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An experience-based perspective on pro-environmental behavior in urban forests ecotourism

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ABSTRACT

Urban forest ecotourism has emerged as an important strategy for promoting sustainable tourism and pro-environmental behavior in rapidly urbanizing cities. However, there has been limited attention to understanding how experiential encounters in urban forests translate into pro-environmental behavioral intentions. Drawing on the Theory of Planned Behavior (TPB) and Experience Economy Theory, this study examines the relationships among experience quality, perceived value, attitude, and pro-environmental behavioral intention in the context of urban forest ecotourism. A quantitative research design was employed using a cross-sectional survey of 460 urban forest visitors. Data were analyzed using Structural Equation Modeling with a variance-based approach (SEM-PLS) to assess both the measurement and structural models. The results indicate that experience quality has significant positive effects on perceived value and attitude. Furthermore, both perceived value and attitude significantly influence pro-environmental behavioral intention. However, the direct effect of experience quality on pro-environmental behavioral intention was not significant, suggesting that experiential encounters influence intention indirectly through cognitive and attitudinal mechanisms. These findings extend the TPB framework by demonstrating that experience quality functions as a formative antecedent of attitude and perceived value rather than a direct predictor of pro-environmental intention. The study highlights the importance of designing meaningful urban forest experiences that foster positive evaluations and attitudes toward sustainability. From a managerial perspective, the results provide practical insights for urban forest managers and policymakers seeking to enhance pro-environmental outcomes through experience-based ecotourism strategies.

Keywords: attitude; experience economy theory; experience quality; perceived value; pro-environmental behavior intention; theory of planned behavior; urban forest

1. INTRODUCTION

Ecotourism has become a pivotal segment of sustainable tourism development worldwide, characterized by its emphasis on environmental conservation, environmental education, and community benefits, in contrast to conventional mass tourism approaches (Buckley, 2009; Fennell, 2014). Alongside rapid urbanization, urban forest ecotourism has emerged as an increasingly important form of nature-based tourism, in which urban green spaces provide restorative experiences, psychological well-being, and opportunities for sustainable behavior among urban residents (Konijnendijk et al., 2005; World Health Organization (WHO), 2016). Research in urban forest settings suggests that visitors' recreational experiences significantly influence their evaluations and post-visit behavioral intentions (Tang et al., 2022). This aligns with the finding that experience quality may shape attitudinal and cognitive responses, which in turn affect behavioral intentions. While the Theory of Planned Behavior (TPB) (Ajzen, 1991) has been widely used to explain environmentally responsible intentions, existing studies frequently treat attitude as an assumed construct, neglecting how experience processes shape underlying evaluations. Accordingly, there is a theoretical gap in explicating the experiential origins of attitude formation within urban forest ecotourism, warranting an experience-based extension of TPB.

According to TPB, individuals' behavioral intentions are primarily determined by their attitudes toward a behavior, reflecting their overall evaluations of its outcomes (Ajzen, 1991). However, the explanatory power of TPB is limited when antecedent factors of attitude are not specified. In tourism contexts, visitors' behavioral intentions are often influenced by experiential evaluations formed during their encounters with destinations. Experience Economy Theory suggests that value creation in tourism arises from engaging and memorable experiences involving sensory, emotional, and participatory dimensions (Pine & Gilmore, 1998). Consistent with this perspective, tourism research has demonstrated that experience quality influences perceived value and behavioral intentions through cognitive and evaluative processes (Chen & Chen, 2010; Dewi et al., 2022). Building on these insights, this study adopts an experience-based extension of TPB, positioning experience quality as an antecedent that shapes perceived value and attitude, which subsequently influences environmentally sound behavioral intention. By integrating experiential constructs into the TPB framework, this study seeks to explain how visitors' experiences in urban forest ecotourism translate into environmentally responsible behavioral intentions.

In Indonesia, urban green spaces have gained strategic importance amidst growing environmental concerns and urban stress, positioning urban forests as ecotourism sites that offer ecosystem services, recreational benefits, and public engagement with sustainability (Lawasi et al., 2025). While forest-based ecotourism has been widely studied in rural and protected settings, previous research that focuses on urban forest ecotourism and its influence on pro-environmental behavior is limited. Moreover, studies in the Indonesian context often overlook the role of experience quality as a formative antecedent of attitudes toward sustainable behaviors. Addressing this gap is critical, as visitors' experiential encounters in urban forests may shape their cognitive evaluations and intentions to adopt environmentally responsible behaviors, which has practical implications for sustainable urban planning and ecotourism management. Therefore, this study investigates the relationships between experience quality, perceived value, attitude, and pro-environmental behavioral intention in urban city forest ecotourism in Indonesia, providing empirical evidence to strengthen an experience-based extension of TPB.

2. LITERATURE REVIEW

2.1. Linkage between The Theory Planned Behavior and The Experience Economy Theory

The Theory of Planned Behavior (TPB) posits that behavioral intention is primarily determined by an individual's attitude toward a behavior, reflecting an overall evaluation of its expected outcomes (Ajzen, 1991). The TPB has been widely applied in tourism and environmental behavior studies to explain intentions related to sustainable and responsible actions. However, one of the key criticisms of the TPB is its limited explanation of how attitudes are formed, particularly in experiential consumption contexts, such as tourism.

To address this limitation, Experience Economy Theory (Pine & Gilmore, 1998) provides a complementary perspective by emphasizing that value creation in tourism is rooted in experiential encounters rather than functional attributes alone. Experiences characterized by sensory stimulation, emotional engagement, and participation are argued to shape visitors' perceptions and evaluations. In tourism research, experience-based perspectives have increasingly been used to explain cognitive and affective responses that precede attitudinal and behavioral outcomes (Bigné et al., 2005; Chen & Chen, 2010; Hosany & Witham, 2010).

Integrating Experience Economy Theory with TPB allows researchers to conceptualize experience quality as an antecedent of attitude, thereby strengthening TPB's explanatory power in tourism settings. This integration is particularly relevant in ecotourism, where experiences are closely tied to environmental meanings and ethical evaluations. Nevertheless, empirical studies that explicitly link experience economy constructs with TPB mechanisms remain limited, particularly in the context of urban forest ecotourism.

2.2. Linkage between Experience Quality and Attitude

Experience quality refers to visitors' overall evaluation of their experiential encounters, encompassing the sensory, emotional, and functional dimensions of tourism activities. Previous studies consistently suggest that high-quality experiences lead to favorable attitudinal responses, as visitors cognitively and affectively evaluate what they have experienced (Wu & Li, 2017). In ecotourism contexts, immersive experiences, such as natural scenery, environmental comfort, and recreational engagement, have been shown to enhance visitors' positive attitudes toward destinations and conservation practices (Lee, 2011). When visitors perceive their experiences as enjoyable, meaningful, and restorative, they are more likely to develop favorable evaluations toward the destination and the behaviors associated with it (Bratman et al., 2019; Zhang et al., 2014).

Within urban forest ecotourism, experience quality is expected to play a critical role in shaping tourists' attitudes, as urban forests offer direct and repeated experiential interactions with nature in otherwise built environments. However, empirical evidence examining this relationship remains sparse, particularly in developing-country urban contexts, indicating a need for further investigation. In experiential consumption settings such as ecotourism, visitors form attitudes based on their overall evaluation of the experiences they encounter. High-quality experiences are characterized by pleasant sensory stimulation, environmental comfort, and enjoyable recreational activities, which tend to generate positive cognitive and affective responses (Chen & Chen, 2010). Drawing on Experience Economy Theory, experiential encounters are central to shaping how individuals evaluate destinations and related behaviors (Pine & Gilmore, 1998). In the context of urban forest ecotourism, positive experience quality is therefore expected to foster favorable attitudes toward visiting and engaging with the destination.

H1: Experience quality has a positive effect on tourists' attitude toward urban forest ecotourism.

2.3. Linkage between Experience Quality and Perceived Value

Perceived value represents visitors' overall assessment of the benefits received relative to the costs and efforts expended during a visit. In tourism research, experience quality has been identified as a key determinant of perceived value, as experiential encounters directly influence how visitors appraise what they gain from tourism activities (Chen & Chen, 2010). Studies in nature-based and ecotourism settings demonstrate that high-quality experiences enhance visitors' perceptions of value by delivering psychological benefits, learning opportunities, and emotional satisfaction beyond monetary considerations (Prebensen et al., 2013). In urban green tourism, experiential elements, such as tranquility, environmental quality, and accessibility, further contribute to value perceptions.

Despite these findings, limited research has explored how experience quality shapes perceived value, specifically within urban forest ecotourism, where value may extend beyond recreation to include environmental and social significance (Gallarza et al., 2017). This gap suggests the importance of examining perceived value as a mediator of cognitive evaluation stemming from experience quality.

Perceived value reflects visitors' assessment of the benefits received relative to the effort and costs incurred during a visit. Prior tourism research has consistently indicated that experience quality is a key

determinant of perceived value, as meaningful and enjoyable experiences enhance visitors' perceptions of worth beyond monetary considerations. In urban forest ecotourism, experiential elements such as natural ambience, relaxation opportunities, and recreational enjoyment are likely to increase visitors' perceived value of the destination.

H2: Experience quality has a positive effect on perceived value in urban forest ecotourism.

2.4. Linkage between Attitude and Pro-Environmental Behavior Intention

According to the TPB, attitude is one of the most influential predictors of behavioral intention (Ajzen, 1991). In environmental and tourism studies, positive attitudes toward sustainability and nature-based destinations have been consistently associated with stronger pro-environmental behavioral intentions (Han et al., 2010). In ecotourism contexts, visitors who hold favorable attitudes toward nature conservation and environmentally responsible tourism are more likely to intend to engage in behaviors such as reducing environmental impact, supporting conservation initiatives, and choosing eco-friendly products (Lee & Jan, 2018). Attitude thus serves as a key psychological mechanism that translates evaluations into intentions. However, most existing studies have focused on rural or protected natural areas, with limited attention to urban forest ecotourism. Given the increasing importance of urban green spaces, examining the role of attitude in shaping pro-environmental intentions within urban forests remains an underexplored but critical area.

According to the Theory of Planned Behavior, attitude is a primary predictor of behavioral intention (Ajzen, 1991). Individuals with favorable attitudes toward a behavior are more likely to form strong intentions to perform that behavior. In ecotourism contexts, positive attitudes toward nature-based destinations and environmental sustainability have been shown to encourage intentions to engage in pro-environmental behaviors, particularly among urban and younger visitors (Han et al., 2010; Han et al., 2017). Thus, tourists who evaluate urban forest ecotourism positively are expected to exhibit stronger intentions to behave in environmentally responsible ways.

H3: Attitude toward urban forest ecotourism positively influences pro-environmental behavioral intention.

2.5. Linkage between Perceived Value and Pro-Environmental Behavior Intention

Perceived value has been recognized as an important antecedent of behavioral intention in tourism research. When visitors perceive high value from their experiences, they are more inclined to reciprocate through positive behavioral intentions, including environmentally responsible actions (Sweeney & Soutar, 2001). In ecotourism, perceived value extends beyond economic considerations to include environmental and social benefits, which can strengthen visitors' intentions to support sustainability initiatives (Chiu et al., 2014). Visitors who recognize the broader benefits of ecotourism experiences are more likely to engage in pro-environmental behaviors. Despite its relevance, the relationship between perceived value and pro-environmental behavioral intention in urban forest ecotourism remains under-investigated. Understanding this linkage is essential for clarifying how cognitive evaluations contribute to sustainable behavioral intentions in urban contexts.

Perceived value not only shapes satisfaction and loyalty but also plays a crucial role in influencing behavioral intentions. When visitors perceive high value from ecotourism experiences, particularly in terms of environmental and social benefits, they are more likely to reciprocate through responsible and sustainable behaviors. In the urban forest context, recognizing the broader value of such destinations may motivate tourists to adopt pro-environmental intentions.

H4: Perceived value positively influences pro-environmental behavioral intention.

2.6. Linkage between Experience Quality and Pro-Environmental Behavior Intention

Experience quality may also exert a direct influence on pro-environmental behavioral intention. Positive and memorable experiences can foster emotional attachment and environmental concern, which in turn encourages intentions to act responsibly toward the environment (Ballantyne et al., 2011). In nature-based tourism, high-quality experiences have been shown to directly enhance visitors' intentions to

engage in conservation-supportive behaviors, even without mediation by attitudes or values (Chen & Chen, 2010; Kim & Thapa, 2018). This suggests that experiential encounters can act as immediate triggers for behavioral intention.

However, empirical evidence on this direct relationship in urban forest ecotourism is limited. Given the unique characteristics of urban forests as everyday nature settings, further research is needed to examine whether experience quality directly shapes pro-environmental behavioral intentions, alongside indirect pathways through attitude and perceived value. Beyond its indirect effects through attitude and perceived value, experience quality may also exert a direct influence on pro-environmental behavioral intention. Positive and memorable experiences can evoke emotional connections and environmental concern, which may immediately encourage intentions to act responsibly toward the environment (Ballantyne et al., 2011; Kim & Thapa, 2018). In urban forest ecotourism, high-quality experiential encounters with nature may directly stimulate tourists' intentions to engage in pro-environmental behaviors, particularly when experiences foster emotional engagement and environmental awareness (Lee & Jan, 2018).

H5: Experience quality has a positive effect on pro-environmental behavioral intention.

3. METHODOLOGY

3.1. Research Design

This study employed a quantitative research design using a cross-sectional survey approach to examine the relationships among experience quality, perceived value, attitude, and pro-environmental behavioral intention in the context of urban forest ecotourism. The proposed conceptual framework was developed based on the Theory of Planned Behavior (TPB) (Ajzen, 1991) as the main theoretical foundation, with Experience Economy Theory (Pine & Gilmore, 1998) providing a supporting perspective to explain the experiential antecedents of attitude and value formation. Data were collected using a structured questionnaire distributed to visitors of urban forest. The research model tested five hypothesized relationships (H1–H5), including both direct and indirect effects of experience quality on pro-environmental behavioral intention through attitude and perceived value. This design is appropriate for capturing visitors' perceptions and intentions at a single point in time and is widely applied in tourism and behavioral research (see Figure 1).

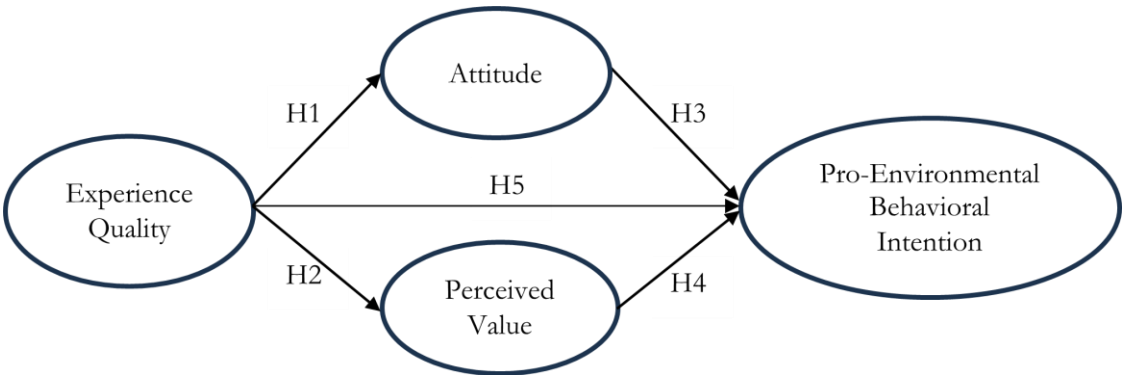

Figure 1. Research Model

Source: Author's own work (2026)

3.2. Respondents Profile

The respondents of this study consisted of 460 visitors to urban city forests. As presented in Table 1, the sample was relatively balanced in terms of gender, with 255 female respondents (55.43%) and 205 male respondents (44.57%). In terms of age, the majority of respondents were between 18 and 25 years

old (52.17%), followed by those aged 26–35 years (19.78%), indicating that urban forest ecotourism is particularly attractive to younger visitors.

Table 1. Respondents Profile

Categories		Frequency	Percentage
Gender	Male	205	44.57%
	Female	255	55.43%
Age	18 - 25	240	52.17%
	26 - 35	91	19.78%
	36 - 45	69	15.00%
	46 - 55	47	10.22%
	> 55	13	2.83%
Education	Primary	3	0.65%
	Junior High School	6	1.30%
	Senior High School	190	41.30%
	Diploma	82	17.83%
	Bachelor Degree	138	30.00%
	Post Graduate Degree	41	8.91%
Occupation	Civil Servants	32	6.96%
	Entrepreneur	42	9.13%
	Private Employee	109	23.70%
	Students	173	37.61%
	Housewife	53	11.52%
	Others	51	11.09%
Citizen	Bandung	413	89.78%
	Other	47	10.22%
Frequency of Visit	First time visit	78	16.96%
	Rare (1-2 times in a year)	179	38.91%
	Sometimes (3-5 times in a year)	100	21.74%
	Often (more than 5 times a year)	58	12.61%
	Very Often (almost monthly visit)	45	9.78%
Purpose of Visit	Learning/Education	31	6.74%
	Recreation	299	65.00%
	Sports	85	18.48%
	Spiritual	11	2.39%
	Other	34	7.39%

Source: Processed from primary data (2026)

Regarding educational background, most respondents had completed senior high school (41.30%) or held a bachelor's degree (30.00%), suggesting a relatively educated visitor profile. In terms of occupation, students (37.61%) and private employees (23.70%) constituted the largest group, followed by housewives, entrepreneurs, and civil servants.

Data were collected from 460 visitors to several prominent urban forest and park destinations in Bandung from March to May 2025, including Babakan Siliwangi, Taman Hutan Raya Ir. Djuanda, Taman Maluku, Taman Lalu Lintas, and Taman Cilaki. These sites were selected because they represent diverse forms of urban forest ecotourism and are among the most frequently visited green spaces in the city, making them suitable contexts for examining experience-driven behavior and loyalty formation. Questionnaires were distributed using both online and offline survey approaches to reach visitors with diverse demographic and experiential backgrounds. The online questionnaires were disseminated through digital platforms and targeted individuals who had prior experience visiting at least one of the selected

urban forests. Screening questions were included to ensure that only respondents who had previously visited one or more of these urban forest destinations were eligible to participate. Meanwhile, the offline survey was conducted through direct interaction with visitors at the selected sites, where respondents were approached and invited to complete the questionnaire on site. This mixed distribution approach enabled the study to capture a broader and more comprehensive understanding of visitors' experiences in urban forest ecotourism.

Most respondents were residents of Bandung (89.78%), while the remaining 10.22% came from other areas. Regarding visit frequency, the largest proportion of respondents rarely visited urban forests (1–2 times per year, 38.91%), followed by those who visited sometimes (3–5 times per year, 21.74%). The primary purpose of the visit was recreation (65.00%), followed by sports and learning-related activities. This profile indicates that urban forests primarily function as recreational ecotourism spaces for local residents.

3.3. Measurement Instrument and Data Analysis

The measurement instrument comprised a structured questionnaire divided into two sections. The first section captured respondents' demographic characteristics, and the second section measured the study constructs. All latent variables were measured using multiple-item scales adapted from prior validated studies and modified to fit the urban forest ecotourism context.

Experience Quality was measured using six items capturing sensory, environmental, and recreational aspects of visitors' experiences. Perceived Value was measured using four items reflecting visitors' evaluations of benefits relative to effort and cost. Attitude toward urban forest ecotourism was measured using four items assessing respondents' overall evaluations and enjoyment of visiting urban forests. Pro-environmental behavioral intention was measured using five items reflecting respondents' intentions to engage in environmentally responsible behaviors.

All measurement items were assessed using a five-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree. Prior to data collection, the questionnaire was reviewed to ensure clarity and contextual relevance. Data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) to analyze the relationship among constructs within the conceptual model. The measurement model was evaluated to assess construct reliability and validity, including indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. Second, the structural model was assessed to examine the hypothesized relationships among the constructs, including path coefficients and their significance levels. This analytical approach enables a comprehensive examination of how experience quality influences attitude, perceived value, and pro-environmental behavioral intention within the urban forest ecotourism context.

4. RESULTS AND DISCUSSION

4.1. Results

4.1.1. Measurement Model Evaluation

The measurement model was assessed to examine the reliability and validity of the constructs. Indicator reliability was confirmed, as all outer loadings exceeded the recommended threshold of 0.70 (Hair et al., 2024), ranging from 0.720 to 0.875, indicating that all indicators adequately represented their respective latent constructs. Internal consistency reliability was evaluated using Cronbach's alpha and composite reliability (CR). As shown in the measurement results, Cronbach's alpha values ranged from 0.793 to 0.881, while CR values ranged from 0.792 to 0.886, exceeding the minimum acceptable threshold of 0.70 (Hair et al., 2024). These results confirm satisfactory internal consistency across all constructs.

Convergent validity was assessed using average variance extracted (AVE). All constructs demonstrated AVE values above 0.50, ranging from 0.618 to 0.713, indicating that each construct explained more than half of the variance of its indicators (Hair et al., 2024). Thus, convergent validity was established.

Discriminant validity was examined using the heterotrait–monotrait ratio (HTMT). All HTMT values were below the conservative threshold of 0.90, further supporting adequate discriminant validity among the constructs (Hair et al., 2024). Overall, the measurement model demonstrated acceptable reliability and validity (see Table 2).

Table 2. Measurement Model

Constructs	Indicators		Loading	Cronbach Alpha	CR	AVE	Q^2
Experience Quality	This urban forest is a suitable place for relaxation.	EQ1	0.811	0.881	0.884	0.627	0.000
	I enjoy the recreational activities available in this urban forest.	EQ2	0.790				
	The scenery in this urban forest is visually appealing.	EQ3	0.780				
	The presence of natural sounds, such as birdsong, helps me feel calm.	EQ4	0.762				
	The scent of trees and vegetation in this urban forest is pleasant.	EQ5	0.816				
	The air quality and temperature in this urban forest are comfortable.	EQ6	0.788				
Perceived Value	Visiting this urban forest is worth the effort I put into the visit.	PV1	0.806	0.793	0.792	0.618	0.285
	The benefits of visiting this urban forest outweigh the costs I incur.	PV2	0.816				
	The experience in this urban forest is more valuable than other recreational options in the city.	PV3	0.799				
	This urban forest is an important asset for the environment and the community.	PV4	0.720				
Attitude	I believe that visiting this urban forest is beneficial.	AT1	0.871	0.865	0.873	0.713	0.350
	I enjoy the experience of visiting this urban forest.	AT2	0.875				
	This urban forest is worth visiting on a regular basis.	AT3	0.785				
	This urban forest is an enjoyable recreational destination.	AT4	0.843				
Pro-Environmental Behavior Intention	I feel responsible for preserving this urban forest.	PEB1	0.819	0.877	0.886	0.670	0.233
	I intend to reduce my use of fossil-fuel-based transportation.	PEB2	0.782				
	I prefer recreational activities that are environmentally friendly.	PEB3	0.837				
	I intend to use environmentally friendly products.	PEB4	0.861				
	I intend to reduce my consumption of single-use products.	PEB5	0.793				

Source: Processed from primary data (2026)

4.1.2. Structural Model Evaluation

The structural model was evaluated to test the proposed hypotheses and examine the relationships among experience quality, perceived value, attitude, and pro-environmental behavioral intention. Prior to hypothesis testing, collinearity was assessed using the variance inflation factor (VIF). All VIF values ranged between 1.000 and 2.669, which are well below the threshold of 5.00, indicating no multicollinearity issues (Hair et al., 2024). Path coefficients were analyzed using bootstrapping with 10,000 subsamples at a 95%

confidence level, ensuring that the T-values exceeded the 1.96 threshold and P-value significance was < 0.05 (Hair et al., 2024).

Table 3. Hypotheses Result

Hypotheses	VIF	β	T-Values	P-Values	f^2
H1. Experience Quality → Attitude	1.000	0.707	20.243	0.000	0.997
H2. Experience Quality → Perceived Value	1.000	0.689	18.270	0.000	0.905
H3. Attitude → Pro-Environmental Behavior Intention	2.669	0.333	4.562	0.000	0.065
H4. Perceived Value → Pro-Environmental Behavior Intention	2.546	0.233	3.653	0.000	0.033
H5. Experience Quality → Pro-Environmental Behavior Intention	2.269	0.091	1.487	0.137	0.006

Table 4. Indirect Effects and Confidence Intervals (CI)

Path	β	T-Values	P-Values	2.5 % CI	97.5 % CI
Experience Quality → Attitude → Pro-Environmental Behavior Intention	0.235	4.351	0.000	0.132	0.343
Experience Quality → Perceived Value → Pro-Environmental Behavior Intention	0.161	3.506	0.000	0.073	0.254

Table 5. Total Effects

Path	β	T-Values	P-Values
Experience Quality → Pro-Environmental Behavior Intention	0.486	8.010	0.000

As shown in Table 3, the hypothesis testing results revealed that experience quality had a strong and significant effect on attitude, supporting H1. Similarly, experience quality significantly influenced perceived value, supporting H2. These findings indicate that higher perceived experience quality enhances both visitors' value evaluations and their attitudes toward urban forest ecotourism. Furthermore, perceived value showed a significant positive effect on pro-environmental behavioral intention, supporting H3. In addition, attitude significantly influenced pro-environmental behavioral intention, supporting H4. These results align with the Theory of Planned Behavior, confirming that cognitive evaluations and attitudes play important roles in shaping pro-environmental intentions. However, the direct effect of experience quality on pro-environmental behavioral intention was not significant.

Therefore, H5 was rejected. This finding suggests that experience quality does not directly translate into pro-environmental behavioral intention but rather exerts its influence indirectly through perceived value and attitude. Overall, four out of the five proposed hypotheses were supported. Experience quality significantly influenced perceived value and attitude, which in turn significantly affected pro-environmental behavioral intention. The nonsignificant direct path from experience quality to pro-environmental behavioral intention highlights the importance of mediating mechanisms, indicating that experiential encounters must first be cognitively and attitudinally processed before translating into pro-environmental intentions (Bamberg & Möser, 2007; Klöckner, 2013).

The analysis of specific indirect effects as in Table 4 further confirms this mediating mechanism. Experience quality shows a positive indirect effect on pro-environmental behavioral intention through perceived value and attitude. These results indicate that visitors' experiential encounters with urban forests must first be cognitively evaluated and attitudinally internalized before influencing their intentions to engage in environmentally responsible behaviors. The bias-corrected confidence intervals for both indirect paths do not include zero (Hair et al., 2024), confirming the significance of the mediation effects. Furthermore, the total effect of experience quality on pro-environmental behavioral intention was positive,

indicating that experience quality influences intention primarily through evaluative and attitudinal mechanisms.

In addition to the indirect effects, Table 5 shows that the total effect of experience quality on pro-environmental behavioral intention was also examined. The results indicate that the total effect is positive, suggesting that although the direct relationship is not significant, experience quality still contributes to pro-environmental behavioral intention through its indirect influence via perceived value and attitude.

The explanatory power and predictive capability of the structural model were assessed using the coefficient of determination (R^2), effect size (f^2), and predictive relevance (Q^2). R^2 values of 0.75, 0.50, and 0.25 can be interpreted as substantial, moderate, and weak, respectively (Hair et al., 2024). The results indicate that the R^2 values for attitude (0.499) and perceived value (0.475) suggest a moderate level of explanatory power, indicating that quality of experience explains a substantial portion of the variance in both constructs. Meanwhile, the R^2 value for pro-environmental behavioral intention (0.360) indicates a moderate predictive capability, suggesting that attitude and perceived value jointly explain 36.0% of the variance in visitors' pro-environmental behavioral intention. Furthermore, the effect size (f^2) analysis shows that quality of experience has a large effect on attitude ($f^2 = 0.997$) and perceived value ($f^2 = 0.905$), indicating that experiential encounters play a dominant role in shaping visitors' evaluations. In contrast, attitude ($f^2 = 0.065$) and perceived value ($f^2 = 0.033$) exhibit small effects on pro-environmental behavioral intention, whereas the direct effect of quality of experience on pro-environmental behavioral intention is negligible ($f^2 = 0.006$). Finally, the predictive relevance assessed using the blindfolding procedure shows that the Q^2 values for attitude (0.350), perceived value (0.285), and pro-environmental behavioral intention (0.233) are all greater than zero, indicating that the model demonstrates adequate predictive relevance for the endogenous constructs (Hair et al., 2024).

4.2. Discussion

This study provides empirical evidence on the mechanism through which experience quality influences pro-environmental behavioral intention in the context of urban forest ecotourism. The results demonstrate that experience quality has significant positive effects on perceived value and attitude, confirming that visitors' experiential encounters play a crucial role in shaping cognitive and evaluative responses. Furthermore, both perceived value and attitude were found to significantly influence pro-environmental behavioral intention, supporting the core assumptions of the Theory of Planned Behavior (Ajzen, 1991). However, the direct relationship between experience quality and pro-environmental behavioral intention was not supported. This finding suggests that experiential encounters alone are insufficient to directly motivate environmentally responsible intentions unless they are cognitively processed and evaluated. In other words, experience quality must first translate into favorable attitudes and value perceptions before influencing intentions. This pattern aligns with previous tourism studies emphasizing the mediating role of psychological evaluations in transforming experiences into behavioral intentions (Chen & Chen, 2010). Overall, the findings highlight the importance of attitudinal and value-based mechanisms in linking experiential quality to pro-environmental intentions within urban forest ecotourism.

From a theoretical perspective, this study contributes to the extension of the Theory of Planned Behavior by elucidating the experiential origins of attitude and perceived value in an ecotourism context. While TPB has been widely applied to predict pro-environmental intentions (Ajzen, 1991; Chen & Chen, 2010; Lee, 2011), it often treats attitude as a static antecedent without explaining how it is formed. By integrating Experience Economy Theory (Pine & Gilmore, 1998), this study demonstrates that experience quality serves as a formative antecedent that shapes visitors' evaluative judgments. The significant paths from experience quality to attitude and perceived value indicate that experiential encounters function as a critical psychological input within the TPB framework. This finding reinforces the argument that TPB's explanatory power can be enhanced by incorporating experiential variables that capture the context-specific nature of tourism consumption. In doing so, the study responds to prior calls for experience-based extensions of TPB in tourism and sustainability research (Han et al., 2010), thereby strengthening the theoretical robustness of TPB in explaining environmentally responsible intentions.

This study also contributes to the experience economy literature by clarifying the indirect role of experience quality in shaping pro-environmental behavioral intention. The rejection of the direct effect between experience quality and intention underscores that experiential encounters do not automatically translate into responsible behavioral intentions. Instead, experiences must be cognitively evaluated and internalized through perceived value and attitude. This finding aligns with experience economy research, suggesting that value creation is not inherent in the experience itself but emerges through visitors' interpretations and evaluations (Prebensen et al., 2013). By empirically demonstrating this mediation mechanism, this study advances the understanding of how experiential stimuli are transformed into intentional outcomes in urban ecotourism settings. Moreover, the findings suggest that urban forest experiences function more as reflective and evaluative triggers rather than direct behavioral drivers. This nuanced understanding contributes to bridging experience economy theory with behavioral decision-making models, offering a more refined explanation of how experiential quality influences sustainability-oriented intentions through psychological processing.

The findings of this study have several practical implications for urban forest managers and ecotourism planners. First, the strong influence of experience quality on perceived value and attitude suggests that managers should prioritize the design of high-quality experiential elements rather than solely focusing on physical infrastructure. Enhancing sensory experiences, such as visual aesthetics, natural soundscapes, and environmental comfort, can significantly improve visitors' evaluations of urban forest destinations. In addition, providing well-organized recreational activities and ensuring a clean, safe, and comfortable environment can strengthen visitors' perceived value. Importantly, these experiential improvements should be strategically framed to highlight environmental and social benefits, as perceived value was found to directly influence pro-environmental intentions. By consciously designing experiences that communicate the broader significance of urban forests as ecological and social assets, managers can encourage visitors to perceive them as meaningful and worthwhile. This approach is consistent with prior findings that emphasize the role of experience design in enhancing value perception and sustainable tourism outcomes (Kim & Thapa, 2018).

Second, the significant role of attitude in shaping pro-environmental behavioral intention highlights the importance of fostering positive evaluations toward urban forest ecotourism. Managers and policymakers should integrate interpretive and educational components that help visitors reflect on their experiences and connect them with environmental responsibility. Informational signage, guided activities, and environmental education programs can reinforce positive attitudes by linking enjoyable experiences with sustainability values. Such initiatives can facilitate the cognitive processing necessary to transform experiences into pro-environmental intentions. Additionally, communication strategies should emphasize how individual actions contribute to the preservation of urban forests, thereby reinforcing visitors' sense of responsibility. The absence of a direct effect from experience quality to intention further suggests that experiential enjoyment alone is insufficient to promote sustainable behavior. Instead, managerial efforts should focus on shaping visitors' interpretations and evaluations of their experiences. By aligning experiential design with attitudinal and value-based messaging, urban forest ecotourism can more effectively function as a platform for promoting environmentally responsible intentions among urban residents (Lee & Jan, 2018).

5. CONCLUSION

This study examined the relationships between experience quality, perceived value, attitude, and pro-environmental behavioral intention within the context of urban forest ecotourism by integrating the Theory of Planned Behavior (Ajzen, 1991) and Experience Economy Theory (Pine & Gilmore, 1998). The findings confirm that experience quality plays a crucial role in shaping visitors' perceived value and attitudes toward urban forest ecotourism. In turn, both perceived value and attitude significantly influence pro-environmental behavioral intention, supporting the central logic of the Theory of Planned Behavior (Ajzen, 1991). However, the study found no significant direct effect of experience quality on pro-environmental behavioral intention, indicating that experiential encounters must be cognitively and

attitudinally processed before translating into environmentally responsible intentions. These results highlight that experience quality primarily functions as an indirect driver of pro-environmental intention through evaluative mechanisms. Overall, this study contributes to a deeper understanding of how experiential factors influence sustainable behavioral intentions in urban forest ecotourism, emphasizing the importance of psychological processes in transforming experiences into pro-environmental outcomes.

Despite its contributions, this study has several limitations that should be acknowledged. First, the use of a cross-sectional research design limits the ability to infer causal relationships among the variables. Although the proposed relationships are theoretically grounded, future research employing longitudinal or experimental designs would provide stronger causal evidence. Second, the data were collected from visitors to urban forests in a single urban context, which may limit the generalizability of the findings to other cities or cultural settings. Third, this study focused on pro-environmental behavioral intention rather than actual behavior, which may not fully capture visitors' real-world actions. Additionally, self-reported data may be subject to social desirability bias, particularly when measuring environmentally responsible intentions. These limitations suggest that the findings should be interpreted with caution and viewed as an initial step toward understanding experience-based mechanisms in urban forest ecotourism.

Future research can build on this study in several ways. First, scholars may consider incorporating actual pro-environmental behaviors or observational measures to complement self-reported intentions and enhance behavioral validity. Second, future studies could examine the moderating roles of variables, such as perceived crowding, environmental awareness, or place attachment, to better understand the boundary conditions of the proposed model. Third, comparative studies across different urban forest settings or countries would help assess the robustness and generalizability of the findings. Finally, future research could extend the theoretical framework by integrating additional psychological constructs, such as moral norms or environmental identity, to further enrich the experience-based extension of the Theory of Planned Behavior. Such efforts would contribute to a more comprehensive understanding of how urban forest ecotourism can effectively promote sustainable behavior among visitors.

Ethical Approval

Not Applicable

Informed Consent Statement

Not Applicable

Authors' Contributions

SNAF contributed to the conceptualization of the study, development of the research design, data collection, statistical testing and data analysis. She also led the writing of the manuscript and coordinated the overall research process. KAC contributed to the development of research design, data collection, statistical testing, and interpretation of the findings.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Data Availability Statement

The data presented in this study are available on request from the corresponding author due to privacy reasons.

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REFERENCES

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Ballantyne, R., Packer, J., & Falk, J. (2011). Visitors' learning for environmental sustainability: Testing short- and long-term impacts of wildlife tourism experiences using structural equation modelling. Tourism Management, 32(6), 1243–1252. https://doi.org/10.1016/j.tourman.2010.11.003

Bamberg, S., & Möser, G. (2007). Twenty years after Hines, Hungerford, and Tomera: A new meta-analysis of psycho-social determinants of pro-environmental behaviour. Journal of Environmental Psychology, 27(1), 14–25. https://doi.org/10.1016/j.jenvp.2006.12.002

Bigné, J. E., Andreu, L., & Gnoth, J. (2005). The theme park experience: An analysis of pleasure, arousal and satisfaction. Tourism Management, 26(6), 833–844. https://doi.org/10.1016/j.tourman.2004.05.006

Bratman, G. N., Anderson, C. B., Berman, M. G., Cochran, B., De Vries, S., Flanders, J., Folke, C., Frumkin, H., Gross, J. J., & Hartig, T. (2019). Nature and mental health: An ecosystem service perspective. Science Advances, 5(7), eaax0903. https://doi.org/10.1126/sciadv.aax0903

Buckley, R. (2009). Ecotourism: Principles and Practices. CABI. https://books.google.co.id/books?id=qRzHNJgEiBEC

Chen, C.-F., & Chen, F.-S. (2010). Experience quality, perceived value, satisfaction and behavioral intentions for heritage tourists. Tourism Management, 31(1), 29–35. https://doi.org/10.1016/j.tourman.2009.02.008

Chiu, Y.-T. H., Lee, W.-I., & Chen, T.-H. (2014). Environmentally Responsible Behavior in Ecotourism: Exploring the Role of Destination Image and Value Perception. Asia Pacific Journal of Tourism Research, 19(8), 876–889. https://doi.org/10.1080/10941665.2013.818048

Dewi, F. R., Fatmawati, I., & Musa, H. G. (2022). Effects of Experience Quality and Perceived Value on Tourist Satisfaction and Behavioral Intention in Prambanan Temple. Jurnal Bisnis: Teori Dan Implementasi, 13(2). https://doi.org/https://doi.org/10.18196/jbti.v13i2.17168

Fennell, D. A. (2014). Ecotourism. Routledge.

Gallarza, M., Gil-Saura, I., & Arteaga-Moreno, F. (2017). Exploring competing models on sacrifices, quality, value, satisfaction and loyalty with PLS and partial correlations. European Journal of Tourism Research, 17(17), 116–135. https://doi.org/10.54055/ejtr.v17i.297

Hair, J. F., Ortinau, D. J., & Harrison, D. E. (2024). Essentials of marketing research (Sixth edition, international student edition). McGraw Hill Education.

Han, H., Hsu, L.-T. (Jane), & Sheu, C. (2010). Application of the Theory of Planned Behavior to green hotel choice: Testing the effect of environmental friendly activities. Tourism Management, 31(3), 325–334. https://doi.org/10.1016/j.tourman.2009.03.013

Han, H., Kim, W., & Kiatkawsin, K. (2017). Emerging youth tourism: Fostering young travelers' conservation intentions. Journal of Travel & Tourism Marketing, 34(7), 905–918. https://doi.org/10.1080/10548408.2016.1261758

Hosany, S., & Witham, M. (2010). Dimensions of cruisers' experiences, satisfaction, and intention to recommend. Journal of Travel Research, 49(3), 351–364. https://doi.org/10.1177/0047287509346859

Kim, M., & Thapa, B. (2018). Perceived value and flow experience: Application in a nature-based tourism context. Journal of Destination Marketing & Management, 8, 373–384. https://doi.org/10.1016/j.jdmm.2017.08.002

Klöckner, C. A. (2013). A comprehensive model of the psychology of environmental behaviour—A meta-analysis. Global Environmental Change, 23(5), 1028–1038. https://doi.org/10.1016/j.gloenvcha.2013.05.014

Konijnendijk, C., Nilsson, K., Randrup, T., & Schipperijn, J. (2005). Urban forests and trees: A reference book. Springer.

Lawasi, Moh. A., Kenda, N., Yusnikusumah, T. R., Pratama, B. B., Pratiwi, D., Septina, A. D., & Asrawijaya, E. (2025). Forest-Based Ecotourism in Indonesia: A Comprehensive Review of Policy Challenges, Diverse Practices, Stakeholder Engagement, Conservation Efforts, and Socioeconomic Aspects. Geojournal of Tourism and Geosites, 60(2 supplement), 1041–1056. https://doi.org/10.30892/gtg.602spl02-1478

Lee, T. H. (2011). How recreation involvement, place attachment and conservation commitment affect environmentally responsible behavior. Journal of Sustainable Tourism, 19(7), 895–915. https://doi.org/10.1080/09669582.2011.570345

Lee, T. H., & Jan, F.-H. (2018). Ecotourism Behavior of Nature-Based Tourists: An Integrative Framework. Journal of Travel Research, 57(6), 792–810. https://doi.org/10.1177/0047287517717350

Pine, B. J., & Gilmore, J. H. (1998). Welcome to the Experience Economy. Harvard Business Review, 7(1), 97–105. Reprint 98407.

Prebensen, N. K., Woo, E., Chen, J. S., & Uysal, M. (2013). Motivation and Involvement as Antecedents of the Perceived Value of the Destination Experience. Journal of Travel Research, 52(2), 253–264. https://doi.org/10.1177/0047287512461181

Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. Journal of Retailing, 77(2), 203–220. https://doi.org/10.1016/S0022-4359(01)00041-0

Tang, H., Ma, Y., & Ren, J. (2022). Influencing factors and mechanism of tourists' pro-environmental behavior – Empirical analysis of the CAC-MOA integration model. Frontiers in Psychology, 13, 1060404. https://doi.org/10.3389/fpsyg.2022.1060404

World Health Organization (WHO). (2016). Urban green spaces and health. A review of evidence. WHO Regional Office for Europe. https://www.who.int/europe/publications/i/item/WHO-EURO-2016-3352-43111-60341

Wu, H.-C., & Li, T. (2017). A Study of Experiential Quality, Perceived Value, Heritage Image, Experiential Satisfaction, and Behavioral Intentions for Heritage Tourists. Journal of Hospitality & Tourism Research, 41(8), 904–944. https://doi.org/10.1177/1096348014525638

Zhang, H., Fu, X., Cai, L. A., & Lu, L. (2014). Destination image and tourist loyalty: A meta-analysis. Tourism Management, 40, 213–223. https://doi.org/10.1016/j.tourman.2013.06.006