

TOURIST PERCEPTIONS AND BEHAVIOURS TOWARDS CONSERVATION FEES: EVIDENCE FROM TIOMAN ISLAND

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ABSTRACT

Tourism in natural areas can harm wildlife and the environment therefore conservation fees are an important way to support protection efforts. However, many tourists are lacking awareness or doubt the value of these fees, which makes their implementation challenging. Thus, the study aims to examine tourists' perceptions and behaviours regarding conservation fees with Tioman Island as a case study. Using a quantitative approach, 170 questionnaire responses from the tourists were analysed via SPSS. Results show most tourists lacked clarity on how these fees are used. While some expressed willingness to pay more when outcomes were visible, others remained uncertain. Findings highlight the need for clearer communication and transparency to strengthen trust, promote responsible tourism, and support ecotourism sustainability.

Keywords: Conservation Fees, Ecotourism, Tourists, Perception, Behaviors.

1.0 INTRODUCTION

The Biodiversity known in encompassing all organisms, genetic diversity and aquatic, marine and terrestrial ecosystems which represents the variety of life within living organisms and their ecological systems (Mishra et al., 2024; FAO, 2018). As a central driver of the tourism industry, biodiversity underpins the attractiveness of destinations with tourism development closely associated with biodiversity-rich biomes (Ramanayaka, 2023). Ecosystem services derived from biodiversity are essential for sustaining community livelihoods and are widely regarded as critical for achieving sustainable development. By having initially that been framed to highlight the benefits ecosystems provide to society and to promote biodiversity conservation (Ferraro & Hanauer, 2014; Goswami et al., 2017). In this context, ecotourism defined by The International Ecotourism Society as responsible travel to natural areas that conserves the environment and supports community well-being through education and interpretation serves as a low-impact and small-scale alternative to mass tourism activities focusing on pristine and fragile environments. By fostering environmental protection and ecosystem restoration while generating equitable economic benefits for local communities, ecotourism strengthens the linkage between conservation and sustainable development (Poyyamoli, 2018).

Despite the increasing implementation of conservation fees in marine and ecotourism destinations, limited empirical evidence exists on how tourists perceive these fees and whether such perceptions translate into supportive behaviours, particularly in island ecotourism settings in Malaysia. Previous studies have examined willingness to pay for conservation (e.g., Batool et al., 2024), yet fewer studies explore the psychological dimensions of tourists' attitudes, including complacency, ignorance, and responsibility avoidance, in relation to conservation fee mechanisms.

In the Malaysian context, marine park conservation fees are enforced at destinations such as Tioman Island; however, questions remain regarding tourists' understanding of fee structures, transparency of fund utilisation, and behavioural responses toward conservation participation. This study therefore addresses this gap by examining the interrelationship between awareness, attitudinal dimensions, and behavioural intentions toward conservation fees in Tioman Island.

2.0 LITERATURE REVIEW

2.1 Ecotourism

Ecotourism is a subset of the tourism industry that reflects an ethos of responsible involvement with the environment and with local cultures. Ecotourism includes but is not limited to, nature hiking, diving, wildlife viewing, and cultural tourism, usually with some attention given to the ecosystem, biodiversity education or sustainability (Mckinney, 2016).

Definition of Ecotourism

The term was formally introduced in 1983 by Mexican environmentalist and architect Héctor Ceballos-Lascuráin and the first organization devoted to ecotourism is TIES founded in 1990. Since then, ecotourism has been one of the fastest growing sectors of global tourism. For the purpose of this study, the definition provided by The International Ecotourism Society is adopted, as it explicitly links environmental conservation, community well-being, and educational components, which align with the variables examined in this research. Honey (1999) defined ecotourism as travel to fragile, pristine and usually protected areas that strive to be low impact and usually on a small scale. It helps educate the tourists that provides funds for conservation directly benefits the economic development and political empowerment of local communities and fosters respect for different cultures and human rights. Malaysia on the other hand, adopted the definition by the World Conservation Union (IUCN) where they defined ecotourism as environmentally responsible travel to relatively undisturbed natural areas in order to enjoy and appreciate nature.

Components of Ecotourism

According to the United Nations Environment Programme (2002), the subcategories of sustainable tourism is ecotourism where the most evident components are its connection to nature as ‘primarily concerned with the direct enjoyment of some relatively undisturbed phenomenon of nature’ (Valentine, 1992). The urge to get away from the stresses of daily life, the desire to view animals before it's too late and particular hobbies are some of the many reasons people are drawn to the outdoors.

The components outlined in Table 1 provide the conceptual foundation for examining tourists’ awareness, attitudes, and behaviours in this study. Specifically, the emphasis on conservation contribution, responsible action, and learning experience directly informs the questionnaire constructs measuring awareness of conservation activities and behavioural compliance with environmental regulations.

Table 1: Components of Ecotourism

Components of Ecotourism
• Contributes to conservation of biodiversity. • Includes an interpretation / learning experience. • Involves responsible action on the part of tourists and the tourism industry. • It is delivered primarily to small groups by small-scale businesses. • Requires lowest possible consumption of non-renewable resources. • Stresses local participation, ownership and business opportunities, particularly for rural people.

(Source: United Nations Environment Programme, 2002)

National Policy of Ecotourism in Malaysia

Accordingly, Malaysia's National Ecotourism Plan 2016–2025 seeks to position the country as a premier ecotourism destination while ensuring environmental sustainability. The plan emphasizes biodiversity protection, enhancement of ecotourism services and infrastructure and active community participation. Malaysia ranked at 26th among the world’s top 50 ecotourism destinations by Forbes Advisor in 2023 underscores this potential. By integrating conservation with tourism. The plan ensures that ecotourism contributes to ecosystem protection through funding and awareness initiatives. It further designates 60 ecotourism clusters nationwide, comprising 43 in Peninsular Malaysia, 9 in Sarawak and 8 in Sabah.

2.2 Biodiversity Conservation

Biodiversity underpins ecosystem sustainability and the services essential to human well-being (Kappelle et al., 1999). Its conservation was first emphasized at the 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro. The Convention on Biological Diversity (CBD), ratified by 196 nations that seeks to preserve biodiversity and promote its sustainable use to ensure fair benefit-sharing from genetic resources (CBD, 2000). Conservation is defined as actions that enhance the persistence of habitats and species in the wild (Leader-Williams et al., 2011). More broadly, it is understood as active efforts to establish, strengthen or maintain positive relationships with nature (Sandbrook, 2015).

Conservations Fees

The goal of biodiversity conservation fee is to protect and sustain these ecosystems while attempting to address government failures, whose actions are frequently driven by short-term political concerns (Mitchell et al., 2014). According to Eagles et al. (2012), there are three main revenue streams for protected area management: (i) taxes paid by society; (ii) fees and levies for users; and (iii) donations. The fees partially reflect the cost of supplying recreational services, demand for natural resources and value tourist's experience. The direct link between maintaining natural areas and income from user fees is a strong economic incentive for conservation (Vega, 2004). In Malaysia, conservation fees differ depending on the tourist's location and kind. Nationality, age and disability status are a few variables that could influence the cost.

Table 2: Malaysia Marine Park Conservation Fees

Malaysia Marine Parks		
Age Group	Local Tourists	International Tourists
Adult	RM 5	RM 30
Children (aged between 6 to 12 years old)	RM 2	RM 15
Senior Citizen (aged 60 years old and above)	RM 2	RM 15
Disabled Person	Free	Free

(Source: Department of Fisheries Malaysia, 2025)

The differentiated fee structure shown in Table 2 illustrates a user-based financing mechanism where international tourists contribute at a higher rate than local visitors. While such tiered pricing reflects economic considerations, its effectiveness depends heavily on tourists' acceptance, perceived fairness, and understanding of how the funds are utilised. Therefore, examining tourists' awareness and behavioural responses toward these payment mechanisms becomes crucial in evaluating the sustainability of conservation financing in marine park management.

2.3 Tourists Attitude Towards Conservation Initiatives

Ecotourism helps raise awareness among tourists and local communities about the value of nature, people and culture (Junus et al., 2020). The success of conservation in ecotourism destinations depends largely on how tourists perceive these efforts, making such insights vital for policy-making (Batool et al., 2024). Early definitions described tourists as short-term travellers spending money from their home area, often requiring an overnight stay though this lacked clarity and risked categorising all travellers as tourists (Ghanem, 2017). A tourist is generally defined as an individual who travels outside their usual environment for leisure, recreation, or other non-remunerative purposes. In this study, tourists refer specifically to visitors to Tioman Island who have paid the marine park conservation fee.

Tourists Awareness

It is important to comprehend how tourists participate in conservation initiatives since their purchases have an impact on the tourism sector. If all stakeholders have a greater understanding of the social and human aspects of environmental concerns, conservation initiatives can be more successful (Latif et al., 2024). Because they can incorporate traditional and native knowledge that promote conservation-minded behaviour, build relationships and raise the legitimacy of the science and data used. Conservation projects that involve citizen scientists and local stakeholders have a higher chance of success (Kelly et al., 2020). More aware tourists can help conserve the environment by altering their behaviour and attitudes and making financial contributions (Clement et al., 2014). It is important to continually observe how these initiatives affect public awareness and attitude. This guarantees that people maintain their altered perspectives and actions for years after their experience is over.

Tourists Attitude

The attitude of tourists or tourists' action towards the environment is an indicator of how they would like to experience it in regard to their personal preferences for environmental, social and cultural factors (Abas et al., 2017). Environmental education and the conduct of responsible tourists can be influenced by positive attitudes towards conservation. Therefore, improving the long-term effects of ecotourism on conservation, cultural preservation, and responsible tourism development requires an understanding of tourists' attitudes. Tourists' attitudes toward ecotourism locations include respect and admiration for culture in addition to environmental views (Xu et al., 2022).

Tourists' Behaviour

Behaviour refers to an individual's overall awareness and interpretation of their environment formed through cognitive sensing and personal experience, which then serves as a foundation for decision-making. Therefore, tourist behaviour generally refers to the impressions or interpretations that form from the physical and social environments they experience during their visit. Tourists behaviour varies from person to person which is influenced by factors such as past and present experiences, personal values, needs, memories, moods, social contexts and expectations (Saarinen, 1976). This indicates that each tourist's perception can vary at any moment toward any subject or environmental setting. This variation exists because their behaviour is closely tied to psychology with each tourist forming their views through cognitive processes that gather and organize knowledge, experiences and sensory information (Lau & McKercher, 2006).

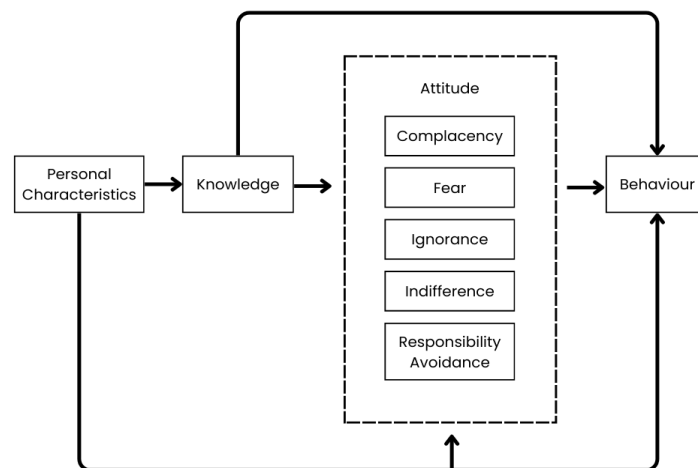


Figure 1: Attitude Theoretical Framework
(Source: Liu et al, 2019)

The attitudinal framework adapted from Liu et al. (2019) was operationalised into measurable questionnaire items. Each dimension (complacency, fear, ignorance, indifference, and responsibility avoidance) was represented by multiple Likert-scale statements to assess tourists' psychological responses toward conservation fees. Although originally applied in a healthcare context, the framework is relevant to tourism–conservation settings as it captures cognitive and emotional responses influencing behavioural support.

Table 3: Attitude Theoretical Framework

Categories of Attitude
• Complacency: A feeling of calm satisfaction with your own abilities or situation • Fear: An unpleasant emotion caused by the threat of danger, pain, or harm. • Ignorance: Lack of knowledge or information. • Indifference: Lack of interest, concern, or sympathy. • Responsibility Avoidance: The act of not dealing with or taking responsibility for one's actions or duties

(Source: Liu et al, 2019)

2.4 Linkage to Sustainable Development Goals (SDGs)

Conservation fees directly contribute to the achievement of the United Nations Sustainable Development Goals (SDGs) particularly SDG 14 (Life Below Water) and SDG 15 (Life on Land) which emphasize the sustainable management of terrestrial and marine ecosystems. By supporting biodiversity protection through fee collection, ecotourism destinations like Tioman Island promote responsible tourism (SDG 12) and local economic growth (SDG 8). Thus, conservation fee mechanisms not only sustain ecological integrity but also align national tourism policies with global sustainability agendas. Future policy integration can strengthen these linkages by ensuring that tourism revenues transparently support conservation-based development.

3.0 METHODOLOGY

This research adopted a quantitative approach to analyse tourists' awareness, attitudes and behaviours toward conservation fees at Tioman Island. The quantitative method was selected because it allows for measurable and comparable data collection making it possible to identify patterns and relationships between tourists' socio-demographic characteristics, knowledge of biodiversity conservation, attitudes toward conservation fees and conservation-related behaviours.

Research design employed a structured questionnaire survey, distributed both physically at Tioman Island and virtually through Google Forms. The questionnaire was divided into four sections. The first section focused on personal characteristics such as age, gender, nationality, education, and income. The second section assessed knowledge of biodiversity conservation and awareness of how conservation fees are applied. The third section explored tourists' attitudes toward conservation fees, structured around dimensions such as complacency, fear, ignorance, indifference and responsibility avoidance. The final section examined supportive behaviours including tourists' willingness to pay, compliance with conservation rules and participation in conservation activities.

The study area selected was Tioman Island, a popular ecotourism site located in Pahang, Malaysia. Tioman is one of the country's gazetted marine parks, well-known for its rich biodiversity and vibrant marine ecosystems. It is also one of the few destinations where conservation fees are enforced with RM5 charged to local tourists and RM30 to international visitors. These characteristics make the island an ideal case study to evaluate how tourists perceive and respond to conservation fee mechanisms in an ecotourism context.

In terms of sampling, the study used a non-probability purposive sampling technique. This approach was chosen to ensure that only relevant respondents' tourists who had paid the conservation fee were included in the survey. Sample size determination table with a minimum of 164 respondents was required and given the estimated tourist population of approximately 195,000 visitors per year. The research successfully collected 170 valid responses surpassing the minimum requirement and thereby improving the reliability and validity of the findings.

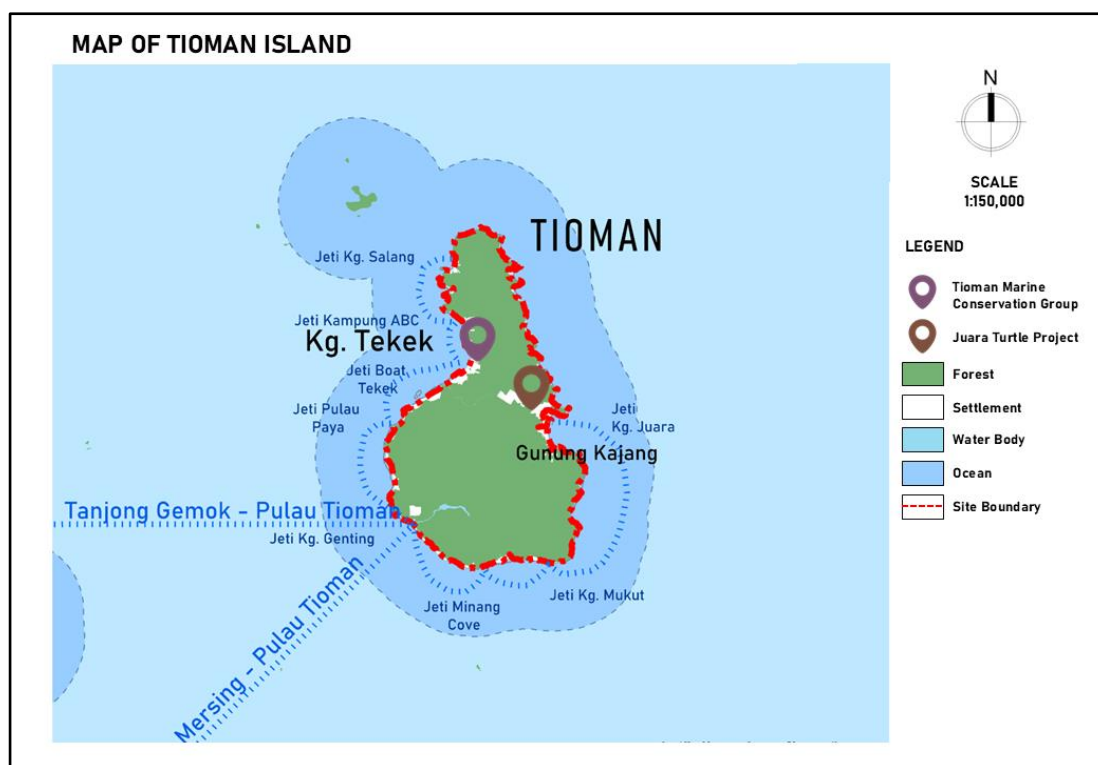


Figure 2: Map of Tioman Island

Data collection was carried out through both physical and digital distribution channels. The offline component of the survey was conducted over a two-week period at Mersing Jetty, Johor where face-to-face questionnaire distribution targeted tourists traveling from Tioman Island. This location was strategically chosen due to its role as a primary transit point for Tioman-bound visitors enabling direct engagement with the target population. Simultaneously, the online survey was disseminated using digital platforms such as WhatsApp and other social media networks aimed to increase response reach by capturing tourists who may have previously visited Tioman Island.

The instrument measured tourists' awareness of conservation efforts, their knowledge of biodiversity and their perceptions of how conservation fees are used. Attitudes were measured across five categories: (1) Complacency; (ii) Fear; (iii) Ignorance; (iv) Indifference and (v) Responsibility Avoidance while behavioural items assessed tourists' willingness to pay adherence to conservation regulations and engagement in conservation-related activities. All attitudinal, awareness, and behavioural items were measured using a five-point Likert scale ranging from 1 (Strongly Disagree/Unaware) to 5 (Strongly Agree/Strongly Aware). The awareness construct consisted of 7 items, attitude comprised 5 dimensions with multiple indicators per dimension (total 20 items), and behaviour included 6 items measuring willingness to pay, compliance, and participation.

The collected responses were coded and processed using SPSS software. Descriptive statistics were applied to summarise respondents' demographic characteristics, levels of knowledge and behavioural patterns. Cronbach's Alpha was used to validate the attitudinal constructs which ensured that the scales were consistent and dependable. Correlation analysis was also conducted to examine relationships between tourists' knowledge, attitudes and behaviours, providing insights into how awareness influences perceptions and actions toward conservation fees.

4.0 RESULTS

The findings of this study are categorised into several components, including personal characteristics, awareness, attitudes, and behaviours of tourists toward conservation fees at the tourism destination of Tioman Island.

4.1 Personal Characteristics

Table 4 shows the demographic profile of the tourists indicates a balanced gender distribution, with males (51.18%) and females (48.82%) represented almost equally. In terms of educational attainment, the majority held a bachelor's degree (58.82%), followed by master's degree holders (21.18%), while only a small proportion reported secondary school education (2.35%) or doctoral qualifications (3.53%). Occupation-wise, most tourists were employed in the private sector (48.24%), with smaller proportions in government service (17.16%), self-employment (11.18%), retirement (13.53%) or unemployment (10.00%). Income levels varied, though the largest share of tourists reported earning RM10,000 and above (32.94%), while 24.12% earned RM2,500 and below. The sample was predominantly local (78.82%), with foreign visitors comprising 21.18%. In terms of visitation frequency, the largest group were first-time visitors (42.94%), followed by those who visited rarely (38.82%), while only a minority visited once (7.06%) or several times per year (11.18%). With regard to awareness of conservation efforts, less than one-third of respondents (32.94%) expressed awareness, whereas nearly half (46.47%) reported no awareness and a further 20.59% were uncertain.

Table 4: Demographic and Personal Characteristics of Surveyed Tourists

Variables	Items		Results
Personal Characteristics	Gender	Male	51.18%
		Female	48.82%
	Level of education	Secondary School	2.35%
		Diploma	14.12%
		Bachelor Degree	58.82%
		Master Degree	21.18%
		Doctor of Philosophy	3.53%
	Occupation	Government Sector	17.16%
		Private Sector	48.24%
		Own Business	11.18%
		Unemployed	10.00%
		Retired	13.53%
	Wage	RM2500 and below	24.12%
		RM2501 - RM4999	15.29%
		RM5000 - RM7499	16.47%
		RM7500 - RM9999	11.18%
		RM10000 and above	32.94%
	Nationality	Local	78.82%
		Foreign	21.18%
	Visits frequency	Once a Year	7.06%
		Few times in a year	11.18%
		Rarely	38.82%
		First Time	42.94%
	Awareness on conservation efforts	Yes	32.94%
		No	46.47%
		Not sure	20.59%

4.2 Awareness

The findings can be seen in Table 5 on tourists' awareness of conservation fees and activities which revealed varying levels of knowledge among tourists. Regarding the structure of conservation fees, more than one-third (35.29%) were unaware, while only a small proportion were strongly aware (10.00%), suggesting limited understanding of fee mechanisms. Awareness of the types of conservation activities was also low, with 31.18% unaware and just 5.88% strongly aware. In contrast, tourists demonstrated greater awareness of the role of conservation fees in supporting habitat restoration, where a combined 74.29% reported being at least moderately aware, including 15.29% who were strongly aware. Similarly, awareness was high regarding the role of conservation in minimising negative environmental impacts, with 62.94% identifying as aware or strongly aware. Awareness of Marine Park reliance on visitor fees was moderate, with 34.71% moderately aware and

44.70% identifying as aware or strongly aware. Notably, respondents expressed strong recognition of the risks posed by insufficient funding, with over two-thirds (68.83%) aware or strongly aware. Awareness peaked regarding the loss of biodiversity in ecotourism, with 52.94% strongly aware and 35.88% aware, indicating strong concern for biodiversity decline.

Table 5: Awareness of Surveyed Tourists

Awareness	Conservation fee's structure	Unaware	35.29%
		Slightly Aware	9.41%
		Moderately Aware	18.82%
		Aware	26.47%
		Strongly Aware	10.00%
	Type of conservation activities	Unaware	31.18%
		Slightly Aware	15.88%
		Moderately Aware	25.29%
		Aware	21.76%
		Strongly Aware	5.88%
	Conservation fees to support habitat restoration	Unaware	8.82%
		Slightly Aware	15.88%
		Moderately Aware	30.59%
		Aware	29.41%
		Strongly Aware	15.29%
	Minimise negative environmental impact	Unaware	1.76%
		Slightly Aware	6.47%
		Moderately Aware	28.82%
		Aware	40.59%
		Strongly Aware	22.35%
	Marine Park reliance on visitor fees	Unaware	4.71%
		Slightly Aware	15.88%
		Moderately Aware	34.71%
		Aware	25.29%
		Strongly Aware	19.41%
	Risk from lack of funding	Unaware	0.59%
		Slightly Aware	7.06%
		Moderately Aware	23.53%
		Aware	41.18%
		Strongly Aware	27.65%
	Loss of biodiversity in ecotourism	Unaware	3.53%
		Moderately Aware	7.65%
		Aware	35.88%
		Strongly Aware	52.94%

The mean scores for awareness items ranged from 2.8 to 4.3, indicating moderate to high awareness among tourists. The highest mean (4.35) was observed for "Loss of biodiversity in ecotourism," reflecting strong concern about ecosystem degradation, while the lowest (2.84) related to "Conservation fee structure," highlighting the need for clearer information on how funds are managed. Similarly, the mean for behavioural items showed that respondents highly valued "Transparency in donations" (mean = 4.2), but showed only moderate "Willingness to pay higher fees" (mean = 3.0). The low awareness of fee structure despite strong concern for biodiversity suggests that tourists value environmental protection conceptually but lack specific knowledge regarding financial management mechanisms. This indicates a communication gap rather than a lack of environmental concern.

4.3 Attitude

This section discusses tourists' attitudes toward the conservation fees implemented in Tioman Island. To better understand their perceptions and behavioural tendencies in Table 6, the analysis is organised into five (5) key attitudinal dimensions: (i) Complacency, which reflects a sense of personal satisfaction or acceptance toward the conservation fees; (ii) Fear, which captures concerns or anxieties related to the effectiveness, cost, or impact of the fees; (iii) Ignorance, which refers to a lack of understanding or questioning of the fees' purpose and significance; (iv) Indifference, which indicates a lack of concern or emotional response toward the issue of conservation funding; and (v) Responsibility Avoidance, which explores the extent to which tourists distance themselves from contributing to conservation efforts or shift the responsibility to others. These five constructs together provide a deeper insight into the psychological and emotional factors that influence tourists' support or resistance toward conservation fee practices.

The reliability analysis demonstrates strong internal consistency across most dimensions. Complacency ($\alpha = 0.949$), ignorance ($\alpha = 0.953$), indifference ($\alpha = 0.927$), and responsibility avoidance ($\alpha = 0.920$) all achieved very high Cronbach's alpha scores, indicating consistent responses among tourists regarding these attitudes toward conservation fees. These results suggest that respondents shared similar perspectives on satisfaction with fees, lack of understanding, disengagement, and shifting responsibility to others. The dimension of fear ($\alpha = 0.767$) was also reliable, though comparatively lower, indicating greater variation in tourists' concerns about cost, effectiveness or potential negative impacts of conservation fees. Overall, the high reliability scores confirm that the constructs were measured consistently and reflect clear patterns in tourist attitudes.

Table 6: Reliability Analysis of Attitudinal Dimensions Toward Conservation Fee

Variables	Cronbach's Alpha (α) Score	Reliability	Results
Complacency	0.949	Very Reliable	Tourists consistently expressed feelings of satisfaction or acceptance toward conservation fees. It indicates strong agreement across respondents regarding this dimension.
Fear	0.767	Reliable	Captured tourists' concerns about cost, effectiveness, or negative impacts of conservation fees. While still reliable, the lower score compared to other dimensions suggests more variation in how tourists perceive or worry about fees.
Ignorance	0.953	Very Reliable	Indicates strong consistency in responses related to a lack of understanding or questioning the purpose of fees. This shows that many tourists shared similar levels of confusion or uncertainty about how conservation fees are used.
Indifference	0.927	Very Reliable	Tourists' lack of emotional response or concern toward conservation fees was measured consistently. Many respondents showed a similar tendency of being uninterested or disengaged.
Responsibility Avoidance	0.920	Very Reliable	Tourists' tendency to shift responsibility for conservation to others was also measured consistently. This indicates a shared attitude where some tourists avoided personal accountability in supporting conservation.

4.4 Behaviour

Table 7 shows the behavioural findings indicate generally positive attitudes toward conservation fees and practices. A majority of tourists expressed support for the use of conservation fees, with 35.29% agreeing and 13.53% strongly agreeing, although nearly one-fifth (19.41%) disagreed. Willingness to pay higher fees was more divided while 39.41% agreed or strongly agreed, a combined 34.71% disagreed or strongly disagreed, suggesting mixed acceptance of increased costs. Respect for local environmental ecotourism regulations was high, with 78.83% agreeing or strongly agreeing, highlighting strong compliance with environmental rules. Participation in conservation activities was moderate, as most tourists remained neutral (38.24%), though 50.58% expressed agreement or strong agreement. Similarly, opportunities to support local conservation efforts were viewed positively, with 45.89% supportive, although 31.76% remained neutral. Transparency in donations received the strongest endorsement, with 77.65% agreeing or strongly agreeing underscoring the importance of accountability in conservation funding.

Table 7: Behaviour of Surveyed Tourists

Behaviour	Support on the use of conservation fees	Strongly Disagree	1.18%
		Disagree	19.41%
		Neutral	30.59%
		Agree	35.29%
		Strongly Agree	13.53%
	Willingness to pay higher conservation fees	Strongly Disagree	11.18%
		Disagree	23.53%
		Neutral	25.88%
		Agree	24.12%
		Strongly Agree	15.29%
	Tourists respect local environmental ecotourism regulations	Disagree	2.35%
		Neutral	18.82%
		Agree	47.65%
		Strongly Agree	31.18%
	Participate in conservation activities	Strongly Disagree	1.18%
		Disagree	10.00%
		Neutral	38.24%
		Agree	38.82%
		Strongly Agree	11.76%
	Seek opportunities to support local conservation efforts	Strongly Disagree	7.06%
		Disagree	15.29%
		Neutral	31.76%
		Agree	31.18%
		Strongly Agree	14.71%
	Donations transparency	Disagree	2.35%
		Neutral	20.00
		Agree	37.06%
		Strongly Agree	40.59%

The relatively high proportion of neutral responses, particularly in participation-related items, may indicate passive support rather than active engagement. While tourists do not oppose conservation fees, many may lack strong motivation to participate beyond compliance. This suggests an opportunity for targeted engagement strategies.

5.0 DISCUSSIONS

The findings reveal that tourists' personal characteristics such as education, occupation, income, and age strongly influence their knowledge of conservation, which in turn shapes their attitudes and behaviours toward conservation fees at Tioman Island. Tourists with higher education and socio-economic status generally showed better awareness of biodiversity protection and the role of conservation fees, while gaps persisted among less-informed groups, particularly locals with lower exposure to environmental education. This knowledge was found to be closely linked to attitudes as well-informed tourists were more supportive of conservation fees and less likely to display complacency, ignorance, or responsibility avoidance whereas those with limited knowledge were more resistant or indifferent. These findings are consistent with Batool et al. (2024), who reported that environmental awareness positively influences willingness to pay for conservation initiatives. Similarly, Junus et al. (2020) emphasised that education level significantly shapes pro-environmental attitudes in Malaysian ecotourism settings. However, this study extends prior research by identifying specific psychological dimensions such as responsibility avoidance that mediate behavioural outcomes.

The findings align systematically with the Theory of Planned Behaviour (TPB). Awareness of conservation functions as a cognitive foundation influencing attitudes toward conservation fees. Positive attitudes increase behavioural intentions such as willingness to pay and regulatory compliance. Furthermore, perceived transparency and fairness may enhance perceived behavioural control, thereby strengthening pro-conservation actions. The study thus empirically supports TPB within a marine ecotourism financing context. From a planning and management perspective, marine park authorities should implement (i) visible information boards detailing fee allocation; (ii) annual public financial reporting on conservation expenditure; (iii) QR-code based digital transparency systems allowing tourists to track funded projects; and (iv) educational briefings at entry points such as Mersing Jetty.

Such measures could reduce ignorance and responsibility avoidance while strengthening trust and long-term financial sustainability of marine park management.

Lastly, the environmental implications are significant. Enhanced awareness and compliance with conservation rules can reduce ecological pressures, prevent resource degradation, and ensure the long-term protection of marine biodiversity at Tioman Island. By fostering behavioural change among tourists, conservation fees can act as a sustainable funding mechanism for ecosystem restoration, aligning with Malaysia's National Ecotourism Plan and global sustainability goals.

6.0 CONCLUSION

This study examined tourists' attitudes and behaviours toward the implementation of conservation fees at ecotourism destinations focusing on Tioman Island as a case study. Employing descriptive, factor and reliability analyses the research effectively identified key determinants influencing tourists' awareness, attitudes and behavioural intentions regarding conservation contributions. The findings provided valuable insights into how socio-demographic characteristics such as education, income, and occupation shape perceptions of biodiversity conservation and how these perceptions translate into behavioural support for conservation initiatives. Through this analysis, the study successfully met its three primary research objectives, offering a clearer understanding of the interplay between awareness, attitudes and pro-environmental behaviour among ecotourists.

The study contributes to the growing body of knowledge on ecotourism and environmental planning by highlighting the behavioural and psychological factors such as complacency, ignorance, and responsibility avoidance that influence tourists' willingness to support conservation efforts. Despite many tourists expressing respect for ecotourism regulations and valuing transparency in fund management, the research revealed notable gaps in understanding how conservation fees are structured and utilised. These findings underscore the need for improved communication, transparency and environmental education to strengthen public trust and enhance participation in conservation financing mechanisms.

However, several limitations should be acknowledged. The study's scope was confined to Tioman Island, which may limit the generalisability of its findings to other ecotourism destinations with differing management systems, tourists' profiles or environmental contexts. Moreover, the exclusive reliance on quantitative methods constrained the ability to explore deeper psychological motivations, values or cultural influences shaping tourist behaviour.

From a marine park planning and management perspective, the findings suggest that conservation fee mechanisms must go beyond simple revenue collection and function as structured governance tools. Marine Park authorities should institutionalise transparent reporting systems that clearly communicate how conservation fees are allocated, particularly for habitat restoration, enforcement, and environmental education programmes. The provision of real-time or annual public financial summaries, displayed at entry points such as Mersing Jetty and through official digital platforms, would enhance accountability and reduce uncertainty regarding fund utilisation.

Additionally, interpretive communication strategies should be strengthened. Brief environmental orientation sessions, informative signage, and QR-code linked project updates could increase tourists' understanding of fee structures and directly address ignorance and responsibility avoidance identified in this study. Integrating behavioural nudges, such as visible "Your Fee Supports This Project" displays at conservation sites, may further reinforce the psychological link between payment and environmental outcomes.

In the longer term, marine park management authorities may consider differentiated engagement strategies targeting first-time visitors and local tourists, who demonstrate lower awareness levels. By embedding conservation education within tourism management frameworks, conservation fees can evolve into a participatory governance mechanism that promotes shared responsibility between authorities and visitors, thereby strengthening the financial and ecological sustainability of Tioman Island.

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