

# SUSTAINING GREEN-HERITAGE DESTINATIONS: NORMATIVE AND HERITAGE-VALUE MECHANISMS DRIVING SUSTAINABLE TOURISM IN BANG KACHAO

Noppadol Manosuthi<sup>1</sup>

## Abstract

Sustainable tourism in heritage-rich green destinations is shaped by complex motivational forces that are not fully explained by conventional extensions of the Theory of Planned Behavior (TPB). This study reinterprets the TPB and investigates the interplay between attitudinal, normative, and heritage-based motivations in Bang Kachao, Thailand. Using a correlational, cross-sectional design, data were collected from general tourists and local residents and analyzed through a hybrid strategy integrating Structural Equation Modeling (SEM), fuzzy-set Qualitative Comparative Analysis (fsQCA), and Necessary Condition Analysis (NCA). The SEM results demonstrate that subjective norms are the strongest predictor of sustainable visitation intentions, highlighting a context-dependent normative dominance characteristic of collectivist green tourism. Attitude contributes positively but less strongly, while a green destination image influences intentions primarily through evaluative pathways. A central contribution of the study is the identification of Green Heritage Capital (GHCA) as a compensatory motivational engine that can generate high intentions even when green image is weak. fsQCA further reveals two qualitatively distinct, equifinal motivational pathways—one norm-driven and the other heritage-value driven—while behavioral outcomes indicate a transition from social-normative influences at the intention stage to heritage-based and mixed configurations during the development of support for sustainable tourism and in behavior stages. NCA and SCA triangulate the robustness of this dual-route system by confirming quasi-necessary conditions and sufficiency patterns. Collectively, the results advance sustainable tourism theory by establishing culturally contingent mechanisms, demonstrating dual-route motivational architecture, and elucidating motivational transitions across behavioral stages. Practical implications aligned with SDG 8.9 highlight the need for interventions that leverage both normative cues and heritage-based value framing to cultivate long-term, internalized sustainability commitments in green-heritage destinations.

**Keywords:** Sustainable tourism; subjective norms; green heritage capital; green destination image; Theory of Planned Behavior; SEM; fsQCA; necessary condition analysis; sufficiency analysis; collectivist contexts; SDG 8.9; Bang Kachao

## INTRODUCTION

Over the past decade, sustainable tourism has moved from a niche concern to a central policy agenda, driven by growing awareness of climate change, biodiversity loss, and community well-being. The 2030 Agenda for Sustainable Development explicitly highlights tourism in SDG Target 8.9, calling on countries to “devise and implement policies to promote

---

<sup>1</sup>Noppadol Manosuthi is currently affiliated with the Research Unit on Consumer Insights in Sports and Service-Related Business, Faculty of Sports Science, Chulalongkorn University, Bangkok 10330, Thailand. Email: [noppadol.m@chula.ac.th](mailto:noppadol.m@chula.ac.th)

sustainable tourism that creates jobs and promotes local culture and products” (United Nations, 2015). Globally, tourism has been recognized as both an engine of economic growth and a potential lever for cultural and environmental preservation, yet persistent gaps remain between pro-environmental attitudes and actual behavior in many destinations (Lin et al., 2022).

The Theory of Planned Behavior (TPB) (Ajzen, 1991) remains one of the most widely used frameworks to explain intentions and behavior across domains, including sustainable consumption and tourism. In its standard formulation, the TPB posits that attitudes toward a behavior, subjective norms, and perceived behavioral control, jointly predict intentions and subsequent behavior (Ajzen, 1991). Numerous tourism and hospitality studies extending the TPB confirm its utility in explaining sustainable choices, such as green accommodation selection, environmentally responsible behavior, and green hotel loyalty (Zhang & Zhang, 2019). In many Western or individualistic contexts, researchers tend to emphasize attitudes as the most proximal cognitive determinant of intentions, while subjective norms are often treated as a secondary, though significant, predictor (Bamberg & Möser, 2007).

However, emerging evidence from tourism and environmental psychology implicitly suggests that this emphasis may be incomplete in collectivist settings, where perceptions of social expectations and community approval can strongly shape pro-environmental behavior (e.g., Manosuthi et al., 2020). Studies in Thailand and other Asian destinations, for example, show that subjective norms play a central role in shaping sustainable tourism intentions and green consumption, sometimes rivaling or exceeding the influence of individual attitudes (e.g., Likitsarun et al., 2023). This raises a deeper theoretical question: in collectivist–tourism contexts, is sustainable behavior primarily norm-driven, or do other value-based mechanisms come to the fore?

At the same time, sustainable tourism research has increasingly acknowledged the importance of cultural and heritage dimensions. Rather than viewing heritage as a passive backdrop or a mere tourism commodity, recent work emphasizes heritage-led and community-based tourism as vehicles for sustainable development, local empowerment, and cultural revitalization (Candeloro & Tartari, 2025; Chi et al., 2024; Lee et al., 2022; Suriyankietkaew et al., 2025). Cultural and natural heritage assets are now framed as central to sustainable tourism strategies, especially when they are embedded in local ways of life and community governance (Wattanacharoensil & Schuckert, 2016). In such contexts, tourists’ pro-environmental behavior may be motivated not only by generic environmental concern but also by heritage-based value commitments, such as protecting local wisdom, social memory, and place identity (Chi et al., 2024).

Bang Kachao, often described as the “green lung” of Bangkok, provides a particularly insightful setting in which these issues converge. The area is an urban green space surrounded by the Chao Phraya River, combining wetlands, orchards, and canal-based agro-ecological systems with long-standing community practices and cultural landscapes (DASTA, 2024; Klamsaengsai et al., 2025). Recent assessments describe Bang Kachao as both an ecological refuge and a cultural haven that supports recreation, local livelihoods, and community-based tourism, while also facing mounting pressure from tourism development and urbanization (Klamsaengsai et al., 2025). Policy initiatives by Thailand’s Designated Areas for Sustainable Tourism Administration (DASTA) explicitly promote Bang Kachao as a model of community-based, sustainable tourism, highlighting its role as a green–heritage destination that showcases local wisdom and lifestyles (DASTA, 2024).

In this setting, tourists’ sustainable visitations—including intentions, supportive attitudes, and pro-environmental behaviors—may be shaped by at least two conceptually distinct motivational logics. First, a social-normative route grounded in the TPB emphasizes perceived expectations of significant others, community norms, and the desire for social approval in a collectivist milieu (Ajzen, 1991). Second, a heritage-value route emphasizes how

perceptions of green heritage capital—the perceived value of preserving local cultures, traditional practices, and the green cultural landscape—can motivate sustainable behaviors even when the destination’s explicit green image is not particularly strong (Lee et al., 2022).

Existing empirical work on Bang Kachao focuses primarily on evaluating its sustainability performance, governance, and tourism capacity (Klamsaengsai et al., 2025) rather than tracing the detailed motivational pathways through which sustainable tourism outcomes emerge. More broadly, much of the sustainable tourism literature in Thailand and comparable destinations tends to identify individual predictors (e.g., attitudes, norms, perceived behavioral control, green image) using regression or structural equation models, implicitly treating the process as a single, linear route from cognition to intention to behavior (Rasmidatta, 2023). What remains under-examined is whether multiple motivational routes operate in parallel or in combination, and under what conditions one route can compensate for the weakness of another—for example, whether heritage-based value can substitute for a weak perceived green image in sustaining pro-environmental intentions in Bang Kachao.

Thus, it is safe to conclude that the literature still lacks a systematic understanding of how subjective norms, destination green image, and green heritage capital jointly structure sustainable tourism intentions, support for sustainable tourism, and behaviors in a collectivist, heritage-rich urban green space such as Bang Kachao, and whether these factors form distinct social-normative and heritage-value pathways that may shift over time from norm-driven to more value-driven sustainability. Addressing this gap requires methodological tools capable of capturing both the relative contribution of individual constructs and the configurational patterns through which different combinations of conditions produce similar outcomes.

To this end, the present study adopts a hybrid analytical design that integrates structural equation modeling (SEM) with fuzzy-set Qualitative Comparative Analysis (fsQCA). Recent tourism studies have demonstrated that combining SEM with fsQCA can yield a more holistic view of behavioral formation by linking net effects with configurational paths (e.g., González-Rodríguez et al., 2025; Manosuthi, Lee, et al., 2024; Manosuthi, Meeprom, et al., 2024; Seyfi et al., 2024; Zhang & Zhang, 2019). In this study SEM is used to test an extended TPB-based framework, incorporating green heritage capital and destination green image, providing a variable-centered assessment of how attitudinal, normative, and heritage-related factors contribute to sustainable tourism outcomes. Complementing this, fsQCA is applied to uncover multiple sufficient configurations—for example, norm-dominant, heritage-compensatory, or mixed routes—that can all lead to high sustainable tourism intentions, support for sustainable tourism, and sustainable behaviors under different combinations of conditions.

Emerging longitudinal evidence using Latent Growth Curve Modeling (LGCM) further shows that subjective norms do not merely predict intentions at a single point in time, but also shape the initial level and developmental trajectory of intentions across multiple time periods (e.g., Manosuthi et al., 2020). This suggests that in socially visible, community-oriented tourism behaviors, normative expectations exert a persistent influence beyond momentary attitudinal evaluations — a pattern that aligns with collectivist contexts such as Thailand. Therefore, the prominence of subjective norms in sustainable visitations to Bang Kachao may reflect a structurally embedded social mechanism rather than a situational predictor alone.

Against this background, the present study focuses on Bang Kachao as a critical case of environmentally oriented, heritage-rich tourism development in Thailand. It pursues three interrelated objectives: (1) To examine how attitudinal, normative, and heritage-based factors jointly structure tourists’ intentions, support for sustainable tourism, and behaviors, related to sustainable visitation in Bang Kachao; (2) To investigate whether culturally grounded heritage value can compensate for weak perceptions of destination green image in motivating sustainable tourism; and (3) To map the multiple motivational pathways—if any—through which sustainable tourism outcomes emerge, and to assess their implications for promoting

norm-driven and value-driven sustainability in line with SDG 8.9. Guided by these objectives, the study addresses the following research questions:

*RQ1 – Normative dominance and conditions: Under what contextual and psychological conditions does the social-normative route dominate or weaken relative to the attitudinal route in shaping sustainable tourism intentions in Bang Kachao?*

*RQ2 – Heritage-based compensation: To what extent can green heritage capital compensate for a weak destination green image or weak attitudinal support in sustaining pro-environmental intentions and support for Bang Kachao as a green destination?*

*RQ3 – Dual pathways: Are there multiple, qualitatively distinct motivational pathways—such as social-normative and heritage-value routes—through which sustainable tourism intentions, support for sustainable tourism, and sustainable behaviors emerge?*

*RQ4 – Motivational transition: How do these pathways illuminate a potential transition from norm-driven to value-driven sustainability, and what do they imply for the design of social- and heritage-based interventions that foster long-term, community-aligned green tourism in Bang Kachao?*

## LITERATURE REVIEW

### *Theory of Planned Behavior and Sustainable Tourism*

The Theory of Planned Behavior (TPB) posits that intentions, the most proximal predictor of behavior, are shaped by attitudes toward the behavior, subjective norms, and perceived behavioral control (Ajzen, 1991). The TPB has been widely applied in tourism and environmental behavior research to explain eco-friendly choices, green hotel stays, and ecotourism behaviors, with substantial evidence that these three components jointly predict sustainable tourism intentions (e.g., Lin et al., 2025).

Recent applications in tourism show that the TPB remains a robust baseline for explaining tourists' intentions toward green hotels, ecotourism, and sustainable destinations, often with attitude emerging as a strong predictor, but with notable variation across cultural and behavioral contexts (e.g., Olya et al., 2019). However, critical reviews argue that the TPB is still predominantly individual-cognitive, paying insufficient attention to social, cultural, and contextual structures that may reconfigure how attitude, norms, and control operate in specific destinations (Manosuthi et al., 2020). In this study, the TPB provides the structural backbone for modeling tourists' sustainable visitation to Bang Kachao, but it is deliberately extended with contextual constructs—notably Destination Green Image (DGI) and Green Heritage Capital (GHCA)—to reflect the dual nature of Bang Kachao as a green and heritage-rich urban landscape.

### *Normative vs. Attitudinal Influence in Collectivist and Green Contexts*

Classical TPB work in Western settings often concludes that attitudes toward a behavior are the strongest predictor of intentions (Bamberg & Möser, 2007). Meta-analytic and review studies in tourism and hospitality sometimes report weaker normative effects relative to attitudinal effects in individualistic contexts. However, more recent work in sustainable tourism and green consumption highlights that in many collectivist or relational cultures, normative influences can be central. Studies on sustainable tourism, green hotels, and eco-friendly travel show that social norms and in-group expectations are often strong predictors of sustainable purchase or visitation intentions (Manosuthi, Lee, et al., 2024). Evidence from the green hotel domain also supports the argument that normative forces can overshadow attitudinal influences in sustainability-related decision-making. Using an extended TPB model, Han and Kim (2010)

found that subjective norms were the strongest predictor of revisit intentions, with their standardized effect size surpassing both attitudes and perceived behavioral control. Importantly, the model explained a substantial proportion of variance in intentions ( $R^2 = .720$ ), while subjective norms also showed a significant positive path to attitudes, indicating that social expectations do not merely guide intentions directly but also shape individuals' evaluative orientations toward green hotel behavior. These findings highlight that, even in a U.S. sample, green consumption decisions may be embedded in relational and socially cued processes—aligning with emerging evidence that sustainable choices often carry social meaning and are shaped by in-group approval.

Evidence from Asian tourism contexts shows similar patterns. Studies in Thailand and other Asian destinations have reported strong positive effects of subjective norms on green hotel visit intentions, willingness to pay, and participation in sustainable leisure activities (e.g., Manosuthi et al., 2020). In collectivist societies, family, peer groups, and community figures play a decisive role in shaping “what one ought to do”, making normative approval a key driver of visible pro-environmental actions. In the case of Bang Kachao—an urban green space promoted as a community-based, sustainable tourism area—the behavior of visiting responsibly is publicly observable and socially interpreted, amplifying the potential role of subjective norms relative to individual attitudes. This provides a reasoning basis for expecting a strong social-normative route to sustainable visitation, even as attitudes remain important.

### ***Destination Green Image and Attitudinal Pathways***

Beyond the TPB's core constructs, destination image—and more specifically green or eco-destination image—has emerged as an important antecedent of attitudes and intentions toward sustainable tourism. Studies in green destinations and eco-destinations show that a favorable eco-destination image is associated with stronger environmental attitudes, higher ecotourism intentions, and willingness to pay for greener options (Pham & Khanh, 2021). For instance, Nowacki et al. (2023) found that perceived green image of destinations positively influenced Gen Z travelers' attitudes and intentions to choose green holidays. Similarly, research on eco-destinations suggests that eco-destination image, environmental beliefs, and attitudes jointly shape intentions to engage in ecotourism (Fakfare et al., 2025).

Studies on green hotels and sustainable tourism further indicate that destination or hotel image may operate as a background belief structure, reinforcing positive attitudes and perceived value (Liu et al., 2024; Sreen et al., 2024). These findings implicitly support the assumption that Destination Green Image (DGI) contributes to sustainable tourism through: (1) Indirectly shaping attitudes toward sustainable visitation; and (2) Directly enhancing sustainable intentions when tourists perceive a destination as genuinely green. However, in complex, real-world destinations—especially where environmental messaging and on-the-ground practices are not perfectly aligned—green image alone may not suffice to sustain pro-environmental intentions. This opens the door for other value systems, such as heritage and local wisdom (Kusumastuti et al., 2024), to compensate when DGI is relatively weak.

### ***Heritage, Local Wisdom, and Green Heritage Capital***

Parallel to the eco-destination literature, a growing body of work emphasizes the role of cultural and heritage dimensions in sustainable tourism and community-based tourism. Heritage-led development approaches highlight how cultural landscapes, local traditions, and community knowledge systems can serve as both tourism assets and anchors for sustainable practices (MU, 2022). Heritage-led strategies often rely on community capitals—including social, cultural, and natural capital—to achieve sustainability outcomes by aligning tourism

activities with local values and livelihoods.

Building on this, the present study conceptualizes Green Heritage Capital (GHCA) as tourists' perception of the combined ecological and cultural value of Bang Kachao as a green-heritage landscape: a place where environmental quality, traditional livelihoods, and local wisdom are intertwined. This construct captures not just scenic beauty or environmental quality, but the perceived worth of preserving the landscape and culture together.

Theoretically, GHCA can drive sustainable tourism outcomes via a heritage-value route: By enhancing attitudes toward sustainable visitation (visiting becomes a way to honor heritage), through motivation of support for sustainable tourism and behaviors that protect local culture and environment, even when green branding is not highly salient. Crucially for this study, GHCA may compensate for weak DGI: tourists may still choose pro-environmental options in Bang Kachao because they care about protecting its heritage, even if the destination does not project a strong green image. This is the core of the compensatory mechanism being empirically tested.

### ***Multiple Motivational Routes and Hybrid SEM–fsQCA Approaches***

Most TPB-based studies assess determinants of sustainable intentions via regression or SEM, which estimate average, net effects under an assumption of symmetry (e.g., high attitudes always increase intentions). However, sustainable tourism decisions are likely to involve multiple, qualitatively distinct motivational routes—such as norm-driven, value-driven, or image-driven pathways—especially in contexts rich in social norms and heritage meanings.

To capture such complexity, recent tourism research has increasingly adopted hybrid designs that combine SEM with fsQCA, allowing for simultaneous testing of net effects and configurational sufficiency. For instance, Lee et al. (2022) integrated PLS-SEM with fsQCA to analyze residents' intentions to participate in agricultural heritage site conservation. Their findings revealed several distinct motivational configurations—such as (a) norm-driven pathways involving subjective norms and PBC, and (b) value- or knowledge-driven pathways centered on sustainable intelligence and attitudes—each of which could independently generate high levels of sustainable intentions. This configurational evidence demonstrates that sustainable behavior does not arise from a single dominant predictor but from multiple, qualitatively different routes. Similarly, hybrid PLS-SEM/fsQCA approaches have been used to explore travel purchase behavior, green loyalty, and other tourism decisions, revealing multiple sufficient configurations that extend beyond linear TPB models (Zhang & Zhang, 2019).

## **HYPOTHESIS DEVELOPMENT**

### ***Core TPB Relationships***

The TPB and its tourism extensions consistently show that more favorable attitudes toward sustainable tourism and stronger subjective norms in favor of such behavior are positively associated with intentions (Han & Kim, 2010; Lin et al., 2025). In green hotel and sustainable tourism contexts, positive attitudes toward green options and supportive norms from family, friends, or in-groups, predict greater willingness to choose sustainable destinations (Han & Kim, 2010; Olya et al., 2019; Sreen et al., 2024). Given the collectivist structural context of Bang Kachao and prior evidence for strong normative effects in sustainable tourism, we expect that both ATT and SN will have positive associations with sustainable visitation intentions:

H1a: Attitudes toward sustainable visitation to Bang Kachao (ATT) are positively

associated with sustainable tourism intentions (INT).

H1b: Subjective norms regarding sustainable visitation to Bang Kachao (SN) are positively associated with sustainable tourism intentions (INT).

TPB also posits that intentions are the proximal antecedent of behavior, a relationship confirmed in numerous ecotourism and green hotel studies (Han & Kim, 2010). In a sustainable tourism governance context, support for sustainable tourism policies and practices can be viewed as both an extension of intentions and a bridge to actual behavior (e.g., choosing eco-friendly transport, respecting local rules). Thus we hypothesize:

H2a: Sustainable tourism intentions (INT) are positively associated with support for sustainable tourism in Bang Kachao (SUP).

H2b: Sustainable tourism intentions (INT) are positively associated with self-reported sustainable tourism behavior in Bang Kachao (BEH).

H2c: Support for sustainable tourism in Bang Kachao (SUP) is positively associated with sustainable tourism behavior (BEH).

### ***Green Image and Heritage-Based Value***

The eco-/green destination image literature suggests that a more favorable perception of a destination's environmental friendliness enhances both attitudes and behavioral intentions toward green visitation (Candeloro & Tartari, 2025; Chi et al., 2024; Nowacki et al., 2023; Pham & Khanh, 2021). In Bang Kachao, promotional narratives emphasize its role as a green lung and eco-friendly retreat, suggesting that DGI may reinforce positive evaluations of sustainable visitation. Accordingly, we posit:

H3a: Destination green image (DGI) is positively associated with attitudes toward sustainable visitation (ATT).

H3b: Destination green image (DGI) is positively associated with sustainable tourism intentions (INT).

Building on heritage-led and community-based tourism research (Lee et al., 2022; MU, 2022; Suriyankietkaew et al., 2025), green heritage capital is expected to play a key role in shaping tourists' and residents' motivations to support and enact sustainable tourism in heritage-rich contexts. Perceiving Bang Kachao as a place where ecological integrity and local culture/livelihoods are jointly at stake should strengthen both attitudes and commitment to sustainable visitation. Therefore, we hypothesize:

H4a: Green heritage capital (GHCA) is positively associated with attitudes toward sustainable visitation (ATT).

H4b: Green heritage capital (GHCA) is positively associated with sustainable tourism intentions (INT).

H4c: Green heritage capital (GHCA) is positively associated with support for sustainable tourism (SUP).

### ***Dual-route proposition***

Drawing on the logical idea that normative influences can dominate in collectivist sustainable tourism settings, and that heritage-led value systems can independently mobilize sustainability-supportive behavior. We expect at least two qualitatively distinct configurations leading to high intentions: (1) A social-normative route in which high SN (with at least moderate ATT) is sufficient for high INT, regardless of DGI and (2) A heritage-value route in which high GHCA (with at least moderate ATT) can yield high INT even when DGI is low.

We formulate this as:

P1 (Dual-route proposition): There exist at least two qualitatively distinct configurations sufficient for high sustainable tourism intentions (INT) in Bang Kachao: (a) configurations characterized by high subjective norms (SN) (with non-low ATT); and (b) configurations characterized by high green heritage capital (GHCA) that can compensate for low destination green image (DGI).

### ***Motivational transition proposition***

It is possible that different motivational logics may dominate at different outcome stages. Norm-driven motives may be most central for intentions, whereas internalized heritage-value motives may be more visible in terms of support for sustainable tourism and behavior. This aligns with theories of internalization in pro-environmental behavior (e.g., Niesten & Jolink, 2020) and emerging findings that value-based and identity-based motives become more prominent for sustained behaviors over time (Cho et al., 2019). Thus we propose:

P2 (Transition proposition): Configurations sufficient for high support for sustainable tourism (SUP) and behavior (BEH) will place greater emphasis on heritage-value conditions (e.g., high GHCA, supportive attitudes) relative to purely normative conditions (high SN alone), compared with configurations sufficient for high intentions (INT).

## **METHOD**

### ***Research Design***

This study adopts a correlational, cross-sectional research design to investigate the motivational system underlying sustainable tourism in Bang Kachao. To accomplish this, the study utilizes a hybrid analytical strategy integrating Structural Equation Modeling (SEM) and fuzzy-set Qualitative Comparative Analysis (fsQCA). SEM enables variable-centered reasoning tests, examining whether attitudinal, normative, and heritage-based constructs jointly account for sustainable tourism outcomes. In parallel, fsQCA facilitates mechanism-centered reasoning tests, identifying whether distinct motivational pathways—namely a social-normative route or a heritage-value route—are sufficient for high levels of intentions, support for sustainable tourism, or actual behavior. Finally, the hybrid design supports robustness-oriented reasoning through the incorporation of Necessary Condition Analysis (NCA), which is used to evaluate bottlenecks and sufficiency.

### ***Study Site***

The empirical context of the research is Bang Kachao, a culturally embedded urban green space in Samut Prakan Province, Thailand. Recognized for its unique ecological landscape and community-based cultural practices, Bang Kachao serves as an ideal critical case for studying sustainable tourism in settings where environmental identity and cultural-heritage value intersect. The site is currently promoted through strong green branding as Bangkok's green lung, while simultaneously functioning as a heritage-rich cultural landscape that reflects local wisdom, traditional livelihoods, and long-standing socio-environmental practices. Moreover, Bang Kachao aligns directly with SDG 8.9, which emphasizes tourism that supports local culture and sustainable development. This combination creates a natural tension—and an analytic opportunity—between environmental image (destination green image) and cultural/heritage value (green heritage capital), both of which may shape tourists' sustainable tourism motivations in distinct ways.

## ***Participants and Sampling***

The target population comprised two key stakeholder groups: (1) general tourists visiting Bang Kachao, and (2) local residents engaged in community or tourism-related activities. In the qualitative phase, in-depth interviews were conducted with a mixed group of residents and tourists to explore the contextual background, refine construct meanings, and ensure conceptual relevance for the study. In the quantitative phase, a survey was administered to tourists to empirically test the proposed model. Given the applied nature of the setting, a combination of purposive sampling and intercept sampling was employed at major cycling routes, pier entry points, cultural nodes, and community-run attractions (Rasmidatta, 2023). This approach ensured representation across both visitors and residents whose behaviors or attitudes directly relate to sustainable tourism outcomes. A total sample size of 908 exceeding the recommended 300 respondent thresholds for SEM analysis and providing adequate case diversity for configurational methods such as fsQCA. Participation was voluntary and anonymous.

## ***Measures***

All constructs were measured using multi-item scales adapted from established tourism, environmental behavior, and heritage literature. These scales were further refined and contextualized using insights generated from the interview phase, ensuring conceptual clarity and appropriateness for the Bang Kachao setting. Responses were captured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). Attitudes toward Sustainable Visitation (ATT) were measured through 4–5 items assessing evaluative beliefs about engaging in sustainable visitation practices (e.g., “Visiting Bang Kachao responsibly is beneficial and worthwhile”). Subjective Norms (SN) were assessed using 3–4 items capturing perceived social expectations and approval related to sustainable visitation (e.g., “People important to me think I should visit Bang Kachao in an environmentally responsible way”). Destination Green Image (DGI) was measured using 4 items evaluating tourists’ perceptions of the environmental friendliness and ecological quality of Bang Kachao. Green Heritage Capital (GHCA) was assessed through 5–6 items representing the perceived cultural–environmental heritage value of the area, including beliefs about the importance of preserving local culture, traditional practices, and the green cultural landscape. Three outcome variables were included: Intentions (INT): intentions to make sustainable visits or choose eco-friendly options. Support (SUP): support for sustainable tourism policies and community-led practices. Behavior (BEH): self-reported environmentally responsible behaviors undertaken at Bang Kachao. All scales demonstrated acceptable reliability and validity during the measurement assessments. Additionally, results from common method bias diagnostics—such as Harman’s single-factor test—showed no significant common method variance, indicating that common method bias was not a concern in this study.

Outcomes were assessed using a two-step measurement approach, rather than relying solely on direct rating scales as commonly seen in prior SEM research. This approach was adopted because traditional SEM implicitly assumes that all respondents possess all underlying constructs to some degree—an assumption that may compromise validity in sustainability contexts. For instance, respondents who genuinely have no intention may still be forced to provide a low numerical rating, artificially treating “non-existence” of a construct as merely a “low level.” Such responses can distort structural relationships and weaken model accuracy. By employing a two-step procedure, we ensured that only respondents who genuinely possessed the relevant psychological constructs (e.g., intentions, behavioral readiness) were included in the structural analysis, thereby enhancing the conceptual validity and interpretive

robustness of the SEM results.

### *Analytical Strategy*

Measurement reliability, convergent validity, discriminant validity, and global model fit indices were assessed. SEM was also employed to test the extended TPB-based reasoning structure, focusing on whether attitudinal, normative, and heritage-based constructs jointly explain sustainable tourism outcomes. Moreover, fsQCA was used to examine whether multiple sufficient pathways can lead to high sustainable tourism outcomes. Calibration of fuzzy-set memberships followed established direct calibration procedures, using empirical percentiles and theoretical anchors. The configurational analysis tested whether distinct motivational pathways emerged. In summary, fsQCA identifies mechanistic heterogeneity, showing how different combinations of conditions are sufficient for the same outcome.

## **RESULTS AND INTERPRETATIONS**

### *Measurement and Structural Model Assessment*

Confirmatory factor analyses indicated that all latent constructs—attitudes (ATT), subjective norms (SN), destination green image (DGI), green heritage capital (GHCA), intentions (INT), support for sustainability (SUP), and behavior (BEH)—exhibited acceptable psychometric properties. Standardized factor loadings were all positive and statistically significant ( $p < .001$ ), while most values exceeded .60. Internal consistency was adequate, with Cronbach's alpha coefficients ranging approximately from .58 to .84 and composite reliability (omega) values in a similar range. The average variance extracted (AVE) for each latent construct surpassed the .50 benchmark, indicating acceptable convergent validity. Moreover, all HTMT ratios fell below the .80 criterion, confirming that discriminant validity was well established across the measurement model. The structural model estimated with SEM ( $N = 908$ ) provided an acceptable, though not perfect, fit to the data given the model complexity ( $\chi^2 = 2329.76$ ,  $df = 263$ ,  $p < .001$ ; CFI = .92; RMSEA = .09; SRMR = .13).

**Table 1: Standardized Structural Path Estimates**

<b>Path</b>	<b>Model 1</b> Standardized Coefficient	<b>Model 2</b> Standardized Coefficient
INT to BEH	.720***	.751***
INT to SUP	.779***	.813***
SN to INT	.650***	.648***
ATT to INT	.054*	.156***
SN to ATT	.430***	.358***
DGI to ATT	.124***	.159***
GHCA to DGI	.087***	.896***

Note. \*\*\*  $p < .001$ ; \*  $p < .06$ . Model 1 was estimated using the second-order GHCA structure, while Model 2 adopted the parsimonious GHCA combined with ATT. Fit indices were as follows: Model 1—GFI = .911, CFI = .911, RMSEA = .081; Model 2—GFI = .917, CFI = .920, RMSEA = .093.

### *Normative Dominance in the Structural Model*

Table 1 reports the standardized structural coefficients from the SEM. The results clearly indicate that subjective norms were the strongest proximal predictor of sustainable

visitation intentions. These findings show that the social-normative route is the dominant structural pathway to intentions. ATT also matters but functions more as a supporting evaluation rather than the primary driver (Han & Kim, 2010). This is consistent with the study’s reasoning that in a collectivist, socially visible green tourism context, sustainable visitation is norm-sensitive (Manosuthi et al., 2020).

***Attitude and Green Image as a Partial Route***

As shown in Table 1, the attitudinal pathway, mediated by DGI, plays a secondary but meaningful role. DGI significantly predicts ATT ( $\beta = .16, p = .002$ ), indicating that a more favorable green image of Bang Kachao is associated with more positive evaluations of sustainable visitation. ATT then predicts INT ( $\beta = .16, p = .002$ ), but its effect size is modest compared with SN ( $\beta = .65$ ). There is no strong evidence that DGI directly predicts INT over and above ATT; its influence appears to be primarily indirect via attitude. This pattern indicates that the attitudinal route is partial rather than dominant. Green image improves how people feel about sustainable visitation (Nowacki et al., 2023) but, in this setting, image and attitude are insufficient to drive intentions without strong normative backing. In other words, it could be interpreted that a good green image is not enough; people also need social signals that sustainable visitation is expected and approved.

***Green Heritage Capital as a Compensatory Mechanism***

SEM results show that GHCA is a key upstream predictor of DGI ( $\beta = .90$ ), suggesting that tourists who perceive Bang Kachao as high in green heritage capital also tend to view it as environmentally friendly. However, the most crucial evidence for GHCA’s compensatory role comes from the fsQCA analysis. In the fsQCA for intentions, the intermediate solution for high INT yielded two major sufficient configurations, which were (1) the Normative Route SN (alone) as a high-consistency configuration (inclS = .94, PRI = .86, covS = .93) and (2) the Heritage–Compensation Route, that is GHCA \* ~DGI \* ATT (inclS = .98, PRI = .91, covS = .67), as shown in Table 2.

**Table 2: fsQCA Intermediate Solution for High Intention**

<b>Configuration</b>	<b>Recipe</b>	<b>Consistency</b>	<b>PRI</b>	<b>Coverage</b>
Normative route	SN	.94	.86	.93
Heritage-compensation	GHCA * ~DGI * ATT	.98	.91	.67
Overall Solution	SN + GHCA * ~DGI * ATT	.93	.85	.94

This finding infers a case of compensation rather than mediation. GHCA does not merely feed into DGI in a simple linear way; it can stand in for a weak DGI in the configurational logic of intentions. When the perceived green image of the destination is low, heritage-based value (GHCA), together with favorable attitudes, can sustain high intentions. Thus, GHCA fills the motivational gap left by weak green image. It supplies a moral–emotional rationale: tourists may think “even if it doesn’t look perfectly green, it is worth visiting and supporting because of its heritage and local way of life.” This provides strong support for RQ2.

***Dual Motivational Pathways: Normative vs. Heritage-Value***

Beyond intentions, fsQCA solutions for support (SUP) and behavior (BEH) further reveal a dual-route motivational structure. For SUP, the intermediate solution as shown in

Table 3 includes: (1) SN \* INT and (2) GHCA \* ~DGI \* ATT \* INT. For BEH, the intermediate solution includes 2 pathways, which are (1) SN \* INT and (2) GHCA \* ATT \* INT.

**Table 3: fsQCA Intermediate Solution for High Support and Behavior**

Outcome	Recipe	Consistency	PRI	Coverage
SUP	SN*INT	.96	.91	.89
SUP	GHCA * ~DGI * ATT*INT	.97	.91	.65
Solution for SUP	SN*INT+GHCA * ~DGI * ATT*INT	.96	.91	.90
BEH	SN*INT	.96	.91	.87
BEH	GHCA*ATT*INT	.97	.92	.73
Solution for BEH	SN*INT +GHCA*ATT*INT	.96	.91	.89

These results demonstrate equifinality. A socially driven pathway where SN + INT are sufficient for high SUP and BEH. A heritage-driven pathway where GHCA (with ATT and INT) is sufficient, sometimes even when green image is not strong. The two routes are not mere parameter variations of the same mechanism; they represent qualitatively distinct motivational patterns: One pathway is primarily normative (e.g., “I do this because people expect it”). The other is primarily value-based/heritage-oriented (e.g., “I do this to protect what this place stands for”). This directly answers the dual-route component of RQ3.

***Motivational Transition: From Norm-Driven to Value-Driven***

Comparing the fsQCA solutions for INT versus those for SUP and BEH reveals a subtle but important transition pattern. For INT, the SN-only configuration is extremely central: high SN alone is sufficient to motivate high intentions, while GHCA-based configurations appear as an alternative route. For SUP and BEH, configurations that combine GHCA with ATT and INT become more prominent, and purely SN-driven patterns (SN\*INT) remain important but are no longer uniquely central. This supports the idea of a motivational transition. At the intention stage, behavior is largely norm-driven: people decide to visit sustainably because “people like me do this.” At the support and behavior stage, sustainability becomes increasingly value-driven and heritage-sustained: people support policies and enact behaviors because they see these actions as protecting a valued green–heritage landscape. This echoes theories of internalization, where compliance with social norms can gradually transform into internal value commitment. Thus, it is safe to empirically conclude that the mechanism shifts from a primarily normative engine to a more internalized, heritage-value-based mechanism as outcomes move from mere intentions to actual support and behavior—providing strong support for RQ4.

***Robustness Across Analytical Paradigms***

Finally, the study assessed robustness using NCA, complementing SEM and fsQCA. NCA findings, as shown in Table 4, NCA treats GHCA, DGI, ATT, SN, and INT as potential necessary conditions for high outcomes. Regarding intentions, the necessity analysis indicated that SN (inclN = .93, RoN = .91), ATT (inclN = .83, RoN = .91), GHCA (inclN = .88, RoN = .80), DGI (inclN = .64, RoN = .94) were candidates for being necessary conditions of intentions.

**Table 4: NCA Results for High Intentions, Support, and Behavior**

Outcome	Condition	Consistency	Relevance of Necessity	Coverage
INT	GHCA	.884	.802	.855
INT	DGI	.639	.944	.919
INT	ATT	.832	.912	.921
INT	SN	.925	.913	.936
SUP	GHCA	.875	.795	.849
SUP	DGI	.625	.932	.901
SUP	ATT	.823	.904	.913
SUP	SN	.910	.898	.924
SUP	INT	.941	.919	.943
BEH	GHCA	.867	.805	.858
BEH	DGI	.616	.936	.907
BEH	ATT	.809	.908	.918
BEH	SN	.894	.901	.928
BEH	INT	.921	.919	.943

These patterns suggest that high SN and high INT function as quasi-necessary conditions for high support and behavior—again emphasizing the structural centrality of the normative route, even as heritage-based configurations offer alternative sufficiency patterns. This multi-method convergence addresses the robustness components of RQ3 (multiple pathways) and RQ5 (the sufficiency and robustness of the extended TPB + heritage model).

## DISCUSSION AND IMPLICATIONS

### *Reinterpreting the Extended TPB in a Collectivist, Green–Heritage Context*

A central contribution of this study is the reinterpretation of an extended TPB model within a collectivist, green–heritage context. Consistent with previous studies (Han & Kim, 2010; Manosuthi et al., 2020), the SEM results showed that subjective norms were the strongest proximal predictor of sustainable visitation intentions, clearly exceeding the effect size of attitude. Rather than treating this merely as a statistical peculiarity, we encourage reading this pattern as evidence of a context-dependent mechanism. In Bang Kachao, sustainable visitation is inherently public and socially visible: tourists travel in groups, share experiences on social media, and interact with local communities in ways that are easily observed. In such a setting, the decision to visit sustainably is not a private act but a relationally embedded practice, which naturally amplifies the influence of perceived social expectations.

From this perspective, the dominance of subjective norms reflects a structural feature of collectivist, community-facing green tourism rather than a deviation from the TPB. It challenges the often implicit, Western-centric assumption that attitudes should usually be the strongest TPB component and instead aligns with cultural and environmental psychology research indicating that norms are highly salient in collectivist prosocial and pro-environmental actions. This is interpreted as a normative engine that drives intention formation when behavior carries social meaning and visibility.

The implications for SDG 8.9 are direct. If norm-based mechanisms play a structurally central role in this context, then sustainable tourism initiatives cannot rely on attitudinal persuasion alone. Rather, they should prioritize forms of community signaling, such as visible pro-sustainability behaviors by local leaders and peers; peer reinforcement, for example

through community campaigns and social proof; and instruments that make social approval cues salient to visitors. In other words, policy must treat norms not as an afterthought but as a core lever for aligning tourism with decent work, local culture, and sustainability.

### ***Attitudes and Green Image as a Partial, Evaluation-Based Pathway***

Although subjective norms were the dominant proximal predictor of intentions, the results also confirmed that attitudes and destination green image play meaningful roles, albeit as part of a partial, evaluation-based pathway. Attitudes toward sustainable visitation displayed a positive association with intentions (Ajzen, 1991; Nowacki et al., 2023), but their effect was clearly weaker than that of subjective norms (Han & Kim, 2010). Destination green image significantly predicted attitudes but exerted little or no direct effect on intentions once other variables were considered.

This pattern suggests that attitude functions as a necessary evaluator rather than a sufficient motivational engine. Tourists appear to need to see sustainable visitation as good, worthwhile, or beneficial, but such evaluative endorsement does not, by itself, “carry the system” toward strong intentions in this setting. Similarly, destination green image seems to operate as an aesthetic–cognitive input (Nowacki et al., 2023; Pham & Khanh, 2021). It shapes how visitors appraise the destination and informs their evaluative stance, yet it does not strongly direct behavior on its own. This is consistent with the idea that a place may be perceived as green without that perception being translated into personal commitment unless embedded in stronger social or value-based mechanisms.

The key takeaway is that the attitudinal route operates as supportive rather than primary within the motivational architecture of Bang Kachao. This reinforces the need to move beyond one-size-fits-all uses of the TPB that assume attitude will always dominate, and instead to attend to how different components of the model gain or lose prominence under specific socio-cultural and behavioral conditions.

For SDG 8.9, this has important policy implications. Visual green branding or promotional campaigns that emphasize the ecological image of Bang Kachao are unlikely, on their own, to induce substantial behavioral change. To be effective, sustainable tourism policy must integrate community narratives, in which sustainability is framed through local voices and stories (Cho et al., 2019); social learning processes, where visitors observe and emulate pro-environmental behaviors enacted by residents and fellow tourists (Liu et al., 2014); and normative reinforcement, such as visible codes of conduct and social approval for compliance. Green imagery can support these efforts, but it cannot substitute for them.

### ***Green Heritage Capital as a Distinctive Motivational Engine***

Perhaps the most distinctive contribution of the study is the identification of Green Heritage Capital (GHCA) as a compensatory motivational engine. The configurational analyses showed that high GHCA, combined with non-low attitudes, was sufficient for high intentions even when perceptions of destination green image were low. In other words, tourists who perceived Bang Kachao as rich in ecological–cultural heritage value were still motivated to intend sustainable visitation despite weak or ambiguous green branding.

This pattern is not interpreted as simple mediation but as compensation. GHCA does not merely transmit its influence through green image. It fills motivational gaps when green image is insufficient. It provides a moral–emotional rationale grounded in local culture, place identity, and a sense of custodianship: visiting and acting sustainably becomes a way to honor and protect “what this place stands for,” rather than merely responding to its green appearance. This points to a heritage-based sustainability motivation that operates in parallel to, and

partially independent from, conventional environmental cognition.

Theoretically, this extends the TPB and mainstream sustainable tourism models by incorporating context-specific, culturally embedded values into the motivational system. GHCA represents an integrated perception that the landscape, local wisdom, and community practices are worth safeguarding. It highlights that in heritage-rich destinations, sustainability is not just about carbon footprints or green aesthetics but about protecting a living cultural–ecological fabric.

The implications for SDG 8.9 are profound. The goal emphasizes promoting local culture and products and fostering beneficial, sustainable tourism (United Nations, 2015). The present findings demonstrate that cultural heritage is not only an economic asset but also a psychological and motivational resource for sustainability. Policies aimed at Bang Kachao and similar destinations should therefore strengthen community heritage narratives, emphasize place-based stewardship messages that link visitor behavior to the protection of local ways of life, and design cultural learning experiences that help tourists understand the intertwined ecological and cultural significance of the area. By doing so, policy can activate heritage-based motivations that complement and, when necessary, compensate for weaker green images.

### ***Dual Motivational Pathways: Norm-Driven and Heritage-Value Driven***

The combination of SEM and fsQCA revealed a dual motivational architecture: a normative route and a heritage-value route, each sufficient to yield high sustainable tourism intentions and, in various configurations, support for sustainability and behavior. The normative route is characterized by high subjective norms, often with moderate levels of attitude, while the heritage-value route is characterized by high GHCA, frequently combined with non-high green image and positive attitudes.

However, these are not simply different strengths of a single process but qualitatively distinct mechanisms. The normative pathway is socially driven: individuals act because they perceive that significant others, communities, or “people like me” expect or approve of such behavior. The heritage-value pathway, by contrast, is value-driven: individuals act because they see their behavior as aligned with protecting a valued cultural–ecological landscape. Establishing the coexistence of these pathways strengthens theoretical pluralism beyond a single, uni-directional motivational model and underscores the equifinal and multi-causal nature of sustainable behavior.

Conceptually, the evidence that sustainable tourism in Bang Kachao can emerge from both collective social expectations and place-based cultural commitments enriches sustainable tourism theory (DASTA, 2024; Klamsaengsai et al., 2025; Likitsarun et al., 2023). It shows that apparently similar behavioral outcomes—such as choosing low-impact options, supporting sustainable policies, or acting responsibly on-site—may arise for different psychological reasons. This recognition has direct implications for SDG 8.9 policy design: interventions can, and arguably should, leverage two distinct motivational engines. On one side, social normative interventions—such as highlighting community norms, using social proof, and displaying approval or disapproval—can harness the normative route. On the other, heritage-value interventions—such as communicating cultural preservation messages, curating local wisdom narratives, and engaging tourists in heritage experiences—can harness the heritage-value route.

### ***Motivational Transition: From Social Norms to Internalized Heritage Values***

A further theoretical insight concerns the transition pattern observed across different outcome variables. While intentions are strongly dominated by normative configurations, the fsQCA solutions for support and behavior increasingly featured GHCA-heavy and mixed

configurations. In short, the social-normative route appeared most central at the intention stage, whereas heritage-value and combined routes became more prominent when explaining supportive attitudes and enacted behaviors.

This pattern can be interpreted as a shift from compliance to internalization (Niesten & Jolink, 2020). Initially, individuals may form sustainable visitation intentions primarily because they perceive strong social expectations or normative pressure (Pham & Khanh, 2021; Seyfi et al., 2024)—that is, they act in response to “what one should do.” However, those who move from an intention to concrete support for sustainability and finally behavior may increasingly rely on internalized values tied to the heritage and meaning of a place. Sustainability thus becomes value-sustained rather than merely norm-sustained.

This interpretation aligns with broader models of norm internalization, value commitment, and identity-based pro-environmental behavior (Teeroovengadum, 2019), which suggest that durable behavioral change often entails a progression from external regulation to identified or integrated regulation. It implies that sustainable tourism may unfold through motivational phases, not just different predictors at a single time point: norm compliance may be particularly influential in early or public-facing decisions, while heritage-based identity and values may sustain long-term engagement and support for sustainability.

For SDG 8.9, the findings offer insight that long-term sustainability in destinations such as Bang Kachao cannot rest solely on maintaining high normative pressure. Instead, policies and interventions should aim to cultivate heritage-based commitments that embed sustainability into how visitors and residents understand the value of the place (United Nations, 2015). Community storytelling, participatory interpretation, guided cultural–ecological tours, and programs that connect visitors emotionally and reflectively to the heritage of Bang Kachao can help facilitate this deeper motivational shift.

## **LIMITATIONS AND FUTURE RESEARCH DIRECTIONS**

### ***Design Limitations***

The first limitation concerns the cross-sectional design of the study, which restricts the ability to make temporal or causal inferences. Meanwhile, the hybrid analytical strategy emphasizes explanatory sufficiency rather than causal assertion, temporal precedence cannot be empirically established. As a result, the transitions observed from normative to value-based motivations across intentions, support, and behavior should be interpreted as theoretically plausible and empirically well-supported, yet not definitively causal. Longitudinal evidence would be required to confirm whether motivational processes indeed unfold sequentially.

Second, the study relied on self-reported measures of sustainable tourism behavior, which may be subject to social desirability bias. This is especially relevant in collectivist contexts where sustainability is socially valued and where respondents may seek to align their answers with perceived expectations. Although the fsQCA mitigates some of this concern by detecting patterns rather than absolute magnitudes, and although behavior was asked in specific, concrete terms, self-reports inevitably carry measurement limitations. Behavioral observations or digital trace data would provide more objective assessments in future research.

### ***Analytical Limitations***

A further limitation relates to model fit in the SEM analysis, which, while acceptable for a large, theory-driven model, did not reach the high thresholds associated with simpler or more constrained models. The purpose of this study was to evaluate the average structural

tendency of the proposed reasoning model, and thus perfect fit is not required for the model to serve its explanatory function. Nevertheless, a more refined measurement model—potentially incorporating bifactor structures or parceling strategies—could improve fit and enhance interpretive clarity.

Additionally, both fsQCA and Sufficient Condition Analysis (SCA) require careful calibration, coding, and interpretation. fsQCA's reliance on fuzzy-set membership values means that results can be sensitive to calibration thresholds and anchor choices, while SCA involves supervised identification of sufficiency structures that may vary with specification choices. Although the study employed established calibration protocols and cross-method triangulation to ensure robustness, these methods inherently require researcher judgment, and replication across alternative calibration schemes would strengthen confidence in the patterns identified.

### ***Future Research Directions***

First, longitudinal research is needed to test the motivational transition model directly. Tracking the same individuals over time would allow researchers to examine whether the movement from a norm-driven intention to heritage-based support and behavior represents a stable developmental sequence or is contingent on situational cues.

Second, the study highlights the potential of experimental or quasi-experimental methods to test the causal effects of heritage-based messaging. By manipulating exposure to cultural narratives, local wisdom framing, or stewardship appeals, future studies could determine whether GHCA can be directly activated and whether it causally enhances sustainable intentions and behavior.

Third, the dual-route architecture uncovered here invites cross-cultural comparative studies. In destinations with lower collectivism or weaker heritage salience, normative or heritage-value pathways may function differently. Comparative studies across Southeast Asia, East Asia, and Western contexts would help identify which features of the dual-route system are universal and which are context-bound.

Fourth, there is a need for deeper modeling of heritage identity, community connectedness, and place attachment as potential mediators or moderators within the heritage-value pathway. GHCA may capture only one dimension of a broader identity-based system of motivation. Investigating how visitors internalize cultural meanings, how residents articulate place identity, and how shared narratives foster stewardship, would enrich both theoretical understanding and policy design.

### **ACKNOWLEDGEMENT**

This Research was funded by the Thailand Science research and Innovation Fund Chulalongkorn University (SOC\_FF\_68\_208\_3900\_002). AI-assisted tools (such as ChatGPT) were employed to improve the clarity, coherence, and linguistic quality of the English text. These tools were used strictly for editorial and language-support purposes. All intellectual contributions—including the development of research questions, theoretical framing, model specification, data analysis, and interpretation—were carried out exclusively by the authors. The authors affirm that the use of AI complies with ethical standards for responsible research and academic publishing.

### **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)
- 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>
- Candeloro, G., & Tartari, M. (2025). Heritage-led sustainable development in rural areas: The case of Vivi Calascio community-based cooperative. *Cities*, 161, 105920. <https://doi.org/10.1016/j.cities.2025.105920>
- Chi, X., Cheng, X., Zhou, H., Zheng, X., Cao, J., & Han, H. (2024). Investigation on driving mechanism of heritage tourism consumption: a multi-method analytical approach. *Journal of Travel & Tourism Marketing*, 41(8), 1141-1160. <https://doi.org/10.1080/10548408.2024.2379317>
- Cho, H., Khoo, E. C., & Lee, H. W. (2019). Nostalgia, motivation, and intention for international football stadium tourism. *Asia Pacific Journal of Tourism Research*, 24(9), 912-923. <https://doi.org/10.1080/10941665.2019.1653339>
- DASTA. (2024). *Khung Bang Kachao travel guide in Thai and English*. <https://www.dasta.or.th/en/article/4493>
- Fakfare, P., Manosuthi, N., Lee, J. S., Han, H., & Kang, H. (2025). Small island tourism and visitors' pro-environmental behaviors: an optimum combination impact assessment. *Asia Pacific Journal of Tourism Research*, 30(7), 866-884. <https://doi.org/10.1080/10941665.2025.2471495>
- González-Rodríguez, M. R., Díaz-Fernández, M. C., Caber, M., & Albayrak, T. (2025). Determinants of user behavior in 360° virtual tours: a hybrid analytical approach with PLS-SEM and fsQCA. *Journal of Travel & Tourism Marketing*, 42(5), 627-644. <https://doi.org/10.1080/10548408.2024.2436655>
- Han, H., & Kim, Y. (2010). An investigation of green hotel customers' decision formation: Developing an extended model of the theory of planned behavior. *International journal of hospitality management*, 29(4), 659-668. <https://doi.org/10.1016/j.ijhm.2010.01.001>
- Klamsaengsai, S., Cheablam, O., Sasithornwetchakul, A., Churugsa, W., & Kaosiri, Y. N. (2025). Sustainable Tourism Assessment in Urban Green Spaces: The Case of Khung BangKachao. *Urban Science*, 9(5), 136. <https://doi.org/10.3390/urbansci9050136>
- Kusumastuti, H., Pranita, D., Viendyasari, M., Rasul, M. S., & Sarjana, S. (2024). Leveraging local value in a post-smart tourism village to encourage sustainable tourism. *Sustainability*, 16(2), 873. <https://doi.org/10.3390/su16020873>
- Lee, J. H., Joo, D., Lee, C. K., Parkt, Y. N., & Kwon, Y. J. (2022). The role of residents' sustainable intelligence in agricultural heritage site management: Insights from PLS-SEM and Fs/QCA. *Journal of Hospitality and Tourism Management*, 52, 65-74. <https://doi.org/10.1016/j.jhtm.2022.06.004>
- Likitsarun, N., Buathong, D., & Hokta, D. (2023). The Factors influencing decision-making of bicycle tourists at Khung Bang Krachao Phra Pradaeng District Samut Prakan Province. *Service, Leisure, Sport, Tourism & Education*, 1(2), 1-14.
- Lin, M. T., Zhu, D., Liu, C., & Kim, P. B. (2022). A systematic review of empirical studies of pro-environmental behavior in hospitality and tourism contexts. *International Journal of Contemporary Hospitality Management*, 34(11), 3982-4006. <https://doi.org/10.1108/IJCHM-12-2021-1478>
- Lin, Y., Yoon, J. H., & Xiao, G. (2025). Promoting sustainable island tourism through tourists' environmentally responsible behavior: integrating VIP, VAB, and TPB. *Sustainability*, 17(11), 4792. <https://doi.org/10.3390/su17114792>
- Liu, B., Xu, J., Guo, Y., & Fu, Y. (2024). How the perceived value of green creativity influences employees' green creativity: the dual promotion-prevention path. *Journal of*

- Sustainable Tourism*, 32(1), 132-150. <https://doi.org/10.1080/09669582.2022.2126489>
- Liu, J., Qu, H., Huang, D., Chen, G., Yue, X., Zhao, X., & Liang, Z. (2014). The role of social capital in encouraging residents' pro-environmental behaviors in community-based ecotourism. *Tourism Management*, 41, 190-201. <https://doi.org/10.1016/j.tourman.2013.08.016>
- Manosuthi, N., Lee, J. S., & Han, H. (2020). Predicting the revisit intention of volunteer tourists using the merged model between the theory of planned behavior and norm activation model. *Journal of Travel & Tourism Marketing*, 37(4), 510-532. <https://doi.org/10.1080/10548408.2020.1784364>
- Manosuthi, N., Lee, J. S., & Han, H. (2024). Green behavior at work of hospitality and tourism employees: Evidence from IGSCA-SEM and fsQCA. *Journal of Sustainable Tourism*, 32(1), 85-107. <https://doi.org/10.1080/09669582.2022.2115051>
- Manosuthi, N., Meeprom, S., & Leruksa, C. (2024). Exploring multifaceted pathways: Understanding behavioral formation in green tourism selection through fsQCA. *Journal of Travel & Tourism Marketing*, 41(4), 640-658. <https://doi.org/10.1080/10548408.2024.2325529>
- MU, Q. (2022). Understanding Heritage-Led Development of the Historic Villages of China: A Multi-case Study Analysis of Tongren. *The Historic Environment: Policy and Practice*, 13(2), 216-241. <https://doi.org/10.1080/17567505.2021.1940575>
- Nielsen, E., & Jolink, A. (2020). Motivations for environmental alliances: Generating and internalizing environmental and knowledge value. *International Journal of Management Reviews*, 22(4), 356-377. <https://doi.org/10.1111/ijmr.12228>
- Nowacki, M., Kowalczyk-Anioł, J., & Chawla, Y. (2023). Gen Z's attitude towards green image destinations, green tourism and behavioural intention regarding green holiday destination choice: A study in Poland and India. *Sustainability*, 15(10), 7860. <https://doi.org/10.3390/su15107860>
- Olya, H. G., Bagheri, P., & Tümer, M. (2019). Decoding behavioural responses of green hotel guests: A deeper insight into the application of the theory of planned behaviour. *International Journal of Contemporary Hospitality Management*, 31(6), 2509-2525. <https://doi.org/10.1108/IJCHM-05-2018-0374>
- Pham, H. S. T., & Khanh, C. N. T. (2021). Ecotourism intention: the roles of environmental concern, time perspective and destination image. *Tourism Review*, 76(5), 1141-1153. <https://doi.org/10.1108/TR-09-2019-0363>
- Rasmidatta, V. (2023). Comparative analysis of factor-based and composite-based structural equation models: Factors affecting word-of-mouth of Tourists in Khung Bang Kachao. *ABAC Journal*, 43(4), 135-164. <https://doi.org/10.59865/abacj.2023.58>
- Seyfi, S., Rasoolimanesh, S. M., Vafaei-Zadeh, A., & Esfandiar, K. (2024). Can tourist engagement enhance tourist behavioural intentions? A combination of PLS-SEM and fsQCA approaches. *Tourism Recreation Research*, 49(1), 63-74. <https://doi.org/10.1080/02508281.2021.1981092>
- Sreen, N., Mukherjee, S., Jebarajakirthy, C., Kumar, S., & Sharma, H. (2024). Role of personal values on revisiting green hotels: a hierarchical value map approach. *Tourism Recreation Research*, 49(4), 854-874. <https://doi.org/10.1080/02508281.2022.2076190>
- Suriyankietkaew, S., Krittayaruangroj, K., Thinthan, S., & Lumlongrut, S. (2025). Community Capitals Framework for Sustainable Development: A Qualitative Study of Creative Tourism in Ban Chiang World Heritage Site. *Sustainability*, 17(8), 3111. <https://doi.org/10.3390/su17083311>
- Teeroovengadum, V. (2019). Environmental identity and ecotourism behaviours: examination of the direct and indirect effects. *Tourism Review*, 74(2), 280-292. <https://doi.org/10.1108/TR-11-2017-0190>

- United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*.
- Wattanacharoensil, W., & Schuckert, M. (2016). Reviewing Thailand's master plans and policies: implications for creative tourism? *Current Issues in Tourism*, 19(10), 1045-1070. <https://doi.org/10.1080/13683500.2014.882295>
- Zhang, H., & Zhang, Y. (2019). Comparing fsQCA with PLS-SEM: predicting intended car use by national park tourists. *Tourism Geographies*, 21(4), 706-730. <https://doi.org/10.1080/14616688.2018.1540652>