390/su151310277>
- Yoon, H. Y., & Yoo, S. (2023). Finding Tourism Niche on Image-Based Social Media: Integrating Computational Methods. *Journal of Vacation Marketing*, 30(4), 874–889. <https://doi.org/10.1177/13567667231180994>
- Yuliarni, N., Hurriyati, R., Disman, D., Hendrayati, H., & Warlina, L. (2023). Marketing Strategy of Ecotourism in Uzbekistan and Indonesia. *Journal of Eastern European and Central Asian Research (Jeecar)*, 10(4), 638–649. <https://doi.org/10.15549/jeecar.v10i4.1359>
- Zhang, M., & Song, H. (2023). A Study on the Structural Relationships between COVID-19 Coping Strategies, Positive Expectations, and the Behavioral Intentions of Various Tourism-Related Behaviors. *International Journal of Environmental Research and Public Health*, 20(2), 1424. <https://doi.org/10.3390/ijerph20021424>
- Zhu, N., Xu, H., Zhang, X., & Lu, Y. (2025). Research on the Factors Influencing Tourist Loyalty to Outdoor Music Festivals: An Application of Stimulus-Organism-Response Paradigm. *Frontiers in Psychology*, 16. <https://doi.org/10.3389/fpsyg.2025.1553211>
- Zulvianti, N., Aimon, H., & Abror, A. (2023). Perceived Environmental Value, Destination Image, and Tourist Loyalty: The Role of Tourist Satisfaction and Religiosity. *Sustainability (Switzerland)*, 15(10), 1–13. <https://doi.org/10.3390/su15108038>