

## Tourist Loyalty In Bali Green Villages: A Planned Behavior Perspective

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### Abstract

This study investigates the psychological determinants of tourist loyalty in Green Tourism Villages across Bali Province through the lens of the Theory of Planned Behavior (TPB). Despite the proliferation of community-based green tourism initiatives, repeat visitation rates remain suboptimal, threatening the long-term sustainability of these enterprises. Using a quantitative survey of 384 domestic and international tourists who visited Green Tourism Villages in Bali, data were analyzed through Partial Least Squares Structural Equation Modeling (PLS-SEM). Results reveal that attitude toward environmentally friendly behavior exerts the strongest influence on behavioral intention ( $\beta = 0.421$ ,  $p < 0.001$ ), followed by subjective norms ( $\beta = 0.312$ ,  $p < 0.001$ ) and perceived behavioral control ( $\beta = 0.287$ ,  $p < 0.001$ ). All three determinants also demonstrate significant direct effects on tourist loyalty. Importantly, behavioral intention partially mediates the relationships between all three TPB determinants and tourist loyalty. The findings advance theoretical understanding of loyalty formation in sustainable tourism contexts by extending TPB to a multidimensional loyalty construct within a collectivist cultural setting. This study offers practical guidance for destination managers to design psychologically informed strategies that cultivate favorable attitudes, leverage social influence, and enhance perceived control to foster enduring tourist loyalty.

**Keywords:** *attitude, subjective norms, perceived behavioral control, behavioral intention, tourist loyalty.*

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### INTRODUCTION

The global paradigm shift toward sustainable tourism has fundamentally altered traveler preferences and destination selection criteria. Destinations are no longer evaluated solely on aesthetic appeal or luxury amenities, but increasingly on their demonstrated commitment to environmental stewardship and community empowerment (Papallou et al., 2024). This transformation aligns with the Sustainable Development Goals (SDGs), particularly Goal 11 on sustainable communities and Goal 12 on responsible consumption and production patterns. Irwansyah et al., (2025) affirm that sustainable tourism initiatives are directly linked to the SDGs, especially Goal 11 on sustainable communities, reinforcing the relevance of Green Tourism Villages as a vehicle for achieving global sustainability targets. Bali Province, recognized internationally as Indonesia's premier tourism destination, has proactively

responded to this paradigm shift through the strategic development of Green Tourism Villages across its nine regencies and municipalities. Villages including Penglipuran in Bangli Regency, Pemuteran in Buleleng Regency, and Ceningan in Klungkung Regency exemplify how integrated waste management systems, renewable energy adoption, and ecosystem conservation practices can simultaneously attract responsible travelers while preserving cultural authenticity. This trend aligns with the shifting preference toward nature-based leisure, which has become increasingly prominent in recent decades (Trianasari et al., 2021).

The Bali Provincial Government has codified its commitment to sustainable tourism development through regional regulations aligned with the broader vision of Nangun Sat Kerthi Loka Bali, a philosophical framework emphasizing environmental sanctity and cosmic harmony. Rahmawati & Widiastini, (2025) further highlight that supportive government policies, including regulations protecting the natural environment and local culture, are fundamental to sustainable tourism development in Bali. This regulatory foundation provides institutional legitimacy for green tourism initiatives while creating economic incentives for local communities to participate in conservation-oriented development. The implementation of green tourism principles in village settings generates multidimensional benefits encompassing environmental preservation, green employment creation, enhanced local income streams, and operational efficiencies derived from waste reduction and renewable energy utilization (Bappenas, 2024). Despite these promising developments, empirical evidence reveals persistent challenges in maintaining consistent visitor flows to Green Tourism Villages. Data indicate significant inter-regency variation in visitor numbers, with more accessible and infrastructurally developed regions such as Gianyar Regency and Denpasar City recording substantially higher visitation rates compared to geographically remote areas including Karangasem and Bangli Regencies. Critically, the proportion of repeat visitors across all regencies remains below 50 percent, signaling suboptimal tourist loyalty that threatens the long-term economic viability of these community-based tourism enterprises.

Tourist loyalty in the context of Green Tourism Villages represents a multidimensional construct encompassing cognitive, affective, conative, and behavioral dimensions (Çavuşoğlu et al., 2020; Kim et al., 2021). Cognitive loyalty reflects tourists' rational assessment of destination quality and value proposition, while affective loyalty captures emotional attachment developed through satisfying experiential encounters (Hwang et al., 2022). Conative loyalty manifests as stated intentions to revisit and recommend, whereas behavioral loyalty represents actual repeat visitation patterns (Nieves-Pavón et al., 2024). The significance of tourist loyalty extends beyond individual behavioral outcomes to encompass broader destination sustainability, as loyal tourists not only generate reliable revenue streams through repeat visitation but also function as credible brand ambassadors through positive word-of-mouth communication (Dai et al., 2023; Ong et al., 2023). Within the sustainable tourism paradigm, tourist loyalty additionally signifies conscious alignment with environmental values and social responsibility principles championed by destination management (Solekah & Prayogi, 2024). Nevertheless, existing literature reveals limited empirical investigation into the psychological mechanisms

underlying loyalty formation specifically within green tourism contexts, representing a significant scholarly gap warranting systematic inquiry.

The Theory of Planned Behavior (TPB), originally formulated by Ajzen, (1991), provides a robust theoretical framework for explicating the psychological antecedents of behavioral intention and subsequent behavioral enactment. TPB posits that behavioral intention, defined as an individual's motivational readiness to perform a given behavior, constitutes the most proximal predictor of actual behavior (Ajzen, 1991; Godbersen et al., 2020). This intention is itself determined by three conceptually distinct yet interrelated constructs: attitude toward the behavior, reflecting favorable or unfavorable evaluation of behavioral performance (Kim et al., 2021); subjective norms, capturing perceived social pressure from significant referents to engage or refrain from the behavior (Ramírez-Asís et al., 2020); and perceived behavioral control, representing subjective assessment of behavioral feasibility given available resources and anticipated obstacles (Chuenban et al., 2021). TPB has demonstrated considerable explanatory power across diverse behavioral domains, including pro-environmental consumption (Putra et al., 2024; Tan & Quang, 2023), sustainable transportation choices (Siagian et al., 2023), and green product adoption (Rodrigues et al., 2023). However, application of TPB to understand tourist loyalty within green tourism destinations remains notably underdeveloped, presenting an opportunity for theoretical extension and empirical validation.

Contemporary scholarship applying TPB to sustainable tourism contexts has yielded inconsistent and sometimes contradictory findings regarding the relative influence of its constituent constructs. Several studies identify attitude as the predominant predictor of visitation intention to green destinations, suggesting that favorable evaluations of environmental responsibility strongly motivate behavioral engagement (Li et al., 2023; Putra et al., 2024). Conversely, alternative research streams indicate that positive attitudes alone insufficiently guarantee behavioral loyalty in the absence of congruent emotional experiences and value alignment (Anisimova & Weiss, 2023; Xu & Zhao, 2023). Similarly, investigations examining subjective norms reveal that while social influence significantly shapes visitation intentions in collectivist cultural contexts (Koay et al., 2024; Wicaksono et al., 2024), its explanatory contribution diminishes when individual preferences and personal values assume greater decision-making prominence (Dangelico et al., 2024; Mainardes et al., 2021). Perceived behavioral control demonstrates comparable empirical instability, with some studies confirming its robust predictive validity (Tanveer et al., 2025) and others reporting negligible effects when external factors such as destination accessibility and informational availability dominate decision calculus (Tan & Quang, 2023). These empirical inconsistencies underscore the necessity for context-specific investigation that systematically examines the interrelationships among TPB constructs within green tourism settings.

Despite the growing application of TPB in sustainable tourism research, four critical gaps persist. First, existing studies predominantly treat behavioral intention as the terminal outcome, overlooking how TPB determinants translate into multidimensional tourist loyalty encompassing cognitive, affective, conative, and behavioral dimensions (Çavuşoğlu et al., 2020; Nieves-Pavón et al., 2024). Second, TPB's applicability within the unique socio-cultural context of Balinese Green Tourism

Villages characterized by communal values, customary laws (awig-awig), and Tri Hita Karana philosophy remains empirically unexplored (Lestari et al., 2025). Third, the simultaneous mediating role of behavioral intention across all three TPB determinants has not been systematically examined within a unified framework (Mainardes et al., 2021; Nguyen, 2025). Fourth, persistent inconsistencies regarding the relative influence of attitude, subjective norms, and perceived behavioral control on sustainable tourist behavior necessitate context-specific reconciliation (Anisimova & Weiss, 2023; Dangelico et al., 2024). Addressing these gaps, this study offers the first comprehensive empirical investigation that extends TPB to explain multidimensional tourist loyalty within Balinese Green Tourism Villages, systematically examines behavioral intention as a simultaneous mediator, and provides culturally contextualized evidence to resolve extant theoretical inconsistencies. The urgency of this inquiry stems from suboptimal repeat visitation rates threatening the viability of community-based green tourism enterprises. The originality lies in its integrated approach to addressing these interconnected theoretical and practical gaps within a methodologically rigorous framework.

The current study addresses these identified gaps through rigorous quantitative investigation of the psychological determinants influencing tourist loyalty in Bali's Green Tourism Villages. Specifically, the research examines three primary objectives: first, to analyze the direct effects of attitude toward environmentally friendly behavior, subjective norms, and perceived behavioral control on behavioral intention; second, to evaluate the direct effects of these three TPB determinants on tourist loyalty; and third, to assess the mediating role of behavioral intention in transmitting the effects of TPB determinants to tourist loyalty outcomes. The study contributes to theoretical advancement by extending TPB applicability to the underexplored domain of green tourism loyalty while simultaneously providing empirical evidence to reconcile previously inconsistent findings regarding construct interrelationships. From a practical standpoint, research findings will inform destination managers, tourism marketers, and policymakers in designing psychologically informed interventions that effectively cultivate tourist loyalty and ensure the long-term sustainability of community-based green tourism enterprises in Bali Province.

## LITERATURE REVIEW

The conceptual framework of this study is developed based on the Theory of Planned Behavior (TPB) proposed by Ajzen (1991), which posits that behavioral intention is determined by three fundamental constructs: attitude toward the behavior, subjective norms, and perceived behavioral control. In the context of Green Tourism Villages in Bali Province, this framework is extended to include tourist loyalty as the ultimate outcome variable, with behavioral intention serving as a mediating mechanism.

Attitude toward environmentally friendly behavior reflects tourists' favorable or unfavorable evaluation of engaging in responsible environmental practices during their visits to Green Tourism Villages (Kim et al., 2021). Tourists who hold positive attitudes toward green behavior are more likely to develop strong intentions to act responsibly and demonstrate greater loyalty to sustainable destinations. Subjective

norms capture the perceived social pressure from significant referents, such as family, friends, and community leaders, to engage in or refrain from environmentally friendly behavior (Said et al., 2020). In collectivist societies like Indonesia, where communal values and social harmony play significant roles in shaping individual behavior, subjective norms are expected to exert substantial influence on both behavioral intention and loyalty (Koay et al., 2024). Perceived behavioral control represents tourists' assessment of their ability to perform environmentally responsible actions, considering available resources, skills, and anticipated obstacles (Ramírez-Asís et al., 2020). Tourists who perceive greater control over their ability to behave responsibly are more likely to form strong behavioral intentions and maintain loyalty to green destinations.

Behavioral intention, defined as an individual's motivational readiness to perform a given behavior (Ajzen, 1991), serves as the most proximal predictor of actual behavior and is hypothesized to mediate the relationships between the three TPB determinants and tourist loyalty. Loyalty in this study is conceptualized as a multidimensional construct encompassing cognitive, affective, conative, and behavioral dimensions (Çavuşoğlu et al., 2020; Kim et al., 2021). Cognitive loyalty reflects tourists' rational assessment of destination quality, affective loyalty captures emotional attachment developed through satisfying experiences, conative loyalty manifests as stated intentions to revisit and recommend, and behavioral loyalty represents actual repeat visitation patterns (Nieves-Pavón et al., 2024).

Based on these theoretical foundations, the conceptual framework posits that attitude toward environmentally friendly behavior, subjective norms, and perceived behavioral control positively influence behavioral intention (H1, H2, H3) and tourist loyalty (H5, H6, H7). Furthermore, behavioral intention is hypothesized to positively influence tourist loyalty (H4) and to mediate the relationships between the three TPB determinants and tourist loyalty (H8, H9, H10). The conceptual framework is illustrated in Figure 1.

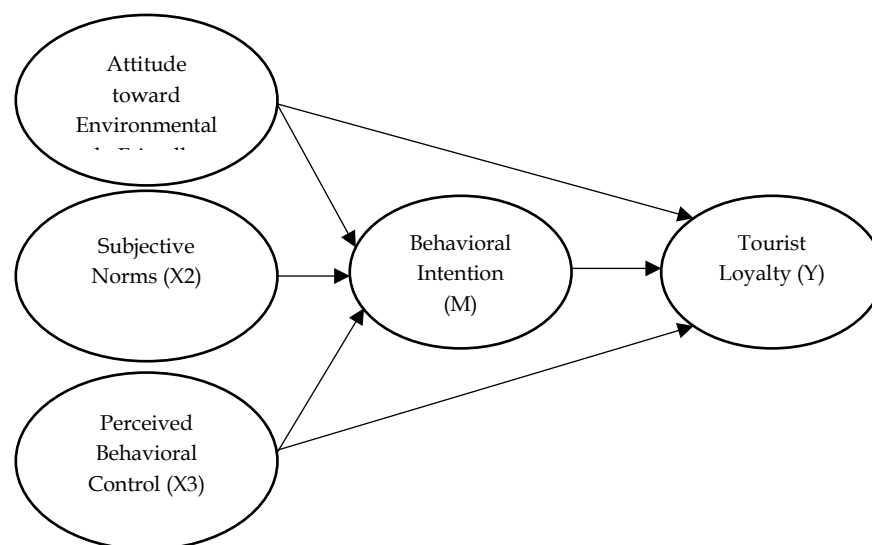


Figure 1. Conceptual Framework

## METHODOLOGY

The current study was based on a quantitative approach with a causal research design, aiming to determine how exogenous variables influence endogenous variables through mediating variables. The quantitative approach was selected because the observed phenomena possess objective reality amenable to measurement, and research variables can be identified with their intercorrelations statistically quantifiable (Creswell, 2018). The study sought to achieve breadth in understanding the effect of psychological determinants on behavioral intention and tourist loyalty through statistical generalization. This design enables rigorous hypothesis testing and permits examination of both direct and indirect relationships among constructs within a unified analytical framework (Hair et al., 2019).

The target population comprised domestic tourists who had visited Green Tourism Villages in Bali Province at least once during the preceding two-year period. Based on estimated visitation data for 2024, the total population approximated 933,571 individuals distributed across nine regencies and municipalities. Sample size determination employed the Krejcie & Morgan, (1970) formula, which provides a widely accepted method for calculating representative sample sizes from finite populations. With a 95 percent confidence level and 5 percent margin of error, the calculation yielded a required sample of 384 respondents. Proportional cluster sampling was implemented to ensure representative geographic distribution, with sample allocation across regencies calculated proportionally to visitation volume. Respondent eligibility criteria included: minimum age of 17 years; minimum one visit to a Green Tourism Village in Bali Province within the preceding two years; and willingness to complete the research questionnaire.

The data collection was based on a quantitative phase conducted between April and May 2025 using an online survey tool (Google Forms) to reach a broad sample of Indonesian domestic travelers who had visited Green Tourism Villages in Bali Province. In the quantitative phase, 384 respondents were selected using proportional cluster sampling. They consisted of domestic tourists who met the following criteria: aged above 17 years; had visited Green Tourism Villages in Bali Province at least once in the last two years; and were willing to complete the research questionnaire.

A structured questionnaire was designed to collect quantitative data comprising five constructs: Attitude toward Environmentally Friendly Behavior, Subjective Norms, Perceived Behavioral Control, Behavioral Intention, and Tourist Loyalty. Operationalization of each construct was performed using multiple items based on existing scales that had been validated to make them contextually relevant. A 5-point Likert scale was used to rate all items with responses varying on the scale of 1 (strongly disagree) to 5 (strongly agree).

## RESULTS AND DISCUSSION

### Descriptive Statistics and Respondent Profile

The quantitative part of the present study obtained responses from 384 participants who had visited at least one Green Tourism Village in Bali Province during the past two years. The demographic focus was directed at four important dimensions, namely nationality, gender, generational cohort, and educational

background. These factors were selected considering their obvious correlation with psychological patterns and cultural backgrounds in tourism situations. The nationality distribution indicated that the majority of participants were domestic tourists (Indonesian), comprising approximately 58 percent of the sample, while international tourists represented approximately 42 percent. The age distribution indicated that the majority of participants belonged to Generation Z (aged 18-27 years), as the group of digital natives often active on various platforms when seeking and sharing travel information. Millennials and Generation X respondents represented smaller proportions. Gender distribution was relatively balanced, with women comprising approximately 53 percent of the sample. In terms of educational background, the majority of respondents held a Bachelor's degree, reflecting the profile of educated travelers who demonstrate greater awareness of sustainable tourism practices. These demographic attributes are essential in comprehending differences in how various tourist groups with diverse cultural backgrounds interact with psychological determinants, develop destination perceptions, and form loyalty expectations when visiting green tourism sites.

**Table 1. Demographic Characteristics of Respondents**

Characteristic	Category	Frequency (n)	Percentage (%)
Nationality	Domestic (Indonesian)	223	58.1
	International (Foreign)	161	41.9
Gender	Male	180	46.9
	Female	204	53.1
Generation	Generation Z (18-27 years)	310	80.7
	Millennials (28-43 years)	55	14.3
	Generation X (44-59 years)	19	5.0
Education	High School	42	10.9
	Diploma	56	14.6
	Bachelor's Degree	218	56.8
	Master's Degree	52	13.5
Occupation	Doctoral Degree	16	4.2
	Student	124	32.3
	Private Employee	98	25.5
	Civil Servant	42	10.9
	Entrepreneur	65	16.9
	Professional	38	9.9
Visit Frequency	Others	17	4.5
	First Visit	156	40.6
	2-3 Times	148	38.5
	More than 3 Times	80	20.9

Source: Researcher, (2026)

### Validity and Reliability Testing

Convergent validity was assessed through outer loadings and Average Variance Extracted (AVE). A value of outer loading of 0.70 or more was used as the criterion of acceptable convergent validity (Hair et al., 2019). According to the results presented in Table 3, measurement items loaded highly on their respective constructs with values exceeding 0.70, indicating that each construct was fully and clearly

measured. The five constructs obtained matched the planned constructs of this research: attitude toward environmentally friendly behavior, subjective norms, perceived behavioral control, behavioral intention, and tourist loyalty. These findings indicate good evidence of indicators measuring their intended constructs, thus validating the convergent validity of the measurement instrument.

**Table 2. Outer Loadings and Construct Reliability**

Construct	Item	Outer Loading	Cronbach's Alpha	Composite Reliability	AVE
Attitude toward Environmentally Friendly Behavior (X1)	ATT1	0.856	0.840	0.893	0.675
	ATT2	0.827			
	ATT3	0.808			
	ATT4	0.818			
	ATT5	0.833			
Subjective Norms (X2)	SN1	0.845	0.832	0.889	0.667
	SN2	0.812			
	SN3	0.798			
	SN4	0.823			
	SN5	0.806			
	SN6	0.815			
Perceived Behavioral Control (X3)	PBC1	0.834	0.846	0.894	0.678
	PBC2	0.821			
	PBC3	0.809			
	PBC4	0.838			
	PBC5	0.815			
	PBC6	0.822			
Behavioral Intention (M)	BI1	0.873	0.854	0.912	0.775
	BI2	0.926			
	BI3	0.840			
Tourist Loyalty (Y)	LOY1	0.843	0.832	0.899	0.749
	LOY2	0.881			
	LOY3	0.871			
	LOY4	0.856			
	LOY5	0.834			
	LOY6	0.847			

Source: Researcher, (2026)

Construct reliability was confirmed through Cronbach's Alpha and Composite Reliability values exceeding 0.70, demonstrating good internal consistency across all constructs. The Average Variance Extracted (AVE) for all constructs exceeded the threshold of 0.50, indicating that each construct explains more than half of the variance of its indicators (Hair et al., 2019).

Discriminant validity was assessed using the Fornell-Larcker criterion and the heterotrait-monotrait (HTMT) ratio of correlations. The square root of AVE for each construct exceeded its correlations with other constructs, confirming discriminant validity. Additionally, all HTMT values were below the conservative threshold of 0.85, providing further evidence of discriminant validity (Henseler et al., 2015).

### Structural Model Assessment

The structural model was evaluated through examination of coefficient of determination ( $R^2$ ), predictive relevance ( $Q^2$ ), effect sizes ( $f^2$ ), and model fit indices. The  $R^2$  value for Behavioral Intention was 0.508, indicating that Attitude, Subjective Norms, and Perceived Behavioral Control collectively explain 50.8 percent of the variance in Behavioral Intention. The  $R^2$  value for Tourist Loyalty was 0.809, indicating that the model explains 80.9 percent of the variance in Tourist Loyalty. Both values exceed the moderate threshold of 0.33, demonstrating substantial explanatory power (Hair et al., 2019). Predictive relevance ( $Q^2$ ) values were 0.387 for Behavioral Intention and 0.592 for Tourist Loyalty, both exceeding zero, confirming the model's predictive relevance. The SRMR value was 0.085, below the threshold of 0.10, indicating acceptable model fit.

### Effect Sizes ( $f^2$ )

Effect sizes were calculated to assess the substantive impact of each predictor. Following Cohen's (1988) guidelines,  $f^2$  values of 0.02, 0.15, and 0.35 represent small, medium, and large effects, respectively. Attitude demonstrated a large effect on behavioral intention ( $f^2 = 0.412$ ), while subjective norms ( $f^2 = 0.287$ ) and perceived behavioral control ( $f^2 = 0.223$ ) exhibited medium effects. Behavioral intention showed a large effect on tourist loyalty ( $f^2 = 0.398$ ). For the direct effects on tourist loyalty, attitude ( $f^2 = 0.156$ ) and subjective norms ( $f^2 = 0.118$ ) exhibited medium to small effects, while perceived behavioral control demonstrated a small effect ( $f^2 = 0.089$ ).

### Hypothesis Testing Results

The impact of three psychological determinants, namely Attitude toward Environmentally Friendly Behavior, Subjective Norms, and Perceived Behavioral Control on Behavioral Intention and Tourist Loyalty was analyzed through PLS-SEM using bootstrapping procedures with 5,000 subsamples. The results of hypothesis testing are presented in Table 3.

**Table 3. Summary of Hypothesis Testing Results**

Hypothesis Code	Hypothesis Statement	$\beta$ Coefficient	t-Statistic	p-value	Decision
H1	Attitude has a positive effect on Behavioral Intention	0.421	7.856	0.000	Supported
H2	Subjective Norms have a positive effect on Behavioral Intention	0.312	5.923	0.000	Supported
H3	Perceived Behavioral Control has a positive effect on Behavioral Intention	0.287	4.871	0.000	Supported
H4	Behavioral Intention has a positive effect on Tourist Loyalty	0.458	8.234	0.000	Supported
H5	Attitude has a positive effect on Tourist Loyalty	0.278	4.562	0.000	Supported

Hypothesis Code	Hypothesis Statement	$\beta$ Coefficient	t-Statistic	p-value	Decision
H6	Subjective Norms have a positive effect on Tourist Loyalty	0.235	3.891	0.000	Supported
H7	Perceived Behavioral Control has a positive effect on Tourist Loyalty	0.198	3.214	0.001	Supported

Source: Researcher, (2026)

### Mediation Analysis

Mediation analysis was conducted to examine whether Behavioral Intention serves as a mediating mechanism between the three TPB determinants and Tourist Loyalty. The results of mediation testing are presented in Table 4.

**Table 4. Summary of Mediation Testing Results**

Hypothesis Code	Mediation Path	Indirect Effect	t-Statistic	p-value	Mediation Type	Decision
H8	Attitude → Behavioral Intention → Tourist Loyalty	0.193	5.124	0.000	Partial	Supported
H9	Subjective Norms → Behavioral Intention → Tourist Loyalty	0.143	4.356	0.000	Partial	Supported
H10	Perceived Behavioral Control → Behavioral Intention → Tourist Loyalty	0.131	3.678	0.000	Partial	Supported

Source: Researcher, (2026)

The results indicate that Behavioral Intention partially mediates all three relationships. Specifically, the indirect effects of Attitude ( $\beta = 0.193$ ,  $p < 0.001$ ), Subjective Norms ( $\beta = 0.143$ ,  $p < 0.001$ ), and Perceived Behavioral Control ( $\beta = 0.131$ ,  $p < 0.001$ ) on Tourist Loyalty through Behavioral Intention were all statistically significant. Since the direct effects also remained significant (H5, H6, and H7), partial mediation was established for all three relationships (Hair et al., 2019; Zhao et al., 2010). This finding suggests that while psychological determinants directly influence tourist loyalty, their effects are strengthened through the formation of behavioral intention.

### The Effect of Attitude on Behavioral Intention and Tourist Loyalty

Attitude toward environmentally friendly behavior emerged as the strongest predictor of behavioral intention ( $\beta = 0.421$ ,  $p < 0.001$ ), which is consistent with the cognitive-affective mechanism formulated by Kim et al. (2021), stating that positive evaluations of behavior strengthen psychological readiness to act. The higher ability of attitude compared to other determinants to create credible and emotionally intense

representations of green behavior is also demonstrated in previous studies (Putra et al., 2024; Siagian et al., 2023). This dual nature of attitude influence reflects a cognitive-affective mechanism where belief in environmental benefits combines with emotional satisfaction from behaving responsibly. Tourists who hold favorable attitudes toward environmentally responsible behavior are more likely to develop strong intentions to engage in such behavior during their visits to Green Tourism Villages. Furthermore, attitude demonstrated a significant direct effect on tourist loyalty ( $\beta = 0.278$ ,  $p < 0.001$ ), indicating that positive evaluations of green behavior directly contribute to long-term commitment to sustainable destinations (Anisimova & Weiss, 2023). Notably, the present investigation extends prior work by demonstrating that attitude exerts both direct and indirect effects on loyalty through behavioral intention, a finding that addresses the ongoing scholarly debate regarding the attitude-behavior gap in sustainable consumption contexts (Dangelico et al., 2024; Xu & Zhao, 2023). While previous research has yielded inconsistent findings regarding whether attitude translates directly into loyalty or operates exclusively through intention (Mainardes et al., 2021; Tan & Quang, 2023), the partial mediation pattern observed here suggests that both pathways are operative and complementary rather than mutually exclusive.

### **The Effect of Subjective Norms on Behavioral Intention and Tourist Loyalty**

Subjective norms proved to be a significant predictor of both behavioral intention ( $\beta = 0.312$ ,  $p < 0.001$ ) and tourist loyalty ( $\beta = 0.235$ ,  $p < 0.001$ ), supporting the long-term relevance of social influence in travel decision-making processes, particularly in collectivist settings such as Indonesia (Chuenban et al., 2021; Koay et al., 2024). The discovery supports the notion that personally trusted sources possess increased persuasive power ((Petty & Cacioppo, 1986). In the context of Green Tourism Villages, tourists who perceive strong social support from family, friends, and community leaders are more inclined to develop behavioral intentions aligned with environmentally responsible practices and demonstrate greater loyalty to sustainable destinations. This finding is particularly relevant in Balinese society, where communal values and social harmony (Tri Hita Karana) play significant roles in shaping individual behavior (Lestari et al., 2025). A noteworthy theoretical contribution emerging from this finding concerns the relative magnitude of subjective norms compared to perceived behavioral control. In contrast to studies conducted in individualistic Western contexts where perceived control often emerges as the dominant predictor (Godbersen et al., 2020; Tanveer et al., 2025), the present investigation conducted in a collectivist cultural setting reveals that subjective norms exert stronger effects than perceived behavioral control. This divergence provides empirical evidence for the cultural contingency of TPB predictions and responds to calls for culturally sensitive applications of behavioral theories in tourism research (Rodrigues et al., 2023; Wicaksono et al., 2024).

### **The Effect of Perceived Behavioral Control on Behavioral Intention and Tourist Loyalty**

Perceived behavioral control, although showing relatively lower yet significant effects on behavioral intention ( $\beta = 0.287$ ,  $p < 0.001$ ) and tourist loyalty ( $\beta = 0.198$ ,  $p = 0.001$ ), serves the important purpose of providing tourists with confidence in their

ability to perform environmentally responsible actions (Ramírez-Asís et al., 2020; Tan & Quang, 2023). Tourists who believe they possess sufficient skills, knowledge, and resources to engage in green behavior are more likely to form strong behavioral intentions and maintain loyalty to Green Tourism Villages. The relatively lower coefficient may be attributed to the fact that environmentally responsible behavior in tourism contexts often requires minimal specialized skills, making perceived control less critical than attitude and social norms in shaping behavioral outcomes (Tanveer et al., 2025). Nevertheless, the significant effect observed underscores the importance of ensuring that tourists feel empowered and adequately resourced to enact responsible behaviors during their visits.

### **The Direct Effect and Mediating Role of Behavioral Intention**

Behavioral intention emerged as a powerful cognitive-conative mediator of the relationship between TPB determinants and tourist loyalty, a trend attributable to the theoretical framework of TPB itself (Ajzen, 1991), which states that intention represents the immediate antecedent of behavior. Supporting H4, behavioral intention demonstrated a strong direct effect on tourist loyalty ( $\beta = 0.458$ ,  $p < 0.001$ ). The perception and behavior of visitors are shaped by psychological readiness formed through attitude, social support, and perceived control (Kim et al., 2021; Mainardes et al., 2021). A significant theoretical advancement offered by this investigation lies in its systematic examination of behavioral intention as a simultaneous mediator across all three TPB determinants, supporting H8, H9, and H10. While prior research has typically examined mediation in isolated relationships, for instance, focusing exclusively on the attitude-intention-loyalty pathway (Nguyen, 2025; Putra et al., 2024), the present study provides empirical evidence that intention serves as a consistent partial mediator for attitude (H8:  $\beta = 0.193$ ,  $p < 0.001$ ), subjective norms (H9:  $\beta = 0.143$ ,  $p < 0.001$ ), and perceived behavioral control (H10:  $\beta = 0.131$ ,  $p < 0.001$ ). This finding addresses a notable gap in the literature, where the mediating role of intention across the full spectrum of TPB antecedents had not been comprehensively established within a single analytical framework (Hwang et al., 2022; Solekah & Prayogi, 2024). The partial mediation pattern observed across all three relationships indicates that while TPB determinants exert direct effects on tourist loyalty, a substantial portion of their influence is transmitted through behavioral intention. Destination managers, therefore, need to ensure strategies that strengthen tourists' psychological readiness to behave responsibly while simultaneously cultivating favorable attitudes and supportive social environments.

### **Theoretical Contributions and Model Robustness**

Beyond these specific findings, the present study makes a broader contribution to the sustainable tourism literature by being the first empirical investigation, to the authors' knowledge, that comprehensively applies the full TPB framework to examine multidimensional tourist loyalty within the specific context of Green Tourism Villages in Bali Province. Previous TPB applications in tourism have predominantly focused on behavioral intention as the terminal outcome variable (Li et al., 2023; Putra et al., 2024; Tan & Quang, 2023) or have examined loyalty as a unidimensional construct (Çavuşoğlu et al., 2020). By conceptualizing and measuring loyalty across its

cognitive, affective, conative, and behavioral dimensions (Kim et al., 2021; Nieves-Pavón et al., 2024), this research provides a more nuanced and comprehensive understanding of how psychological determinants translate into sustained destination commitment. The high explanatory power of the model ( $R^2 = 0.809$  for tourist loyalty) attests to the robustness of this extended TPB framework in predicting complex loyalty outcomes.

### **Practical and Managerial Implications**

Finally, the results demonstrate the need for an integrated communication strategy combining attitude formation, social norm reinforcement, and control perception enhancement to strengthen behavioral intention and tourist loyalty. Behavioral intention plays a central mediating role, warranting investment in strategies yielding interesting, realistic, and emotionally effective approaches to promoting responsible tourist behavior. Destination managers should develop programs that highlight the benefits of environmentally friendly behavior (attitude), leverage social proof and community endorsements (subjective norms), and provide clear information and resources that enhance tourists' confidence in their ability to act responsibly (perceived behavioral control). Furthermore, the synergy between government, private sector, and tourism industry players is critical to strengthening human resources and ensuring that community empowerment programs in green tourism destinations yield sustainable outcomes (Telagawathi et al., 2021). Similarly, Rahmawati, (2023) asserts that the involvement of all tourism stakeholders is vital for developing sustainable tourism destinations, reinforcing the need for collaborative governance in Green Tourism Villages across Bali.

### **CONCLUSION**

This study under consideration investigates the empirical effects of psychological determinants within the Theory of Planned Behavior framework on behavioral intention formation and tourist loyalty enhancement in Bali's Green Tourism Villages. Findings show that attitude and subjective norms have the most significant predictive effects, implying that genuine personal evaluation and interpersonal trust are the most prominent aspects of sustainable tourism experiences. Behavioral intention has been established as a partial mediating construct playing a key role, thus reaffirming its cognitive and conative functions in bridging psychological determinants with loyalty outcomes.

This research contributes to the sustainable tourism literature in several important respects. First, it provides the inaugural comprehensive application of the full TPB framework to explain multidimensional tourist loyalty within the unique socio-cultural context of Balinese Green Tourism Villages. Second, it empirically establishes behavioral intention as a consistent partial mediator across all three TPB determinants, thereby reconciling previously inconsistent evidence regarding the mechanisms through which psychological factors influence loyalty outcomes. Third, it demonstrates the cultural contingency of TPB predictions by revealing the primacy of attitude and subjective norms over perceived behavioral control within a collectivist cultural setting. These contributions collectively advance theoretical understanding of

the psychological pathways underlying sustained tourist commitment to sustainable destinations.

The research therefore advises that psychologically informed marketing strategies should be adopted, focusing on strengthening positive attitudes, leveraging social influence, and enhancing tourists' perceived control. The results highlight how a balanced approach to psychological engagement can enhance tourist perception and loyalty due to its authenticity, credibility, and emotional appeal. In this regard, green tourism destination managers are invited to design programs that cultivate positive attitudes, foster supportive social environments, and empower tourists with the confidence to behave responsibly as ways of supporting sustainable tourism development.

Future research should consider incorporating additional variables such as environmental knowledge, past experience, and destination image to provide a more comprehensive understanding of tourist loyalty formation in green tourism contexts. Comparative cross-cultural studies would also contribute to generalizing the findings and understanding the boundary conditions of TPB applicability in sustainable tourism. Longitudinal designs tracking changes in attitudes, intentions, and actual loyalty behaviors over time would provide valuable insights into the dynamic nature of these psychological processes.

## 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](https://doi.org/10.1016/0749-5978(91)90020-T)
- Anisimova, T., & Weiss, J. (2023). Toward a better understanding of the attitude–behavior gap in organic food conative loyalty: a moderation and moderated mediation analysis. *Asia Pacific Journal of Marketing and Logistics*, 35(6), 1474–1493. <https://doi.org/10.1108/APJML-06-2021-0420>
- Bappenas. (2024). *Peta Jalan & Rencana Aksi Nasional Ekonomi Sirkular Indonesia 2025–2045*.
- Çavuşoğlu, S., Demirağ, B., Jusuf, E., & Gunardi, A. (2020). The Effect Of Attitudes Toward Green Behaviors On Green Image, Green Customer Satisfaction And Green Customer Loyalty. *GeoJournal of Tourism and Geosites*, 33(4spl), 1513. <https://doi.org/10.30892/gtg>
- Chuenban, P., Sornsaruht, P., & Pimdee, P. (2021). How brand attitude, brand quality, and brand value affect Thai canned tuna consumer brand loyalty. *Heliyon*, 7(2). <https://doi.org/10.1016/j.heliyon.2021.e06301>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.)*. SAGE Publications.
- Dai, Q., Peng, S., Guo, Z., Zhang, C., Dai, Y., Hao, W., Zheng, Y., & Xu, W. (2023). Place identity as a mediator between motivation and tourist loyalty in 'red tourism.' *PLoS ONE*, 18(10 October). <https://doi.org/10.1371/journal.pone.0284574>

- Dangelico, R. M., Ceccarelli, G., & Fraccascia, L. (2024). Consumer behavioral intention toward sustainable biscuits: An extension of the theory of planned behavior with product familiarity and perceived value. *Business Strategy and the Environment*. <https://doi.org/10.1002/bse.3774>
- Godbersen, H., Hofmann, L. A., & Ruiz-Fernández, S. (2020). How People Evaluate Anti-Corona Measures for Their Social Spheres: Attitude, Subjective Norm, and Perceived Behavioral Control. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.567405>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. In *European Business Review* (Vol. 31, Number 1, pp. 2-24). Emerald Group Publishing Ltd. <https://doi.org/10.1108/EBR-11-2018-0203>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://doi.org/10.1007/S11747-014-0403-8>
- Hwang, J., Abbas, J., Joo, K., Choo, S. W., & Hyun, S. S. (2022). The Effects of Types of Service Providers on Experience Economy, Brand Attitude, and Brand Loyalty in the Restaurant Industry. *International Journal of Environmental Research and Public Health*, 19(6). <https://doi.org/10.3390/ijerph19063430>
- Kim, J. J., Han, H., & Ariza-Montes, A. (2021). The impact of hotel attributes, well-being perception, and attitudes on brand loyalty: Examining the moderating role of COVID-19 pandemic. *Journal of Retailing and Consumer Services*, 62. <https://doi.org/10.1016/j.jretconser.2021.102634>
- Koay, K. Y., Lim, W. M., Khoo, K. L., Xavier, J. A., & Poon, W. C. (2024). Consumers' motivation to purchase second-hand clothing: a multimethod investigation anchored on belief elicitation and theory of planned behavior. *Journal of Product and Brand Management*, 33(5), 502-515. <https://doi.org/10.1108/JPBM-05-2023-4512>
- Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30(3), 607-610. <https://doi.org/10.1177/001316447003000308>
- Lestari, L., Kandia, I., Santika, I. G., Bara, Y., & Syukur, F. (2025). Coexisting In Harmony: The Role Of Tri Hita Karana Philosophy In The Social Structure Of Balinese Society. *International Journal of Education and Social Science Studies*, 1, 147-152. <https://doi.org/10.60153/ijess.v1i3.233>
- Li, X., Dai, J., Zhu, X., Li, J., He, J., Huang, Y., Liu, X., & Shen, Q. (2023). Mechanism of attitude, subjective norms, and perceived behavioral control influence the green development behavior of construction enterprises. *Humanities and Social Sciences Communications*, 10(1). <https://doi.org/10.1057/s41599-023-01724-9>

- Mainardes, E. W., André, O. de F., Soares Júnior, A. P., & Sepulcri, L. M. C. B. (2021). Antecedents and Consequents of Loyalty to a Religious Organization. *Journal of Nonprofit and Public Sector Marketing*, 33(1), 84–107. <https://doi.org/10.1080/10495142.2019.1691415>
- Nguyen, H. M. (2025). Factors influencing customer loyalty via purchase intention toward manufacturing firms in Vietnam. *International Journal of Economics and Business Research*, 29(8). <https://doi.org/10.1504/IJEER.2025.10068966>
- Nieves-Pavón, S., López-Mosquera, N., & Jiménez-Naranjo, H. (2024). The role emotions play in loyalty and WOM intention in a Smart Tourism Destination Management. *Cities*, 145. <https://doi.org/10.1016/j.cities.2023.104681>
- Ong, A. K. S., Prasetyo, Y. T., Dangan, V. C. C., Gudez, M. A. D., Juanier, J. I. M., Paulite, G. A. D., Yambot, R. X. R., Persada, S. F., Nadlifatin, R., & Ayuwati, I. D. (2023). Determination of loyalty among high school students to retain in the same university for higher education: An integration of Self-Determination Theory and Extended Theory of Planned Behavior. *PLoS ONE*, 18(11 November). <https://doi.org/10.1371/journal.pone.0286185>
- Papallou, E., Katafygiotou, M., & Dimopoulos, T. (2024). Emerging Sustainability Trends in Tourist Facilities: A Comparative Assessment of Multiple Hotels and Resorts. *Sustainability* 2024, Vol. 16, Page 3536, 16(9), 3536. <https://doi.org/10.3390/SU16093536>
- Petty, R., & Cacioppo, J. (1986). The Elaboration Likelihood Model of Persuasion. *Advances in Hydroscience*, 19, 124–205.
- Putra, A. H. P. K., Mariam, S., Tafsir, M., & Rosanti, N. (2024). Deciphering the Green Marketing Puzzle: Understanding the Interplay of Green Marketing Strategic Orientation, Attitude towards Green Marketing, Brand Integrity, and Purchase Intention. *International Review of Management and Marketing*, 14(4), 210–229. <https://doi.org/10.32479/irmm.16224>
- Rahmawati, P. I. (2023). The Strategy for Development of Heritage Tourism in Singaraja City. *Jurnal Penelitian Dan Pengembangan Sains Dan Humaniora*, 7(1), 78–86. <https://doi.org/10.23887/jppsh.v7i1.59629>
- Rahmawati, P. I., & Widiastini, N. M. A. (2025). Tourism Development Strategy for Coastal Areas of Banjar District, Buleleng Regency, Bali Province in Indonesia. *International Journal Of Research And Innovation In Social Science (IJRISS)*. <https://doi.org/10.47772/IJRISS>
- Ramírez-Asís, E. H., Maguiña-Palma, M. E., & Huerta-Soto, R. M. (2020). Attitude, satisfaction and loyalty of customers in Municipal Savings Banks of Peru. *Retos(Ecuador)*, 10(20), 329–343. <https://doi.org/10.17163/ret.n20.2020.08>
- Rodrigues, M., Proença, J. F., & Macedo, R. (2023). Determinants of the Purchase of Secondhand Products: An Approach by the Theory of Planned Behaviour. *Sustainability (Switzerland)*, 15(14). <https://doi.org/10.3390/su151410912>

- Siagian, H., Tarigan, Z. J. H., Basuki, R., & Basana, S. R. (2023). The effect of excessive use of social networking sites on customer loyalty, mediating role of perceived usefulness, essential information, behavioral intention. *International Journal of Data and Network Science*, 7(4), 1669–1682. <https://doi.org/10.5267/j.ijdns.2023.7.022>
- Solekah, N. A., & Prayogi, A. H. (2024). How Green Awareness Green Knowledge Of Gen Z Impacted Attitude Toward Green Sharia Banking And Intention To Use Services Green Sharia Banking. *Proceeding Iconies*. <https://doi.org/https://www.researchgate.net/publication/385291748>
- Tan, T. Le, & Quang, N. D. (2023). Influences of environment perception and social media communication via brand loyalty on the intention to buy green products among Vietnamese youth. *International Journal of Applied Economics, Finance and Accounting*, 16(2), 158–172. <https://doi.org/10.33094/ijaefa.v16i2.942>
- Tanveer, U., Agung Sahara, S. N., Kremantzis, M., & Ishaq, S. (2025). Integrating circular economy principles into a modified theory of Planned Behaviour: Exploring customer intentions and experiences with collaborative consumption on Airbnb. *Socio-Economic Planning Sciences*, 98. <https://doi.org/10.1016/j.seps.2024.102136>
- Telagawathi, L. N., Wayan Suci, & Yulianthini, N. N. (2021). *Development of a Model for Empowering Women Craftsmen Through a Partnership Pattern in Buleleng Regency, Bali*.
- Trianasari, T., Rahmawati, P. I., Andiani, N. D., Gede, I., Nugraha, P., Luh, N., & Andayani, H. (2021). *Dolphin Watching Tour from the Tourists' Perspective An Exploratory Study in Lovina, Bali, Indonesia*.
- Wicaksono, P. A., Sari, D. P., Azzahra, F., & Sa'adati, N. A. (2024). Analysis of Consumer Behaviour in Purchasing Second-Hand Fashion Products: An Extended Theory of Planned Behaviour Model. *International Journal of Sustainable Development and Planning*, 19(8), 2955–2964. <https://doi.org/10.18280/ijdsdp.190813>
- Xu, N., & Zhao, Y. (2023). A Moderated Mediation Analysis of the Relationship between Cultural Embeddedness of Regional Brand Products and Behavior Loyalty: A Case Study of Wudang Mountains in Hubei Province of China. *Sustainability (Switzerland)*, 15(10). <https://doi.org/10.3390/su15107927>