

Original Article

PERCEIVED VALUE, EXPERIENTIAL CO-CREATION AND LOYALTY OUTCOMES OF ADVENTURE TOURISM IN KERALA

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ABSTRACT

Tourism has proven to be one of the fastest expanding sectors globally by contributing to social sustainability, cultural exchange, and economic development. In this vast sector, adventure tourism has recently emerged as the centre of attention by offering experiences that integrate physical exercise, immersion in nature, and cultural engagement. Adventure tourism caters to rising amounts of young and well-educated travelers motivated by the desire for thrill, authenticity, and meaning. This research examines the perceived value of adventure tourism experiences in Kerala, one of India's top tourist destinations and provides insight into the impact on tourist satisfaction, experiential value, and behavioral loyalty on the intentions to revisit, word-of-mouth, and advocacy to the destination. A total of 320 adventure tourists provided information through questionnaires, and the analysis consisted of reliability testing, exploratory factor analysis (EFA), Pearson correlations, multiple linear regression (MLR), MANOVA, and moderated mediation analysis using the PROCESS macro, examining types of perceived value and their correlation to satisfaction and intentions to revisit. The findings indicate that perceived value is multi-dimensional which strongly supports perceived emotional value and relational value as the strongest determinants of satisfaction and intentions to revisit- adding to the value are both functional values and epistemic values. The experiential value of co-created experiences with service environments and the natural environments has a strong influence on either emotional or relational value, while the cultural aspects enhance value even more. Mediation analyses revealed that destination image positively amplified the effect of adventure experiences on loyalty (indirect effect = 0.183 for revisit intention), while perceived risk acted as a suppressor, weakening positive outcomes (-0.072). Ultimately, the results reveal that Kerala's adventure tourism development should focus on creating emotionally engaging, socially meaningful, and safe experiences that uphold destination image while managing perceived risks.

Keywords: Adventure Tourism, Natural Exploration, Perceived Value, Experiential Co-Creation, Kerala

INTRODUCTION

Tourism is one of the fastest-growing and dynamic industry sectors within the world economy [Dridea and Dobrotă \(2024\)](#). It contributes significantly to employment, income and culture and plays a crucial role in regional development. Tourism has evolved as societies have become more mobile and globalized. Tourism itself can encompass the spectrum of leisure pursuits, including cultural engagements, wilderness experiences, personal satisfaction, and others. Over the past decades, tourism has transformed into multiple distinct categories, including mass tourism, cultural tourism, medical tourism, and most recently adventure tourism

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[Ahmed and Nihei \(2024\)](#). This diversification of tourism reflects changing consumer preferences, rising levels of disposable income, and an increasing desire for sustainable and meaningful travel experiences.

Adventure tourism inherently expands the boundaries of conventional tourism [Rosenberg et al. \(2021\)](#). It involves physical activity, interaction with natural environments that are often remote, and a level of real or perceived risk. Adventure tourism can be described in two different ways, soft and hard. Soft adventure activities include hiking, birdwatching, kayaking, and cycling that are generally low-risk. Individuals who engage in soft adventure seek exploration without significant physical labor or risk. Hard adventure activities include mountaineering, white-water rafting, skydiving, rock climbing, and scuba diving that can only be safely pursued with a high level of fitness, skill and risk tolerance. Both soft and hard adventure activities are planned or undertaken with the desire to learn about oneself, to seeking excitement and stimulation, and want significant social engagement with local cultures and the natural environment.

What sets adventure tourism apart from any other form of travel is the reliance on natural landscapes, maximal involvement, and getting engaged emotionally [Ivanova and Wald \(2023\)](#). Adventure tourists generally pursue novelty, transformation, and achievement, indicating that adventure tourism transcends mere recreation; it also serves as an expression of identity and a pathway to self-actualization. Adventure tourism has grown immensely in recent years, and the recognition of adventure travel as a legitimate option to pursue has altered the focus of tourism development in regional and national agendas. In 2021, the adventure tourism market generated revenues of \$282.1 billion and grew rapidly from there, with an estimated compound annual growth rate of more than 15 per cent through 2030. This incredible growth signifies the changing desires of traveler preferences who are interested in experiential and sustainable conceptual models of tourism based on nature and authenticity.

The COVID-19 epidemic severely impacted worldwide tourism [Yepez and Leimgruber \(2024\)](#). Public health, travel limitations, and lockdown restrictions caused a collapse of tourism unlike we had ever seen. Tourists in the post-pandemic period not only saw a change in their behaviors, but their preferences also changed. The slow recovery process for the world presented an opportunity for tourists to seek open, uncrowded places, low-contact activities, and destinations offering safety and emotional or psychological healing. The emergence of new and altered behaviours rendered adventure tourism an exceptional alternative for post-pandemic travel. Activities that took place in open spaces and with few people, like trekking, mountain biking and camping, became appealing simply because they aligned with health-conscious and socially distanced travel preferences.

In addition, the pandemic benefitted technology adoption in tourism [Elkhwesky et al. \(2024\)](#). Many operators adopted digital booking systems, contactless services, as well as virtual tours. Nevertheless, pandemic innovation adoption varies drastically between destinations, particularly in developing regions where low digital literacy, high cost of investment, and lack of institutional support continue to pose barriers for the advancement of technology. Despite these barriers, the pandemic has tested the endurance and adaptability of the adventure tourism sector, and affirmed the importance of the adventure tourism sector in the post-pandemic era.

India possesses significant potential for adventure tourism due to its diversified landscape, rich wildlife, and cultural treasures [Ahmed and Nihei \(2024\)](#). The country offers a wide variety of different experiences from the snowcapped peaks of the Himalayas in the North, the coastal waters in the South and dense forests to sandy deserts. Bringing together experiences like river rafting in Rishikesh, camel safari in Rajasthan, scuba diving in the Andaman Islands, paragliding in Himachal Pradesh and jungle treks in the Western Ghats are just some examples of India's vast adventure tourism [Kumar \(2024\)](#). The overarching motivation besides adventure tourism which promotes health and wellbeing and exploratory experiences have provided a purpose to adventure tourism as a mean to promote sustainable rural development and livelihoods through jobs. Opportunities also exist in community driven tourism models that allow local members of the community to engage as aides, hosts, and cultural ambassadors for travel groups and experiences.

Amongst India, the state of Kerala is distinct and a new and an emerging destination for adventure tourism [Joseph et al. \(2022\)](#); a place identified with its backwaters, idyllic scenery, biodiversity rich forests, and hilly landscapes. Kerala is a unique combination of nature, culture, and wellness. Historically recognized for ecotourism, Ayurveda-based wellness tourism, and cultural tourism, Kerala is now including more adventures as part of its tourism marketing. Bamboo rafting in Periyar, trekking in Wayanad, paragliding in Vagamon, kayaking in Alleppey, and off-road cycling in Idukki are examples of how Kerala is trying to get tourism marketing to include adventure elements. Kerala gives an advantage with its natural diversity by offering unique soft adventure or hard adventure experiences, combined with real cultural experiences.

An important aspect of adventure tourism is the perceived value of the tourist experience. Perceived value is the general evaluation of a travel experience related to its quality, satisfaction, and hedonic value compared to the energy and money expended [Zhang et al. \(2023\)](#). This subjective evaluation is contingent upon a number of factors including the challenge, the uniqueness of the activity, the beauty of the destination, the level of service provided, and the emotional response connected to the experience. In adventure tourism, perceived value is frequently paramount due to the significant self-involvement and risk inherent in the activities. The tourist experience, especially in adventure contexts, transcends simply the act of physical activity. In fact, the experience encompasses a much wider context: anticipation before the trip, interactions present at the location, emotions generated during the activity, and memories formed after the activity. The perceived value associated with these dimensions is strongly linked to the tourists' intent to return or recommend the destination. In a state like Kerala, which is attempting to develop its tourism brand and

to increase the number of repeat visitors, enhancing the perceived value is no longer a nice to do; it has become important to the state's strategy.

Moreover, the destination image significantly impacts an individual's expectations and happiness with travel post-trip [Chou et al. \(2024\)](#). A destination with a positive image of safety, hospitality, natural beauty, and adventurer readiness encourages a greater volume of tourists, resulting in more return visitors. These essential factors may serve as differentiations in a market that is heavily competitive. Building and manage a relevant an attractive and credible destination image is particularly difficult but essential. Kerala enjoys a firm brand as "God's Own Country"; hence, developing and promoting adventure tourism within this branded image without compromising its cultural and ecological essence should be strategically considered. Given the dynamic changes in traveler preferences, the complexity of adventure tourism offerings, and Kerala's increasing prominence as a nature-based destination, a focused study on the travel experiences of adventure tourists in the region is both timely and necessary. The proposed research seeks to explore the perceived value of adventure tourists by investigating their travel experiences in Kerala.

RELATED WORKS

[Orden-Mejía et al. \(2025\)](#) conducted a quantitative study in Santa Elena, Ecuador, to examine factors influencing adventure tourists' perceptions of destination quality and loyalty. Data were collected from 318 participants through online questionnaires during the COVID-19 pandemic. The study revealed that health assurance, stress relief, and intellectual curiosity significantly influenced perceived destination quality. Conversely, there was no discernible influence from physical state or social relationship. Tourist loyalty was highly predicted by the quality of the destination. The findings emphasized the post-pandemic importance of health, emotional well-being, and intellectual engagement in shaping quality perceptions and loyalty, contributing to theoretical development and practical tourism planning in emerging destinations.

[Teng et al. \[13\]](#) conducted a study in Hainan to explore how perceived risk influences travel intentions among potential adventure tourists, using surf tourism. The study surveyed 716 individuals through a validated questionnaire. Results revealed an inverted U-shaped relationship between perceived risk and travel intention, with desired risk acting as a crucial moderating factor. When perceived risk aligned with desired risk, travel intention increased; however, when it exceeded desired levels, intention declined. Attitude partially mediated this relationship, while subjective norms had a strong positive effect. Perceived behavioral control did not significantly affect travel intentions. The findings provided key insights for adventure tourism operators in designing experiences that match individual risk preferences, thereby enhancing participation and ensuring safety.

[Yuliviona et al. \(2025\)](#) conducted a study in Indonesia to evaluate factors influencing revisit intention in adventure tourism. The research analyzed responses from 88 adventure tourists with regression analysis via Stata. The results showed that visitor attractions and social media marketing had no discernible impact on the intention to return. In contrast, tourist experience and destination image had a positive and significant impact. The study underlined that developing a positive perception of the site and enhancing the whole travel experience were crucial tactics to encourage return trips. The research also highlighted the limited direct influence of social media and attractions.

A study on adventure tourism in Indonesia by [Pranoto et al. \(2024\)](#) concentrated on how self-identity influences surf tourism involvement. The research was carried out across Menganti, Widarapayung, and Parangtritis beaches, involving both qualitative interviews and quantitative surveys. A total of 298 valid responses were analyzed using AMOS 25. The findings revealed that self-identity significantly influenced attitudes toward and intentions to engage in surfing activities. The study confirmed that attitudes mediated the relationship between self-identity and participation intentions. It also highlighted that social connectedness, novelty seeking, and sporty identity shaped the overall experience. The research emphasized the importance of aligning brand identity with consumers' sense of self and suggested that surf schools could enhance engagement by fostering confidence, community, and authentic learning experiences.

[Nguyen-Van et al. \(2024\)](#) conducted a quantitative study on hard adventure tourism in mountain and rural areas, using data from 503 tourists across Asia, Europe, Australia, and the Americas. The study assessed behavioral intentions by examining the influence of customer value, self-congruity, perceived risk, and switching costs. The findings revealed that novelty and emotional value had the strongest positive impact on satisfaction and behavioral intentions, while perceived risk negatively influenced both. Actual self-image significantly affected satisfaction and behavior, unlike ideal self-image and switching costs, which showed no significant effect. Notably, differences emerged across cultural and income groups, with Western tourists and higher-income participants showing stronger behavioral intentions. The research emphasized the role of multidimensional customer value in shaping tourist behavior.

[Quang and Thuy \(2024\)](#) conducted a study in Vietnam to examine how mindfulness influences customer loyalty in the context of adventure tourism. Using data from 388 respondents collected through 15 travel agents, the study tested a structural equation model involving mindfulness as the independent variable, customer experience as the mediating factor, and loyalty outcomes such as return intention and word of mouth (WOM) as dependent variables. The findings revealed that novelty producing had the strongest contribution to mindfulness, which in turn significantly influenced customer experience. Mindfulness also had both direct

and indirect effects on loyalty, with indirect effects being stronger. Customer experience emerged as a key driver of word of mouth and return intention.

[Nasution et al. \(2023\)](#) conducted a quantitative study in Indonesia to observe how autonomy, competence, and flow experience influenced the satisfaction of extreme and non-extreme adventure tourists. Data were collected from 405 respondents through an online survey and analyzed using SEM-PLS. The study found that both autonomy and competence significantly impacted flow experience in both tourist groups. Flow experience, in turn, had a positive effect on satisfaction across both types of adventure tourism. However, autonomy did not significantly affect satisfaction among extreme adventure tourists, likely due to the structured nature and safety requirements of extreme activities. In contrast, competence had no effect on satisfaction in non-extreme tourism, where skill demands were lower. The research emphasized the lack of tailored tourism packages based on the differing characteristics and expectations of adventure tourist segments.

[Rahjasa et al. \(2023\)](#) conducted a study in Bali Province to analyze the travel preferences of Generation Z in the context of adventure tourism. Using both survey and exploratory qualitative methods, the researchers collected primary data from Generation Z tourists, focusing on destination choices, preferred adventure activities, sustainability concerns, and the desire for unique experiences. The study concluded that Generation Z preferred destinations with authentic and challenging experiences and they were very influenced from social media during the travel decision-making process. Visual content creation and personal branding were also important motivations. It also showed travel was among the highest priorities, with many respondents indicating they would spend money to create memories.

[Rojo-Ramos et al. \(2023\)](#) studied the differences between the profiles, expenditures, perceived economic impact, and satisfaction of male and female adventure tourists who participated in kayaking activities in the Valle del Jerte, Spain. A total of 511 adventure tourists participated in the study and were randomly selected and surveyed via e-questionnaires. The results of the study found that women on the whole had higher expenditures overall and in particular, higher expenditures on accommodation and food. Men exhibited higher expenditures on transport and kayaking activities. Women were more satisfied with services rendered and had a more positive perception of potential economic/social impacts. Gender differences based on statistical significance were found for: accommodation types, group size, and perceptions of tourism impacts on local communities. The study highlighted recognizing tourism gender profiling for designing service delivery.

[Bhatti and Alshiha \(2023\)](#) conducted a study in Saudi Arabia regarding the effects of personality traits, and electronic word-of-mouth (E-WOM) on motivation and intention to partake in leisure and adventure tourism. The data was collected in the summer of 2023 with a total of 234 respondents. The findings revealed a negative correlation between motivation and travel intention and found that openness to experience negatively influenced amotivation. Extraversion and neuroticism showed no significant direct impact on motivation, although indirect effects were observed. E-WOM emerged as a strong positive predictor of travel intention. The findings contributed to tourism literature by highlighting how psychological traits and digital interactions affect travel behavior. The study also emphasized the importance of online communities in shaping travel intentions and offered practical insights for tourism marketers.

RESEARCH GAP

Despite the valuable contributions of recent studies in understanding adventure tourism, several limitations persist across the existing body of work, revealing important research gaps. Many studies, such as [Orden-Mejía et al. \(2025\)](#), [Teng et al. \(2025\)](#), and [Yuliviona et al. \(2025\)](#), have focused on isolated constructs like destination image, revisit intention, and perceived risk, often treating them in silos rather than within a holistic framework that integrates perceived value, experience, and satisfaction. While works like [Pranoto et al. \(2024\)](#) and [Quang and Thuy \(2024\)](#) provide insights into psychological drivers and tourist behavior, they often lack geographic specificity, limiting their applicability to culturally unique destinations such as Kerala. Moreover, a majority of studies ([17], [20], [21]) tend to emphasize either specific demographics or activity types, with limited attention to the experiential richness and emotional depth that define adventure tourism. Post-pandemic studies like [Pranoto et al. \(2024\)](#) and [Rahjasa et al. \(2023\)](#) explore traveler preferences and motivations but often neglect how tourists evaluate their experiences in terms of perceived value and emotional fulfillment. Additionally, much of the existing research draws from broader adventure tourism contexts without focusing on emerging destinations or integrating contextual factors such as sustainability, local community engagement, or destination branding. These limitations highlight a pressing need for location-specific, integrated research that explores the interplay between tourist experience, perceived value, and destination image, particularly in underexplored but promising destinations like Kerala.

RESEARCH QUESTIONS

- 1) What are the key dimensions of perceived value (functional, emotional, epistemic, and relational) among adventure tourists in Kerala, and how do these dimensions influence overall tourist satisfaction and revisit intention?
- 2) How do adventure tourists co-create experiential value through interactions with destination touchpoints, such as service encounters, natural landscapes, and cultural experiences in Kerala?

- 3) To what extent does destination image mediate the relationship between adventure tourism experiences and behavioral loyalty outcomes, such as revisit intention and destination advocacy?
- 4) How does perceived risk influence the strength and direction of the relationship between adventure travel experiences and tourists' loyalty behaviors?
- 5) What is the combined effect of perceived value, experiential co-creation, destination image, and perceived risk on tourists' post-visit behavioral intentions, including word-of-mouth recommendations and repeat visitation?

OBJECTIVES

- To assess the structural composition of perceived value among adventure tourists in Kerala by quantitatively analyzing its functional, emotional, epistemic, and relational dimensions, and their predictive influence on tourist satisfaction and revisit intention.
- To explore the experiential co-creation process between adventure tourists and destination touchpoints in Kerala, focusing on how interactions with service environments, natural settings, and cultural attributes contribute to the formation of experiential value.
- To investigate the mediating effects of destination image and perceived risk on the relationship between adventure tourism experiences and behavioral loyalty outcomes, including revisit intention, word-of-mouth, and destination advocacy.

PROPOSED HYPOTHESES

H₀₁: The functional, emotional, epistemic, and relational dimensions of perceived value do not significantly predict tourist satisfaction among adventure tourists in Kerala.

H₁₁: The functional, emotional, epistemic, and relational dimensions of perceived value significantly predict tourist satisfaction among adventure tourists in Kerala.

H₀₂: The functional, emotional, epistemic, and relational dimensions of perceived value do not significantly influence revisit intention.

H₁₂: The functional, emotional, epistemic, and relational dimensions of perceived value significantly influence revisit intention.

H₀₃: Interactions with service environments, natural settings, and cultural elements do not significantly contribute to the formation of experiential value among adventure tourists.

H₁₃: Interactions with service environments, natural settings, and cultural elements significantly contribute to the formation of experiential value among adventure tourists.

H₀₄: Destination image does not mediate the relationship between adventure tourism experiences and behavioral loyalty outcomes (revisit intention, word-of-mouth, and destination advocacy).

H₁₄: Destination image mediates the relationship between adventure tourism experiences and behavioral loyalty outcomes (revisit intention, word-of-mouth, and destination advocacy).

H₀₅: Perceived risk does not mediate the relationship between adventure tourism experiences and behavioral loyalty outcomes.

H₁₅: Perceived risk mediates the relationship between adventure tourism experiences and behavioral loyalty outcomes.

RESEARCH METHODOLOGY

CONCEPTUAL FRAMEWORK

The proposed research is based on tourism behavior and value co-creation theories, integrating multidimensional constructs to examine how adventure tourists perceive and engage with destination experiences in Kerala. It conceptualizes perceived value as a composite of functional, emotional, epistemic, and relational dimensions, which directly influence tourist satisfaction and revisit intention. In parallel, the framework incorporates the experiential co-creation model, emphasizing how interactions with service environments, natural landscapes, and cultural attributes contribute to the formation of experiential value. Furthermore, the framework posits that destination image and perceived risk act as mediating variables in the relationship between adventure tourism experiences and behavioral loyalty outcomes, including word-of-mouth, destination advocacy, and repeat visitation. This integrated structure enables a holistic understanding of tourist behavior, offering valuable insights for experience design, marketing strategies, and sustainable tourism development in emerging adventure destinations like Kerala. [Figure 1](#) illustrates the conceptual framework of the proposed study.

Figure 1

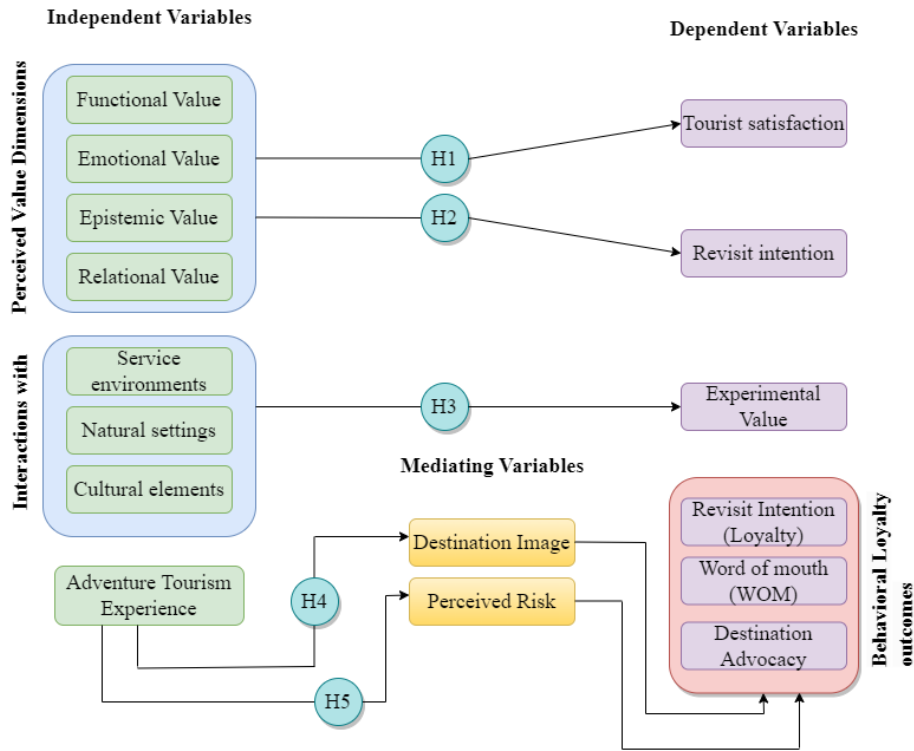


Figure 1 Conceptual Framework of the Proposed Research

RESEARCH DESIGN

The proposed research adopts a quantitative research design to systematically examine the relationships among perceived value dimensions, experiential co-creation, destination image, perceived risk, and behavioral loyalty outcomes within the context of adventure tourism in Kerala. This design enables the collection and analysis of structured numerical data to test hypothesized relationships and measure the strength and direction of associations between variables. By using a structured questionnaire, the study seeks to capture measurable indicators of tourists' experiences, satisfaction levels, and revisit intentions. The design ensures objectivity and replicability while allowing for the identification of patterns and trends that inform strategic tourism planning.

POPULATION AND SAMPLE

The population for the present study comprised domestic and international adventure tourists who have engaged in adventure tourism activities across various destinations in Kerala. This includes individuals who participated in activities such as trekking, kayaking, bamboo rafting, paragliding, wildlife safaris, and off-road cycling, among others, offered across key adventure tourism hubs such as Wayanad, Thekkady, Vagamon, and Munnar. To confirm the relevance of responses, the target population included tourists aged 18 years and above who had completed at least one adventure tourism experience in Kerala between April 2024 and April 2025. The sampling strategy was designed to ensure representation across different demographic groups including age, gender, nationality, and type of adventure activity participated in. Cochran's formula for sample size determination in large populations was used, as shown in Eq. (1):

$$n_0 = \frac{Z^2 \cdot p \cdot (1-p)}{e^2} \quad (1)$$

Assuming a 95% confidence level ($Z = 1.96$), a proportion (p) of 0.5 to account for maximum variability, and a 5% margin of error (e), the calculated initial sample size is 384. To account for potential non-responses or incomplete data, the final target sample was adjusted to 320 respondents. Tourists under the age of 18 and those who participated in strictly leisure or cultural tourism activities without any adventure component were excluded to ensure alignment with the study's objectives focused on adventure travel experiences.

DATA COLLECTION

The study employed a structured and methodologically rigorous data collection approach, integrating both secondary and primary sources to ensure empirical robustness and contextual relevance within the domain of adventure tourism. Secondary data were derived from academic literature, tourism development reports, adventure travel market intelligence, and government datasets including Kerala Tourism Department publications, offering foundational insights into adventure tourism typologies, traveler psychographics, and post-pandemic behavioral shifts. These inputs guided the operationalization of constructs such as perceived value dimensions, experiential co-creation, destination image, and behavioral loyalty. Primary data were collected through a self-administered questionnaire survey targeted at adventure tourists who had participated in nature-based and physically intensive activities such as trekking, river rafting, paragliding, and kayaking in key adventure hotspots across Kerala. The instrument was designed using psychometrically validated scales adapted from tourism and consumer behavior literature and employed a five-point Likert scale to measure multi-dimensional constructs including functional, emotional, epistemic, and relational value, as well as mediating variables like perceived risk and destination image. Questionnaire items were pilot-tested to ensure internal consistency, construct reliability, and cross-cultural clarity, particularly for international respondents. The survey was administered across peak and shoulder tourism seasons in 2025 to capture temporal variations in tourist perceptions and engagement patterns. Ethical protocols such as informed consent, anonymity of respondents, voluntary participation, and secure data handling were strictly adhered to, minimizing common method bias and safeguarding data integrity. This dual-source, context-sensitive data collection design enabled a nuanced capture of the adventure tourist experience and its perceived value within Kerala's evolving tourism ecosystem.

DATA ANALYSIS

The Statistical Package for the Social Sciences (SPSS), Version 26.0, was used to analyse the data gathered from 320 adventure travellers in Kerala. Descriptive statistics summarized the demographic characteristics, while Cronbach's Alpha confirmed the reliability of the constructs. EFA established construct validity, supported by Kaiser-Meyer-Olkin (KMO) and Bartlett's tests. Pearson correlations were applied to assess relationships among variables, followed by MLR to predict satisfaction and revisit intention. MANOVA tested the effect of interaction dimensions on experiential value, and Hayes' PROCESS Macro was used to assess the mediating roles of destination image and perceived risk. This combination of descriptive, inferential, and mediation analyses provided both statistical rigor and theoretical depth, ensuring that the research objectives were comprehensively addressed.

ANALYSIS AND FINDINGS

ANALYSIS OF DEMOGRAPHIC PROFILE

The demographic analysis of adventure tourists in Kerala, as detailed in [Table 1](#), reveals a diverse and representative sample that offers valuable insights into traveler profiles and behavioral tendencies. The gender composition was relatively balanced, with males comprising 54.4% and females 45%, while a small minority (0.6%) identified as non-binary or preferred not to disclose, reflecting inclusivity in participation. The age distribution was skewed toward younger travelers, with 32.5% aged 25–34 and 28.8% aged 18–24, followed by 20.6% in the 35–44 range. This suggests that adventure tourism in Kerala primarily attracts early-career individuals and students motivated by exploration, physical engagement, and novel experiences.

Table 1

Table 1 Demographic Profile of Participants			
Demographic Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	174	54.4%
	Female	144	45.0%
	Non-binary/Prefer not to say	2	0.6%
Age Group (years)	18–24	92	28.8%
	25–34	104	32.5%
	35–44	66	20.6%
	45–54	38	11.9%
	55 and above	20	6.2%

Nationality	Indian	238	74.4%
	Foreign (Non-Resident)	82	25.6%
Education Level	Undergraduate	122	38.1%
	Postgraduate	152	47.5%
	Doctoral/Professional	28	8.8%
	High School or below	18	5.6%
Occupation	Student	86	26.9%
	Employed (Private Sector)	104	32.5%
	Self-employed	48	15.0%
	Government/NGO	34	10.6%
	Retired/Other	48	15.0%
Monthly Income (INR)	Below 25,000	76	23.8%
	25,001–50,000	114	35.6%
	50,001–75,000	78	24.4%
	Above 75,000	52	16.2%
Adventure Activity Type	Soft Adventure (e.g., hiking)	182	56.9%
	Hard Adventure (e.g., rafting)	138	43.1%
Visit Frequency	Two times	64	20.0%
	Three times	46	14.4%
	Four times	32	10.0%
	More than five times	38	11.9%
Tourist Spot Preference	Cross-country	204	63.8%
	Other (e.g., coastal, hill)	116	36.2%

A significant majority of respondents (74.4%) were Indian nationals, while 25.6% were international visitors, highlighting the dual importance of both domestic and foreign markets in Kerala's adventure tourism landscape. Educationally, the sample was highly qualified, with 47.5% holding postgraduate degrees and 38.1% undergraduate degrees, indicating a tourist segment with high cognitive involvement, likely to value epistemic and emotional components of the travel experience. In terms of occupation, private-sector employees formed the largest group at 32.5%, followed by students at 26.9%, and self-employed individuals and those in the government or NGO sector accounted for 15% and 10.6% respectively. An additional 15% were categorized as retired or other, reflecting a modest yet diverse occupational background.

Income distribution showed that 35.6% of respondents earned between INR 25,001 and 50,000, 24.4% earned between INR 50,001 and 75,000, while 23.8% earned less than INR 25,000. A higher-income group, comprising 16.2%, earned above INR 75,000, demonstrating that adventure tourism in Kerala appeals across a wide economic spectrum, though it is particularly concentrated among middle-income earners. In terms of activity preferences, soft adventure activities such as hiking and kayaking were more popular (56.9%) compared to hard adventure activities like rafting or mountaineering (43.1%), indicating a preference for moderately challenging yet rewarding experiences.

When analyzing visit frequency, 20% of tourists had visited Kerala twice, 14.4% thrice, 10% four times, and 11.9% more than five times, revealing a strong trend of repeat visitation. This pattern suggests that Kerala's adventure tourism offerings yield high satisfaction and emotional connection, which are crucial for destination loyalty. In terms of spatial preferences, 63.8% favored cross-country adventure experiences, while 36.2% preferred localized destinations such as coastal or hill-based attractions. The

dominance of cross-country preferences implies a demand for immersive, multi-site experiences that combine natural exploration with cultural engagement. Overall, the demographic structure indicates that adventure tourism in Kerala is largely driven by young, educated, and economically active individuals who value experiential depth, physical activity, and environmental interaction. The high levels of repeat visitation and preference for cross-country itineraries further underscore the importance of perceived value, satisfaction, and destination image in influencing loyalty and advocacy behaviors among adventure tourists.

EMOTIONAL AND RELATIONAL DIMENSIONS AS PREDICTORS OF ADVENTURE TOURIST LOYALTY

To explore how multiple perceived value dimensions influence behavioral outcomes among adventure tourists in Kerala, a multistage analytical strategy was implemented. This included reliability analysis, construct validation through EFA, Pearson correlation diagnostics, and multiple linear regression modeling. The primary objective was to determine how functional, emotional, epistemic, and relational values predict tourist satisfaction and revisit intention.

PRELIMINARY DIAGNOSTICS AND CONSTRUCT VALIDATION

The reliability of all four perceived value dimensions was assessed using Cronbach's Alpha. Functional value ($\alpha = 0.844$), emotional value ($\alpha = 0.865$), epistemic value ($\alpha = 0.812$), and relational value ($\alpha = 0.887$) all exceeded the commonly accepted threshold of 0.70, confirming that the measurement items within each construct are highly cohesive, as shown in Table 2. This supports the structural robustness of the perceived value scale and ensures that the constructs are measured consistently.

Table 2

Table 2 Reliability Analysis (Cronbach's Alpha)		
Construct	No. of Items	Cronbach's Alpha (α)
Functional Value	5	0.844
Emotional Value	5	0.865
Epistemic Value	4	0.812
Relational Value	5	0.887

Next, EFA was performed to verify the factorial validity of the measurement model. The KMO statistic yielded a value of 0.884, indicating a meritorious level of sampling adequacy, as shown in Table 3. Additionally, Bartlett's Test of Sphericity was highly significant ($p < 0.001$), confirming that correlations among variables were sufficiently large for EFA. The analysis revealed four distinct components, aligning with the theorized structure of perceived value—functional, emotional, epistemic, and relational. All items loaded strongly (> 0.60) onto their respective factors, affirming the construct validity of the measurement instruments and supporting their inclusion in the regression model.

Table 3

Table 3 EFA Summary	
EFA Test	Value
KMO Measure of Sampling Adequacy	0.884
Bartlett's Test of Sphericity (p)	< 0.001
Number of Components Extracted	4
Factor Loadings for All Items	> 0.60

Lastly, Pearson correlation analysis was employed to examine the linear relationships between each perceived value dimension and the two outcome variables: tourist satisfaction and revisit intention. The findings show that all four dimensions are positively and significantly correlated with both dependent variables ($p < 0.01$), as shown in Table 4. Among these, Emotional Value emerged as the most influential factor, exhibiting the highest correlation with both satisfaction ($r = 0.674$) and revisit intention ($r = 0.652$), underscoring the importance of affective experiences in adventure tourism.

Table 4

Table 4 Pearson Correlation Matrix		
Variable	Tourist Satisfaction	Revisit Intention
Functional Value	0.558**	0.514**
Emotional Value	0.674**	0.652**
Epistemic Value	0.489**	0.432**
Relational Value	0.614**	0.586**

Relational Value followed, also showing strong associations ($r = 0.614$ with satisfaction, $r = 0.586$ with revisit intention), indicating that social connections and interpersonal engagement are key drivers of tourist loyalty. Functional Value demonstrated moderate but significant correlations ($r = 0.558$ and $r = 0.514$, respectively), highlighting its foundational role in ensuring quality and safety. Epistemic Value, while the least strong, still showed notable correlations ($r = 0.489$ and $r = 0.432$), suggesting that novelty and learning also contribute meaningfully to positive tourist outcomes. Functional and epistemic values were moderately correlated but still statistically significant, indicating their supporting roles in shaping perceived value and influencing tourist behavior. These findings reinforce the multidimensional nature of experiential value and its predictive influence on tourist behavior, as visually summarized in Figure 2 and Figure 3.

These pre-check results collectively confirm that the dataset is statistically appropriate and psychometrically sound for subsequent regression modeling. They validate the theoretical framework underpinning the research and reinforce the legitimacy of proceeding with multiple linear regression analysis to evaluate the hypotheses regarding perceived value's impact on satisfaction and behavioral loyalty outcomes.

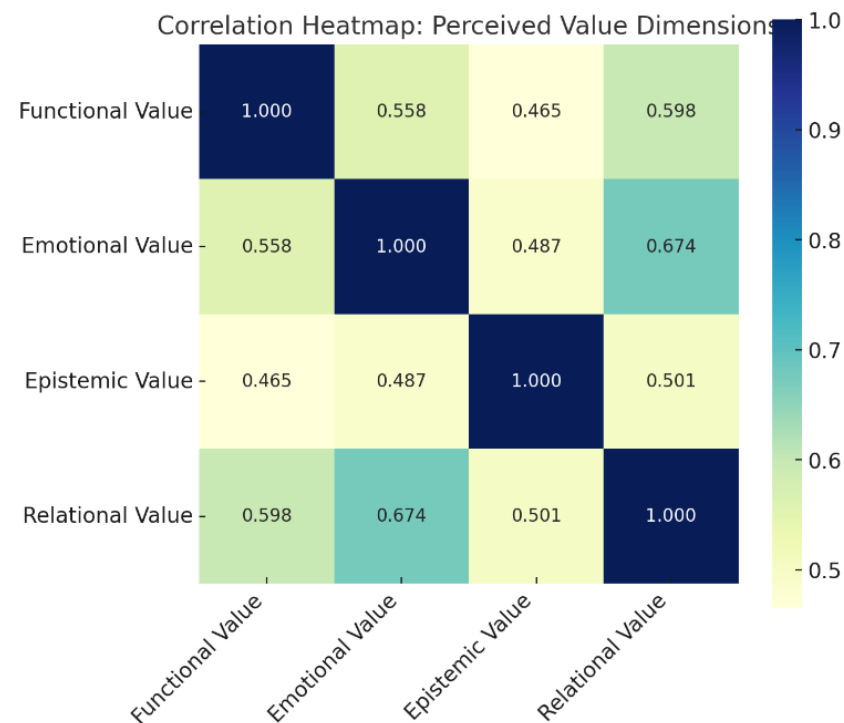
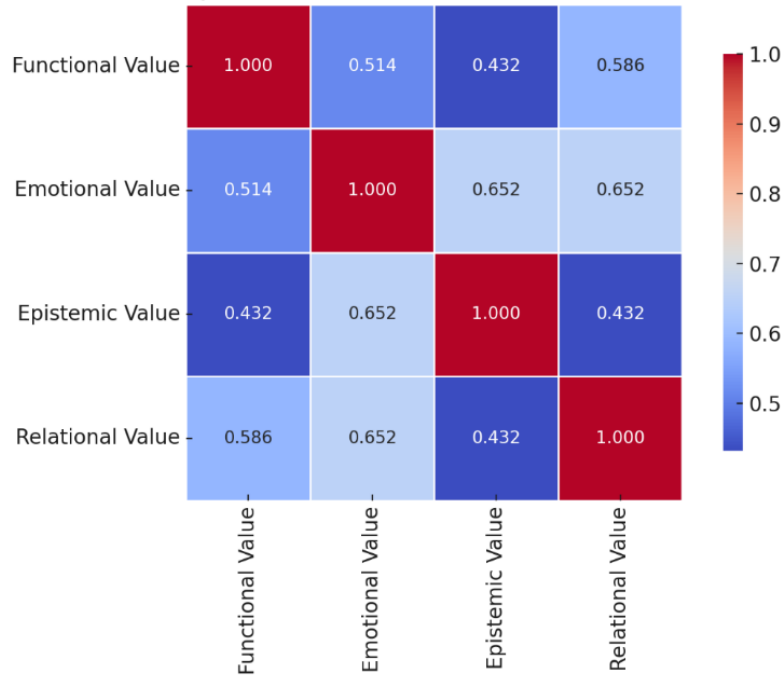
Figure 2**Figure 2 Heatmap of Perceived Value vs. Tourist Satisfaction**

Figure 3

Correlation Heatmap of Perceived Value Dimensions and Revisit Intention

**Figure 3 Heatmap of Perceived Value vs. Revisit Intention****REGRESSION ANALYSIS OF PERCEIVED VALUE DIMENSIONS ON TOURIST SATISFACTION AND REVISIT INTENTION**

Extending from the correlation findings presented in [Figure 2](#) and [Figure 3](#), two MLR models were developed to further evaluate the predictive power of the four perceived value dimensions on two outcome variables: Tourist Satisfaction and Revisit Intention.

REGRESSION MODEL 1: PREDICTING TOURIST SATISFACTION

The first regression model assessed the influence of the perceived value dimensions on tourist satisfaction. The model was statistically significant ($F(4, 315) = 85.17, p < 0.001$) and yielded an adjusted R^2 of 0.517, indicating that approximately 51.7% of the variance in tourist satisfaction could be explained by the independent variables, as shown in [Table 5](#).

Table 5**Table 5 Regression Model for Predicting Tourist Satisfaction**

Variables	Unstandardized Coefficient (B)	Standard Error (SE)	Standardized Coefficient (β)	t-value	p-value
Constant	1.132	0.184	–	6.152	0.000
Functional Value	0.284	0.051	0.276	5.568	0.000
Emotional Value	0.398	0.049	0.368	8.122	0.000
Epistemic Value	0.211	0.045	0.219	4.689	0.000
Relational Value	0.321	0.046	0.312	6.978	0.000

Among the predictors, Emotional Value emerged as the strongest determinant of tourist satisfaction ($\beta = 0.368$), followed by Relational Value ($\beta = 0.312$). This implies that emotional resonance, such as feelings of joy, excitement, or inner fulfillment, and strong social interactions or connections made during the journey substantially enhance overall satisfaction. Functional aspects like safety, infrastructure, and organization ($\beta = 0.276$), along with the intellectual stimulation offered by novelty or learning experiences

($\beta = 0.219$), also contributed significantly, albeit to a lesser extent. Together, these results align closely with the experiential value framework, where affective and social elements are prioritized over utilitarian benefits in shaping memorable travel experiences.

REGRESSION MODEL 2: PREDICTING REVISIT INTENTION

The second model evaluated the influence of perceived value dimensions on revisit intention. This model was also statistically robust, with $F(4, 315) = 79.22$, $p < 0.001$ and an Adjusted R^2 of 0.492, suggesting that nearly 49.2% of the variation in tourists' intent to revisit could be explained by the same set of predictors, as shown in Table 6.

Table 6

Table 6 Regression Model for Predicting Revisit Intention					
Variables	Unstandardized Coefficient (B)	Standard Error (SE)	Standardized Coefficient (β)	t-value	p-value
Constant	1.048	0.176	–	5.955	0.000
Functional Value	0.251	0.053	0.241	4.736	0.000
Emotional Value	0.367	0.048	0.351	7.635	0.000
Epistemic Value	0.179	0.043	0.198	4.163	0.000
Relational Value	0.294	0.045	0.287	6.533	0.000

The results once again highlight Emotional Value as the most dominant predictor of revisit intention ($\beta = 0.351$), emphasizing that emotionally rich experiences significantly foster loyalty behaviors. Relational Value followed closely ($\beta = 0.287$), reinforcing that meaningful social interactions, whether with local hosts or fellow tourists, influence future travel decisions. Functional Value ($\beta = 0.241$) and Epistemic Value ($\beta = 0.198$) were both significant, affirming that while practical and learning-related benefits contribute to repeat visits, the emotional and relational components remain central to behavioral outcomes.

The regression results provide clear empirical evidence supporting the acceptance of the alternate hypotheses proposed for this study. Specifically, the analysis rejects the null hypotheses H_{01} and H_{02} , as all four dimensions of perceived value were found to significantly influence both tourist satisfaction and revisit intention at $p < 0.001$. Therefore, H_{11} and H_{12} are accepted. The findings affirm that perceived value is not a singular construct but rather a multidimensional phenomenon, wherein each component plays a unique and measurable role in shaping tourist behavior. Most notably, emotional and relational dimensions consistently emerged as the strongest predictors across both models. These insights underscore the affective and interpersonal priorities of today's adventure tourists and suggest that emotionally engaging and socially meaningful experiences are more influential than mere utility or novelty in driving loyalty outcomes.

EXPERIENTIAL CO-CREATION AND ITS INFLUENCE ON EXPERIENTIAL VALUE AMONG ADVENTURE TOURISTS

To assess the role of experiential co-creation in shaping the perceived experiential value among adventure tourists in Kerala, a combination of descriptive analysis and One-Way Multivariate Analysis of Variance (MANOVA) was employed. Interaction scores were derived from tourists' self-reported responses on 5-point Likert scale items, which were grouped under the three interaction dimensions. Interaction levels were classified into low, medium, and high groups using mean splits, enabling comparative analysis across groups. The dependent variables included emotional value, epistemic (cognitive) value, and relational value, which collectively represent the core dimensions of experiential value in adventure tourism contexts.

DESCRIPTIVE ANALYSIS OF INTERACTION DIMENSIONS

Tourists were asked to respond to specific statements representing their engagement with service environments, natural surroundings, and cultural elements. The responses are summarized in Table 7.

Table 7

Table 7 Mean Scores for Interaction Statements by Interaction Level				
Statement	Dimension	Low	Medium	High
I felt well-guided and supported by the tourism staff throughout my trip.		3.42	4.01	4.62

The accommodation and transport services were efficient and tourist-friendly.	Service Environment	3.55	4.03	4.42
The tourism staff were knowledgeable and eager to help.		3.36	3.95	4.55
I received timely updates and useful information during my adventure activities.		3.21	3.77	4.38
The support team made me feel safe and cared for during the experience.		3.30	3.90	4.47
Being in natural surroundings was a major highlight of my experience.	Natural Setting	3.89	4.26	4.67
I felt emotionally connected to the natural environment during my activities.		3.76	4.18	4.58
I found moments of solitude and peace in the natural landscapes I visited.		3.60	4.12	4.49
Nature-based activities (e.g., trekking, rafting) felt adventurous yet therapeutic.		3.65	4.10	4.52
I participated in local cultural events or rituals during my visit.	Cultural Element	2.90	3.48	4.15
I tried traditional foods or took part in regional culinary experiences.		3.02	3.66	4.21
Interacting with local communities enriched my understanding of the destination.		3.20	3.74	4.32
I learned about local customs, art forms, or history through firsthand experiences.		3.08	3.60	4.18

As observed in Table 7, interaction scores across all three dimensions show a clear upward trend from low to high levels. Notably, service environment statements such as “*I felt well-guided...*” and “*The tourism staff ...*” reached the highest mean values in the high interaction group (>4.5), demonstrating the emotional and interpersonal impact of well-managed service delivery. Similarly, nature-based statements scored consistently high among the high interaction group, with “*Being in natural surroundings...*” peaking at 4.67. Cultural engagement showed more moderate baseline values but demonstrated significant growth in mean scores, especially in the statement “*Interacting with local communities...*” which increased from 3.20 to 4.32 across interaction levels.

HYPOTHESIS TESTING VIA ONE-WAY MANOVA

To statistically test H₁₃, a One-Way MANOVA was performed using the three interaction dimensions as independent categorical variables and emotional value, epistemic value, and relational value as dependent variables representing experiential value.

Table 8

Table 8 One-Way MANOVA Results for Effect of Interaction Level on Experiential Value Dimensions							
IV (Interaction Type)	DV (Experiential Value)	Mean (Low)	Mean (Medium)	Mean (High)	F-value	p-value	Partial η^2
Service Environments	Emotional Value	3.21	3.78	4.32	11.24	0.000	0.097
	Relational Value	3.04	3.65	4.20	13.89	0.000	0.113
Natural Settings	Emotional Value	3.35	3.95	4.47	10.13	0.001	0.086
	Epistemic Value	3.10	3.74	4.18	9.44	0.002	0.080
Cultural Elements	Relational Value	3.25	3.79	4.28	8.92	0.003	0.074
	Emotional Value	3.19	3.69	4.14	7.61	0.006	0.069

The MANOVA results confirm that all three interaction types have a statistically significant impact on various dimensions of experiential value ($p < 0.01$ in all cases), as shown in Table 8. Among the service-related interactions, emotional value ($F = 11.24$, $p = 0.000$) and relational value ($F = 13.89$, $p = 0.000$) were both significantly higher among tourists who reported high interaction levels. This affirms the emotionally uplifting and socially fulfilling nature of service environments in adventure tourism settings.

Interactions with natural settings also had a robust impact, especially on emotional ($F = 10.13$, $p = 0.001$) and epistemic ($F = 9.44$, $p = 0.002$) dimensions. This suggests that engagement with Kerala’s biodiversity-rich landscapes not only creates affective resonance but also stimulates learning and discovery. The impact of cultural elements, while slightly lower in effect size, remained

statistically significant. High levels of cultural interaction resulted in increased relational ($F = 8.92$) and emotional ($F = 7.61$) value, supporting the idea that deeper cultural immersion enhances social and affective aspects of travel. All partial eta-squared values (> 0.069) suggest medium-to-strong effect sizes, reinforcing the importance of these interactions in shaping the experiential quality of adventure tourism.

Based on the results from both descriptive and inferential statistics, H_{03} is rejected, and H_{13} is accepted. The findings strongly support the notion that interactions with service environments, natural settings, and cultural elements significantly contribute to the formation of experiential value. Among the three, service environments and natural settings exert the greatest influence, particularly on emotional and relational dimensions. Cultural elements, while less intense in their impact, still play a meaningful role, especially in enhancing interpersonal connections and affective engagement. These insights highlight the critical importance of designing multi-touchpoint, co-creative adventure tourism experiences that offer not just physical thrill but also emotional richness, intellectual stimulation, and social connectivity. The findings also underscore Kerala's unique potential as a nature-cultural hybrid destination capable of delivering holistic adventure experiences.

MEDIATING ROLE OF DESTINATION IMAGE AND PERCEIVED RISK IN THE RELATIONSHIP BETWEEN ADVENTURE EXPERIENCE AND TOURIST LOYALTY

This section investigates whether destination image and perceived risk mediate the relationship between adventure tourism experience (ATE) and behavioral loyalty outcomes, namely revisit intention, word-of-mouth, and destination advocacy. Using PROCESS Macro Model 4 with 5,000 bootstrap samples, indirect effects were computed independently for each mediator.

Destination Image on Behavioral Loyalty Outcomes

Adventure tourism experience was specified as the independent variable, destination image as the mediator, and revisit intention, word-of-mouth, and destination advocacy as the dependent variables. Indirect effects were calculated using bias-corrected bootstrapped confidence intervals (95%) to test mediation. The results in Table 9 indicate that destination image significantly mediates the relationship between adventure tourism experiences and all three forms of behavioral loyalty. In all cases, the bootstrapped 95% confidence intervals do not include zero, confirming the statistical significance of the mediation effect.

Table 9

Table 9 Indirect Effects of Destination Image on Behavioral Loyalty Outcomes		
Dependent Variable	Indirect Effect ($a \times b$)	Bootstrapped 95% CI
Revisit Intention	0.183	[0.108, 0.279]
Word-of-Mouth	0.159	[0.082, 0.251]
Destination Advocacy	0.175	[0.097, 0.268]

The indirect effect of ATE on revisit intention through destination image is 0.183, indicating that tourists with a strong and positive perception of the destination, its natural beauty, cultural richness, and hospitality, are substantially more likely to consider returning. This is consistent with literature that positions destination image as a cognitive-affective filter through which all tourism experiences are interpreted and evaluated. Similarly, the indirect effects for word-of-mouth (0.159) and destination advocacy (0.175) suggest that a favorable image of Kerala enhances tourists' willingness to recommend the destination and speak positively about it to others. These findings support the conceptual understanding that destination image operates as a cognitive amplifier, magnifying the emotional and experiential memory of the trip, which then fuels future behavioral intentions.

Theoretically, this aligns with the Theory of Planned Behavior and Destination Loyalty Frameworks, which assert that favorable attitudes (like image perception) are strong precursors to behavioral loyalty. In the context of adventure tourism, which involves risk, novelty, and deep engagement, the mental representation of the destination becomes central to how experiences are internalized and remembered. Since all indirect effects are positive and statistically significant, H_{04} is rejected, and H_{14} is accepted. Destination image acts as a significant positive mediator between adventure experience and loyalty behaviors.

PERCEIVED RISK AS A MEDIATOR OF BEHAVIORAL LOYALTY OUTCOMES

In parallel with destination image, this section explores whether perceived risk mediates the relationship between ATE and three critical behavioral loyalty outcomes: revisit intention, WOM, and destination advocacy. As illustrated in Table 10, all indirect effects through perceived risk are negative and statistically significant, with confidence intervals that do not cross zero. These results suggest that perceived risk functions as a negative mediator, dampening the relationship between positive tourism experiences and downstream loyalty behaviors. The indirect effect on revisit intention (-0.072) indicates that heightened perceptions of physical,

psychological, or logistical risk suppress tourists' inclination to return even when the overall experience was positive. A similar suppression effect is seen for word-of-mouth (−0.068) and destination advocacy (−0.056).

Table 10

Table 10 Indirect Effects of Perceived Risk on Behavioral Loyalty Outcomes		
Dependent Variable	Indirect Effect (a × b)	Bootstrapped 95% CI
Revisit Intention	−0.072	[−0.129, −0.021]
Word-of-Mouth	−0.068	[−0.123, −0.019]
Destination Advocacy	−0.056	[−0.111, −0.014]

These findings point to the dual-edged nature of adventure tourism: while excitement, novelty, and physical engagement often enhance experiential quality, excessive or poorly managed risk perceptions can erode tourists' behavioral loyalty. This supports insights from risk theory in tourism, which argues that risk perception acts as a cognitive inhibitor, often overriding the affective rewards of high-quality experiences. In particular, risks related to personal safety, access to emergency services, and unpredictability of terrain or infrastructure can create psychological resistance, reducing the likelihood of both return and promotion.

Theoretically, this finding corresponds with Protection Motivation Theory and Perceived Risk Theory, both of which suggest that individuals evaluate potential benefits in relation to perceived threats when deciding whether to revisit a destination or advocate for it. Even highly satisfied adventure tourists may hesitate to recommend or revisit a destination if they perceive it as unsafe, underdeveloped, or vulnerable to disruptions. Since the indirect effects for all three outcomes are statistically significant and negative, H_{05} is rejected and H_{15} is accepted. These findings confirm that perceived risk functions as a significant negative mediator, attenuating the influence of adventure tourism experiences on tourists' behavioral loyalty outcomes.

DISCUSSIONS

The findings offer substantial insights into how adventure tourism experiences in Kerala generate perceived value and translate into loyalty behaviors. The demographic analysis revealed that the adventure tourism segment is primarily composed of young and educated travelers, with 61.3% aged between 18–34 years and nearly 86% holding undergraduate or postgraduate qualifications. This profile suggests that Kerala's adventure tourism industry appeals to a segment of tourists who are cognitively engaged and socially dynamic, thus highly responsive to affective, epistemic, and relational components of the travel experience. The high repeat visitation rate, with 20% of tourists visiting twice and 11.9% more than five times, further underscores the role of perceived experiential value in sustaining loyalty.

The empirical results confirmed the multidimensional nature of perceived value, with emotional value ($\beta = 0.368$ for satisfaction; $\beta = 0.351$ for revisit intention) and relational value ($\beta = 0.312$ and $\beta = 0.287$, respectively) emerging as the strongest predictors of loyalty outcomes. Functional and epistemic values were also significant, but with lower coefficients, suggesting that while utilitarian benefits and novelty contribute meaningfully, it is the affective and interpersonal dimensions that anchor long-term satisfaction and revisit intentions. This aligns with experiential consumption theories, which emphasize the affective resonance of tourism experiences over purely functional attributes. Similarly, the MANOVA results highlighted that service environments and natural settings exerted the greatest influence on emotional and relational experiential value (e.g., $F = 13.89$, $p < 0.001$ for service–relational value), while cultural elements contributed more modest but still significant effects. These findings indicate that well-designed service touchpoints and immersive engagement with Kerala's biodiversity-rich landscapes create the strongest emotional bonds.

The mediation analyses further extend theoretical understanding by uncovering the dual role of cognitive-affective filters in shaping loyalty. On one hand, destination image acted as a positive mediator, amplifying the effect of adventure tourism experience on revisit intention (indirect effect = 0.183, CI [0.108, 0.279]) and advocacy (0.175, CI [0.097, 0.268]). This suggests that tourists' mental representation of Kerala significantly magnifies the impact of their on-site experiences, strengthening intentions to return and recommend the destination. On the other hand, perceived risk emerged as a negative mediator, weakening loyalty outcomes with significant suppression effects (e.g., −0.072, CI [−0.129, −0.021] for revisit intention). These results highlight a paradox: while rich and memorable adventure experiences can create enduring value, heightened perceptions of risk, whether physical, infrastructural, or psychological, may offset these gains. This aligns with both Protection Motivation Theory and Perceived Risk Theory, confirming that tourists balance perceived rewards with perceived threats when forming behavioral intentions.

Together, these results underscore that the sustainability of adventure tourism in Kerala depends on a dual strategy: strengthening destination image through branding and service excellence, while simultaneously mitigating risk perceptions through safety assurances, transparent communication, and infrastructure development. Theoretically, the study contributes by demonstrating the combined effects of value co-creation, perceived value dimensions, and mediation mechanisms in predicting loyalty. Practically, it emphasizes that adventure tourism operators and policymakers must design experiences that are not only

emotionally engaging and socially meaningful but also perceived as safe and trustworthy in order to maximize loyalty outcomes and long-term competitiveness of Kerala as a premier adventure destination.

CONCLUSION

This research set out to explore the perceived value of adventure tourism experiences in Kerala and its influence on tourist satisfaction, experiential value, and behavioral loyalty outcomes, using a sample of 320 adventure tourists. The demographic analysis revealed a predominantly young, educated, and economically active tourist segment, with a strong trend of repeat visitation, highlighting Kerala's growing appeal as a hub for adventure travel. The study confirmed that perceived value is multidimensional, with emotional ($\beta = 0.368$ for satisfaction; $\beta = 0.351$ for revisit intention) and relational value ($\beta = 0.312$ and $\beta = 0.287$) emerging as the most powerful predictors of satisfaction and loyalty, while functional and epistemic values also contributed significantly. Experiential co-creation was shown to play a vital role, with service environments and natural settings exerting the greatest impact on emotional and relational value (e.g., $F = 13.89$, $p < 0.001$), while cultural engagement added supplementary depth to the tourist experience. Mediation analyses further revealed a dual mechanism: destination image amplified the effect of experiences on loyalty (indirect effect = 0.183 for revisit intention), whereas perceived risk suppressed it (-0.072), underscoring the paradox of thrill and safety inherent in adventure tourism. Together, these findings affirm that Kerala's adventure tourism success hinges on delivering emotionally engaging, socially meaningful, and safe experiences. Future research could expand this work by employing larger cross-cultural samples, integrating longitudinal designs to track loyalty over time, and exploring digital touchpoints and sustainability perceptions as emerging mediators in the adventure tourism experience.

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