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Towards a greener destination: Evaluating sustainable waste management practices in tourism

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Abstract
The present study aims to analyse tourists' perceptions, awareness, and behaviours related to sustainable waste management in Rajasthan. The primary objective of the research is to examine how Environmental Awareness of Tourists (EAT) and Visitor Pro-environmental Behaviour (VPEB) influence Tourist Satisfaction (TS) and Destination Image (DI**)** within the framework of sustainable tourism development. Primary data were collected through a structured questionnaire distributed among domestic and international tourists visiting major destinations such as Ajmer, Jaisalmer, and Mount Abu. A total of 180 valid responses were obtained using a convenience sampling method. The findings of the linear regression analysis revealed that environmental awareness among tourists has a significant and positive impact on both Tourist Satisfaction and Destination Image, indicating that higher environmental consciousness among visitors leads to more satisfying and responsible tourism experiences. Moreover, the hierarchical regression analysis confirmed that Visitor Pro-environmental Behaviour significantly mediates the relationship between Environmental Awareness and Tourist Satisfaction, suggesting that eco-friendly behavioural engagement enhances tourists' overall experience.

Keywords: Environmental awareness of tourists, visitor pro-environmental behaviour tourist satisfaction & destination image

1. Introduction
Tourism is one of the fastest-growing sectors in India and serves as a vital driver of Rajasthan's economy, generating employment, promoting cultural exchange, and supporting regional development. Known for its majestic forts, royal palaces, vibrant fairs, and desert landscapes, Rajasthan attracts millions of domestic and international visitors annually to destinations. However, this continuous growth in tourism has brought with it several environmental challenges, most notably the problem of waste generation and its improper management. Uncontrolled disposal of plastic bottles, food waste, and packaging materials around popular heritage and natural sites has led to visual pollution, environmental degradation, and loss of aesthetic value. The increasing pressure on local ecosystems and urban infrastructure demands immediate attention to sustainable waste management practices. Maintaining environmental quality is not only essential for ecological preservation but also crucial for sustaining tourist satisfaction and reinforcing a positive destination image, which are vital for Rajasthan's long-term tourism competitiveness. Sustainable waste management practices, such as waste segregation, recycling, composting, and reuse, are therefore critical components of responsible tourism and play an important role in creating cleaner, greener, and more appealing destinations. Despite several policy initiatives like the Swachh Bharat Mission and Clean Rajasthan Campaigns, the actual implementation of sustainable waste management at tourism sites remains inconsistent and fragmented. The success of such initiatives depends not only on infrastructure and governance but also on tourists' environmental awareness and their willingness to engage in pro-environmental behaviour. Environmentally aware tourists are more likely to appreciate and support eco-friendly destinations, thereby contributing to waste reduction and better destination management. Their attitudes, perceptions, and satisfaction levels directly influence how a destination is viewed and promoted globally. Hence, studying the behavioural dimension of sustainability provides a deeper understanding of how environmental awareness can shape visitor actions, satisfaction, and the overall image of the destination. The scope of this study encompasses key tourist destinations across Rajasthan, aiming to evaluate existing waste management practices and their relationship with tourists' environmental awareness and satisfaction. It explores how visitor pro-environmental behaviour mediates the connection between environmental awareness and destination image, providing valuable insights for policymakers, local authorities, and tourism planners.

The research aligns with global sustainable development priorities, particularly the United Nations Sustainable Development Goals (SDG 12: Responsible Consumption and Production, and SDG 13: Climate Action), by emphasizing waste minimization and environmental responsibility within the tourism sector. Despite growing scholarly interest in sustainable tourism, there remains a significant research gap in understanding how tourists' environmental attitudes and behaviours influence satisfaction and destination image in the Indian context, especially in Rajasthan. Previous studies have largely focused on policy, infrastructure, or economic aspects of waste management, with limited attention to the behavioural and perceptual dimensions. Therefore, this study addresses this gap by empirically evaluating how sustainable waste management practices, combined with tourists' environmental awareness and pro-environmental behaviour, can enhance satisfaction and strengthen Rajasthan's global image as a greener, cleaner, and more sustainable tourism destination.

2. Literature Review

2.1 Overview of the Construct

2.1.1 Environmental Awareness of Tourists

Environmental awareness among tourists refers to their understanding, concern, and knowledge about the environmental consequences of tourism-related activities. Environmentally aware tourists are more likely to recognize the importance of conserving natural resources, reducing waste, and supporting sustainable tourism initiatives. Such awareness influences their travel decisions, including destination choice and participation in eco-friendly practices. Higher levels of environmental awareness contribute to the promotion of sustainable waste management and eco-conscious behavior within tourism destinations (Han, 2015) [3]. Educational campaigns, social media, and destination policies play a crucial role in enhancing environmental consciousness among visitors.

2.1.2 Visitor Pro-environmental Behaviour

Visitor pro-environmental behaviour (PEB) refers to the actions and decisions made by tourists to minimize negative environmental impacts during their travel. These behaviours include waste reduction, recycling, energy conservation, and support for eco-friendly products and services. Tourists exhibiting PEB are key drivers of sustainable destination management, as their actions align with environmental policies and waste management initiatives. Factors such as environmental attitudes, moral norms, and perceived behavioural control significantly influence such behaviour (Chiu, Lee, & Chen, 2014) [2]. Encouraging PEB among visitors can lead to more effective implementation of sustainable waste management practices in tourism.

2.1.3 Tourist Satisfaction & Destination Image

Tourist satisfaction and destination image are interrelated constructs influencing the success and sustainability of tourism destinations. A positive destination image, reflecting cleanliness, effective waste management, and environmental responsibility, enhances tourists' satisfaction and likelihood of revisit. Sustainable waste management practices improve the overall aesthetic and experiential quality of destinations, shaping favourable perceptions among visitors (Stylos, Vassiliadis, Bellou, & Andronikidis, 2016) [8]. When tourists perceive a destination as clean, green, and environmentally responsible, their satisfaction increases, leading to stronger destination loyalty and positive word-of-mouth recommendations.

2.2 Hypotheses Development

2.2.1 Environmental Awareness of Tourists and Tourist Satisfaction & Destination Image

Environmental awareness has emerged as a crucial determinant of tourist perceptions, satisfaction, and destination image in the era of sustainable tourism. Environmentally conscious tourists are increasingly prioritizing destinations that demonstrate commitment to ecological preservation, waste management, and sustainable practices (Han, 2015) [3]. Their awareness not only shapes travel decisions but also influences post-visit evaluations, where destinations perceived as "green" or environmentally responsible tend to evoke higher satisfaction levels. This shift reflects a broader transformation in tourism demand, where environmental performance and sustainability initiatives significantly enhance destination competitiveness and reputation (Chiu *et al*., 2014) [2].

The linkage between environmental awareness and tourist satisfaction can be explained through the lens of value-belief-norm theory, which suggests that individuals with strong environmental values derive psychological gratification from engaging with or supporting environmentally responsible destinations (Stern, 2000) [7]. Tourists who perceive that a destination aligns with their ecological values report greater emotional satisfaction and attachment (Han & Hyun, 2017) [4]. For example, destinations implementing visible waste management initiatives—such as recycling bins, plastic-free policies, and eco-certifications—are often rated higher in terms of overall satisfaction and perceived quality (Khan *et al*., 2020) [5]. These practices not only reduce negative environmental impacts but also serve as tangible symbols of a destination's ethical and responsible image.

Destination image plays a mediating role in this relationship. A favorable environmental image—clean surroundings, preserved ecosystems, and effective waste management—enhances tourists' cognitive and affective evaluations of a destination (Stylos *et al*., 2016) [8]. The more tourists perceive a destination as environmentally responsible, the more likely they are to view it as safe, aesthetically appealing, and worth revisiting. In contrast, destinations suffering from pollution, litter, or poor waste management often experience a decline in their image and satisfaction ratings (Zhang, Zhang, & Cheng, 2014) [9]. Hence, environmental awareness not only influences satisfaction directly but also indirectly through its positive contribution to a destination's image.

Moreover, environmentally aware tourists act as agents of change by promoting sustainable practices and influencing the social image of destinations through online reviews and word-of-mouth (Ramkissoon & Mavondo, 2015) [6]. Their satisfaction derives not only from the physical environment but also from the perceived moral value of supporting sustainable tourism. As global awareness of environmental degradation grows, tourists increasingly prefer destinations that balance tourism development with ecological conservation, making environmental management a strategic factor for long-term competitiveness and branding.

In summary, the literature consistently highlights that higher

environmental awareness among tourists positively affects their satisfaction and enhances the destination image. Destinations that invest in sustainable waste management, eco-friendly infrastructure, and transparent green policies are more likely to appeal to environmentally conscious travelers, resulting in repeat visitation and stronger brand loyalty. Therefore, fostering environmental awareness among tourists and integrating sustainability into destination management are essential strategies for building a greener, more satisfying tourism experience.

H_1: Environmental Awareness of Tourists significantly impact Tourist Satisfaction & Destination Image

Mediating role of Visitor Pro-environmental Behaviour between Environmental Awareness of Tourists and Tourist Satisfaction & Destination Image

In recent years, scholars have increasingly examined the behavioural mechanisms through which environmental awareness among tourists translates into enhanced satisfaction and favorable destination image. One of the most significant mediating mechanisms identified in sustainable tourism literature is *Visitor Pro-environmental Behaviour* (*PEB*)—the set of voluntary actions undertaken by tourists to minimize their environmental impact while traveling (Chiu, Lee, & Chen, 2014) [2]. PEB includes practices such as reducing waste, recycling, conserving energy and water, and supporting eco-friendly businesses. It acts as a behavioral link that channels tourists' environmental values and awareness into tangible actions, thereby influencing their perceptions and overall satisfaction with the destination.

Environmental awareness forms the cognitive foundation for pro-environmental behaviour. Tourists who possess greater knowledge and concern for environmental issues are more likely to internalize ecological values and demonstrate responsible behaviours during travel (Han, 2015) [3]. According to the Value-Belief-Norm (VBN) theory, awareness of environmental consequences activates personal moral obligations, motivating individuals to act sustainably (Stern, 2000) [7]. When tourists translate their environmental awareness into responsible behaviours—such as proper waste disposal, use of public transport, or participation in eco-tourism activities—they not only contribute to destination sustainability but also derive personal satisfaction from acting consistently with their environmental values (Khan *et al*., 2020) [5]. Thus, PEB serves as a bridge that connects internal awareness with external satisfaction outcomes.

Visitor PEB also significantly shapes the perceived image of a destination. Destinations that facilitate and encourage environmentally responsible behaviour—through visible waste management infrastructure, eco-friendly signage, and sustainability campaigns—tend to be perceived as clean, green, and ethically responsible (Stylos *et al*., 2016) [8]. When tourists engage in or observe sustainable practices, they attribute a higher level of environmental responsibility to the destination, enhancing its image and credibility. Moreover, engaging in pro-environmental activities enhances tourists' emotional connection with the destination, fostering feelings of pride, contribution, and belongingness (Ramkissoon & Mavondo, 2015) [6]. These positive emotional outcomes directly contribute to higher satisfaction levels and reinforce destination loyalty.

Several empirical studies support the mediating role of PEB. For instance, Han and Hyun (2017) [4] found that tourists with strong environmental awareness displayed greater pro-environmental intentions, which in turn positively influenced their satisfaction and revisit intentions. Similarly, Chen and Tung (2014) [1] demonstrated that tourists' environmentally responsible behaviours mediate the relationship between environmental concern and their evaluation of green hotel experiences. This suggests that satisfaction is not merely derived from passive environmental observation but from active participation in sustainability efforts. The more opportunities a destination provides for tourists to behave responsibly, the stronger its positive image and visitor satisfaction become.

In conclusion, visitor pro-environmental behaviour serves as a crucial mediating variable linking tourists' environmental awareness with their satisfaction and perception of destination image. Environmentally aware tourists derive deeper satisfaction when their beliefs are reflected in their actions and supported by destination policies. This alignment between awareness, behaviour, and experience creates a virtuous cycle, wherein sustainable practices enhance tourist satisfaction and strengthen the environmental image of the destination. Hence, encouraging pro-environmental behaviour through education, infrastructure, and policy interventions is vital for destinations aspiring to achieve both ecological sustainability and visitor satisfaction.

H_2: Visitor Pro-environmental Behaviour significantly mediates the relationship between Environmental Awareness of Tourists and Tourist Satisfaction & Destination Image

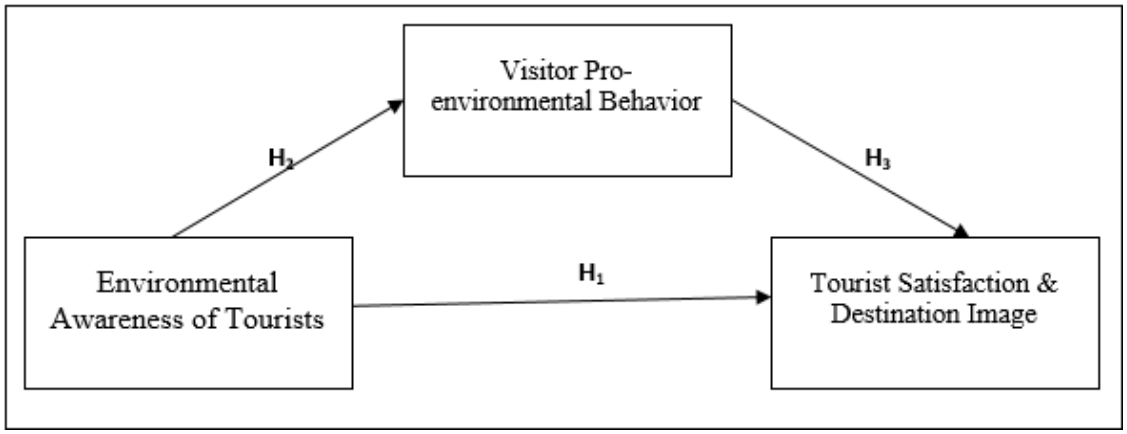

Fig 1: Proposed Conceptual Model

3. Research Methodology

The present study titled *"Towards a Greener Destination: Evaluating Sustainable Waste Management Practices in Tourism"* adopts a descriptive and quantitative research design to analyze tourists' perceptions, awareness, and behaviours related to sustainable waste management in Rajasthan. The study aims to examine how environmental awareness and visitor pro-environmental behaviour influence tourist satisfaction and destination image within the context of sustainable tourism. Primary data were collected through a structured questionnaire distributed among domestic and international tourists visiting major destinations such as Ajmer, Jaisalmer, and Mount Abu. A total of 180 valid responses were received using a convenience sampling method. The questionnaire comprised both demographic and construct-related questions measured on a five-point Likert scale. The demographic section captured details such as gender, age, education, income, type of traveller, and prior exposure to sustainable waste management information. Data were analyzed using descriptive statistics, reliability analysis, and correlation methods to understand relationships among the variables. The design ensures a comprehensive understanding of tourist characteristics and behavioural patterns that contribute to sustainable waste management practices in tourism destinations.

Table 1: Demographic Profile of the Respondents

Category	N	%
Gender		
Male	110	61
Female	70	39
Age		
Below 18	15	8
18-25	40	22
26-30	60	33
31-35	55	31
more than 36	10	6
Education		
Up to 10th	15	8
12th or Diploma	35	19
Graduation	80	45
Post Graduation	50	28
Income		
< 200000	40	22
200,000-500,000	90	50
500,000-800,000	20	11
>800,000	30	17
Type of Traveller		
Solo traveller	25	14
With Family	35	19
With Friends	40	22
Group	65	36
Other	15	9
Any information or guidance about sustainable waste practices		
Yes	110	61
No	70	39

Table 1 presents the demographic profile of 180 respondents who participated in the study. The gender distribution reveals that 61% were male and 39% were female, indicating a higher representation of male tourists in the sample. In terms of age, the largest group of respondents (33%) fell in the 26-30 years category, followed by 31-35 years (31%), suggesting that most tourists visiting Rajasthan belong to the young adult segment, a group typically more aware of environmental issues and sustainability concerns. Only a small proportion (6%) were above 36 years of age, highlighting that younger generations constitute the primary demographic of Rajasthan's tourism sector.

Educationally, the majority of respondents (45%) were graduates, followed by 28% postgraduates, indicating that most participants possess a moderate to high educational background, which is often associated with greater environmental sensitivity and awareness of sustainable practices. Only 8% of respondents had education up to the 10th standard, showing limited participation from less-educated groups. Regarding income distribution, 50% of respondents earned between ₹200,000 and ₹500,000 annually, followed by 22% earning below ₹200,000, 11% earning between ₹500,000 and ₹800,000, and 17% earning above ₹800,000. This suggests that the majority of tourists fall within the middle-income category, which aligns with the general spending capacity of domestic travellers in India.

The distribution by type of traveller reveals that 36% travelled with friends, 19% with family, and 14% were solo travellers, while 17% participated in group tours and 9% in other categories. These figures suggest that peer and social group tourism dominates the travel pattern in Rajasthan, often influencing shared environmental perceptions and collective waste management behaviour. Interestingly, 61% of respondents reported having prior information or guidance about sustainable waste practices, while 39% lacked such awareness. This finding highlights a positive trend toward environmental consciousness among tourists but also indicates a need for greater educational and promotional initiatives to engage the remaining population. Overall, the demographic data provide important insights into the characteristics of tourists visiting Rajasthan. The predominance of educated, young, and socially active travellers suggests a strong potential for promoting sustainable waste management initiatives through targeted awareness campaigns. The findings imply that tourists with higher education and prior exposure to environmental information are more likely to engage in pro-environmental behaviour, thereby supporting cleaner and greener tourism destinations in Rajasthan.

3.1 Analysis and Discussion

Table 1 presents the results of the Linear Regression Analysis conducted to examine the direct relationship between the *Environmental Awareness of Tourists* (*EAT*), *Tourist Satisfaction* (*TS*), and *Destination Image* (*VPEB*). The results reveal that *Environmental Awareness of Tourists* has a significant and positive impact on both *Tourist Satisfaction* and *Destination Image*. The R^2 value of 0.35 for the relationship between *EAT* and *TS* indicates that 35% of the variance in *Tourist Satisfaction* can be explained by tourists' environmental awareness. The standardized coefficient (B = 1.51, $p<0.05$) and significant t-value (t = 51.20) confirm that environmentally aware tourists tend to experience higher satisfaction with their tourism experience. Similarly, *EAT* shows a positive impact on *VPEB* (R^2 = 0.13, B = 1.23, $p<0.01$), suggesting that awareness encourages more responsible pro-environmental actions among tourists. Furthermore, *VPEB* significantly affects *Tourist Satisfaction* (R^2 = 0.45, B = 0.75, $p<0.01$), indicating that visitors engaging in sustainable behaviour contribute positively to their overall satisfaction and perception of the destination image.

Table 1: Linear Regression Analysis Results

Hypothesis	Relationship Path	Indices of Simple Linear Regression Analysis						
		R^2	F	B Un-standardised coefficient)	Std. Error	t	P Value	Remarks
H_1	EAT → TS	0.35	112.26	1.51	0.88	51.20	0.02	S
H_{11}	EAT → VPEB	0.13	152.51	1.23	0.11	10.54	0.00	
H_{12}	VPEB → TS	0.45	112.60	0.75	0.08	11.08	0.00	

Table 2 shows the results of the Hierarchical Regression Analysis, which examines the mediating role of *Visitor Pro-environmental Behaviour* (*VPEB*) in the relationship between *Environmental Awareness of Tourists* (*EAT*) and *Tourist Satisfaction* (*TS*). The findings demonstrate that when *VPEB* is included in the model, the R^2 value increases slightly from 0.35 to 0.352, indicating that the inclusion of *VPEB* strengthens the predictive ability of the model. The regression coefficient (B = 0.245, s<0.01) and significant t-value (t = 5.458) confirm that *VPEB* partially mediates the relationship between *EAT* and *TS*. This means that tourists who are environmentally aware not only directly experience higher satisfaction but also indirectly enhance their satisfaction through their responsible and sustainable actions at the destination.

Table 2: Hierarchical Regression Analysis Results

Hypotheses	Relationship Path	Indices of Simple Hierarchical Regression Analysis						
		R^2	F	B (Un-standardize coefficient)	Std. Error	t	P Value	Remarks
H_2	EAT → VPEB → TS	0.352	141.287	0.245	0.024	5.458	0	S

4. Conclusion & Implication

The findings imply that promoting environmental awareness among tourists can significantly improve both their satisfaction levels and the overall image of the destination. The partial mediation by Visitor Pro-environmental Behaviour suggests that awareness campaigns and sustainability education programs can lead to positive behavioural changes, which in turn contribute to a more satisfying and responsible tourism experience. For destination managers and tourism policymakers, these results emphasize the importance of integrating sustainability education, eco-friendly infrastructure, and awareness initiatives within tourism strategies. Encouraging pro-environmental conduct not only enhances visitor experience but also strengthens the destination's reputation as a "Greener Destination", aligning with long-term sustainable tourism development goals.

The results of the regression and hierarchical regression analyses provide valuable insights for tourism managers, policymakers, and destination planners striving to create environmentally sustainable and satisfying tourist experiences. The findings reveal that Environmental Awareness of Tourists (EAT) has a strong and significant influence on both Tourist Satisfaction (TS) and Destination Image (VPEB). Moreover, Visitor Pro-environmental Behaviour (VPEB) plays a mediating role, indicating that when tourists actively engage in eco-friendly practices, their satisfaction and the perceived image of the destination improve further.

4.1 Managerial Implication

From a managerial perspective, these outcomes highlight the necessity of embedding environmental education and awareness initiatives into destination management strategies. Tourism authorities and destination managers can organize workshops, eco-awareness campaigns, and sustainability drives to enhance tourists' understanding of local environmental issues. For example, signage at tourist sites explaining waste segregation, water conservation, and respect for biodiversity can strengthen eco-conscious behaviour. Such initiatives not only improve the environmental quality of the destination but also elevate visitor satisfaction and loyalty.

Additionally, destination managers must collaborate with local communities and service providers to integrate sustainable waste management practices into everyday tourism operations. Hotels, restaurants, and transport operators can adopt green certification programs, reduce single-use plastics, and promote recycling to demonstrate commitment toward environmental protection. The findings imply that tourists tend to appreciate and support destinations that uphold visible eco-friendly values. Hence, sustainability-driven branding and certification can serve as a competitive advantage in attracting environmentally responsible travelers. Furthermore, destination image building through eco-marketing and green communication strategies can amplify positive perceptions among visitors. The regression results confirm that tourists' environmental awareness enhances the image of the destination, implying that communication efforts showcasing the destination's environmental stewardship—such as clean beaches, community-based conservation, or zero-waste tourism—can significantly influence tourist satisfaction and revisit intentions.

The mediating role of Visitor Pro-environmental Behaviour also suggests that sustainable tourism success depends not only on managerial initiatives but also on fostering behavioural change among visitors. Therefore, destination managers should create enabling environments where eco-friendly behaviour becomes convenient and rewarding—for instance, providing easy access to recycling bins, offering incentives for using reusable materials, or designing digital badges for environmentally responsible tourists.

Overall, these findings guide managers to move beyond mere promotional sustainability to action-oriented environmental management, ensuring that sustainable waste management becomes an integral component of the tourism experience. By doing so, destinations can not only protect their natural resources but also establish a strong, positive image as "greener destinations" that align with global sustainable development goals (SDGs). In the long term, such managerial interventions can enhance destination competitiveness, ensure repeat visitation, and promote community well-being, thereby achieving a balance between economic gains and ecological responsibility.

4.2 Theoretical Implication

Theoretically, the study contributes significantly to the existing body of knowledge on sustainable tourism and destination management by empirically validating the relationships among Environmental Awareness of Tourists (EAT), Visitor Pro-environmental Behaviour (VPEB), Tourist Satisfaction (TS), and Destination Image. The results confirm and extend the assumptions of environmental psychology, the Theory of Planned Behaviour (TPB), and Sustainable Tourism Theory, providing a multidimensional understanding of how individual awareness and behaviour shape the overall sustainability and attractiveness of tourist destinations.

The strong positive relationship between EAT and Tourist Satisfaction supports theoretical propositions that awareness leads to responsible choices and emotional fulfilment. When tourists are environmentally conscious, they tend to evaluate destinations not merely based on amenities but also on sustainability performance, aligning with TPB's emphasis on attitude-behaviour consistency. This implies that environmental awareness acts as an antecedent of satisfaction, reinforcing the notion that responsible cognition drives affective and behavioural outcomes in tourism.

The significant link between EAT and VPEB theoretically validates the mediating process suggested in sustainability behaviour models, where awareness leads to behavioural intention and actual engagement in pro-environmental acts. The study also bridges the gap between environmental knowledge and behavioural outcome, demonstrating that informed tourists are more likely to participate in sustainable waste practices, thereby advancing the understanding of the Knowledge-Attitude-Behaviour (KAB) framework in a tourism context.

Furthermore, the mediating role of Visitor Pro-environmental Behaviour between Environmental Awareness and Tourist Satisfaction extends theoretical discourse by illustrating the mechanism through which sustainability awareness translates into positive visitor experience. This mediation effect implies that behavioural engagement serves as a psychological link that enhances the satisfaction derived from tourism activities. Tourists feel a sense of contribution, responsibility, and emotional connection with the destination, which aligns with self-determination theory, emphasizing intrinsic motivation in pro-environmental contexts.

Lastly, the findings invite future theoretical exploration into cross-cultural variations, psychological drivers of pro-environmental tourism behaviour, and long-term destination loyalty. The model proposed and validated in this study can serve as a conceptual foundation for future research exploring how sustainability-related constructs influence destination image, loyalty, and revisit intention. Hence, this study not only reinforces existing theoretical frameworks but also offers an empirical pathway to evolve new theoretical perspectives in green tourism behaviour and sustainable destination management.

4.3 Limitations and Scope for Future Research

Although the present study provides valuable insights into the relationships among Environmental Awareness of Tourists (EAT), Visitor Pro-environmental Behaviour (VPEB), Tourist Satisfaction (TS), and Destination Image, it is not without limitations. Firstly, the study's sample size was confined to a specific geographic region and selected tourist destinations, which may limit the generalizability of the results to other tourism contexts. Secondly, the use of self-reported data may involve social desirability bias, as respondents could overstate their environmental awareness or behaviour. Thirdly, the study employed a cross-sectional design, restricting the ability to establish causality between awareness, behaviour, and satisfaction over time.

For future research, longitudinal studies could be conducted to track changes in tourist behaviour and satisfaction across multiple visits or seasons. Comparative studies across different cultural, demographic, and ecological contexts would also provide a broader understanding of sustainable tourism behaviour. Future scholars could integrate additional variables such as destination loyalty, perceived value, or environmental policy effectiveness to enrich the proposed model. Employing mixed-method approaches—combining quantitative and qualitative insights—could also deepen understanding of tourists' motivations, barriers, and emotional responses toward sustainable waste management practices in tourism.

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