

Prioritizing Destination Attributes That Shape the Digital Detox Tourism Experience

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Abstract

As digital overuse increasingly undermines psychological well-being, digital detox tourism has emerged as a strategic response. This study examines how destination-level attributes shape tourists' cognitive awareness of digital overuse—a key psychological outcome of disconnection. Drawing on the Stimulus–Response (S–R) model, six environmental stimuli are assessed: natural remoteness, low connectivity infrastructure, destination narrative framing, availability of analog activities, perceived safety while disconnected, and social norms supporting detox. Data from 185 participants at wellness retreats in Thailand were analyzed using PLS-SEM and Importance–Performance Map Analysis (IPMA). Results show that all six attributes significantly influence awareness, with analog activities, low connectivity, and safety perceptions being the most impactful and well-performing. IPMA further reveals strategic priorities for experience design. This study extends S–R theory to digital well-being contexts and offers actionable insights for destination planners and wellness managers seeking to cultivate environments that promote reflective disengagement and cognitive recalibration in the digital age.

Keywords: digital detox tourism, cognitive awareness, destination attributes, Stimulus–Response model, Importance–Performance Map Analysis (IPMA)

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Introduction

The intensification of digital engagement in everyday life has raised concerns about its impact on psychological well-being, prompting a growing interest in tourism experiences that facilitate voluntary disconnection. Digital detox tourism—defined as travel aimed at intentionally disconnecting from digital devices—has emerged as a response to the cognitive fatigue and anxiety associated with constant connectivity (Gong et al., 2023). While research has explored tourists' motivations for engaging in digital detox and the restorative benefits of disconnection, the environmental conditions that enable such outcomes have not been sufficiently theorized or empirically prioritized.

This study adopts the Stimulus–Response (S–R) model as a theoretical lens to examine how external environmental stimuli embedded in destination attributes can trigger psychological responses—specifically, cognitive awareness of digital overuse (Toates, 1997). Cognitive awareness refers to a tourist's reflective recognition of their dependency on digital technologies, a transformative outcome that signals deeper behavioral insight and the potential for longer-term lifestyle recalibration (Aksan & Kisac, 2009). While S–R theory has been applied in consumer psychology and service environments to explain direct behavioral reactions to environmental stimuli (Russell & Mehrabian, 1974), its application in digital detox tourism remains largely unexplored.

The study identifies six destination-level stimuli likely to shape this awareness: natural remoteness, low connectivity infrastructure, destination narrative framing, availability of analog activities, perceived safety while disconnected, and social norms supporting detox (Radtke et al., 2022). These attributes align with emerging evidence that the physical, symbolic, and socio-behavioral environment of a destination plays a critical role in shaping disconnection-related outcomes. However, existing literature tends to treat these factors descriptively or anecdotally, without empirically evaluating their comparative significance or managerial relevance.

Moreover, while studies have highlighted the importance of nature, mindfulness, and social facilitation in disconnection experiences, few have linked these destination-level features to concrete psychological responses such as digital self-awareness. Nor have these features been systematically prioritized to inform destination design or wellness strategy. This study responds to this gap by assessing both the effect and relative importance of key destination stimuli in shaping the digital detox experience. By integrating theory with empirical prioritization, this research contributes to the evolving discourse on digital well-being in tourism and provides evidence-based guidance for the design of environments that foster meaningful disconnection.

Literature Review

Digital Detox

Digital detox refers to the intentional disengagement from digital devices in order to restore psychological balance and mitigate the effects of digital dependency (Radtke et al., 2022). The concept has gained scholarly and public attention in response to rising levels of technostress, anxiety, and attentional fatigue associated with perpetual digital engagement. Scholars have outlined how continuous connectivity erodes cognitive resources, prompting individuals to seek temporary reprieve through digital abstention. Within the tourism context, digital detox is frequently framed as a form of restorative travel, aligning with theory of restorative

environments, which posits that nature and solitude can replenish depleted attentional capacities.

Although the literature has examined tourists' motivations for engaging in digital detox—ranging from self-care and stress relief to mindfulness and reengagement with physical space—most studies remain rooted in qualitative accounts. These explorations often focus on subjective experiences or traveler narratives, offering rich but fragmented insights that lack generalizable frameworks. Furthermore, the existing body of work has emphasized individual-level factors, such as personality traits and self-regulation capacities, while paying insufficient attention to the environmental or contextual features that make disconnection feasible and psychologically effective. This represents a significant theoretical gap, as the digital detox experience cannot be fully understood without reference to the destination attributes that either facilitate or constrain disconnection (Mirbabaie et al., 2022).

Destination Attributes That Shape the Digital Detox Tourism Experience (Stimuli)

Environmental psychology and servicescape theory suggest that physical and symbolic characteristics of a setting significantly influence behavioral and psychological outcomes (Bitner, 1992; Russell & Mehrabian, 1974). Within digital detox tourism, several destination-level attributes have been identified as salient stimuli that may facilitate intentional disconnection.

Natural remoteness is frequently cited as a key facilitator of digital detox, offering spatial and sensory isolation from urban stimuli and digital infrastructures. Such settings enhance restorative potential by removing technological and cognitive distractions. Relatedly, low connectivity infrastructure is reframed in the detox context as an affordance rather than a limitation. Weak or absent digital signals reduce the psychological burden of self-regulation by structurally constraining device use. This emphasizes that infrastructural scarcity can act as a functional design feature in wellness tourism (Quaye, 2025).

Destination narrative framing also plays a crucial role in shaping visitor expectations and behaviors. Through symbolic messaging and brand positioning, destinations that emphasize being “off-grid,” “mindful,” or “unplugged” prime tourists for digital abstention. However, much of this framing remains promotional, with limited empirical analysis of its psychological effectiveness. The availability of analog activities—such as hiking, journaling, or artisanal workshops—provides immersive, screen-free alternatives that foster flow states and redirect attention from digital devices. Despite this, little is known about which types of activities are most effective in promoting sustained engagement and detachment from digital media (Hassan & Saleh, 2024).

Perceived safety while disconnected represents another underexamined dimension. Tourists' willingness to engage in digital detox may be compromised by concerns over personal security or the fear of being unreachable in emergencies. Risk perception literature suggests that feelings of vulnerability can undermine experiential immersion, yet few studies directly link these perceptions to digital abstention behaviors.

Finally, social norms within the destination environment exert a powerful influence. When disconnection is socially sanctioned and collectively practiced—such as in wellness retreats—tourists are more likely to conform to device-free expectations. These norms legitimize non-

use and foster shared accountability. Nevertheless, the mechanisms by which these social cues are transmitted and internalized remain poorly theorized (Hassan & Saleh, 2024).

While each of these attributes has been acknowledged in the literature, most studies treat them descriptively and in isolation. There is a lack of comparative empirical evidence regarding their relative importance or interactive effects, which limits the development of prescriptive models for destination design and experience management.

Awareness of Digital Overuse (Response)

Awareness of digital overuse constitutes a core psychological response within the digital detox tourism experience. Unlike affective states such as relaxation or temporary satisfaction, this construct reflects a metacognitive recognition of one's dependency on digital technologies and the behavioral patterns that sustain it. This form of awareness is transformative in nature, signaling a shift from unconscious digital consumption to deliberate reflection on the role and influence of digital media in everyday life. It denotes not merely the experience of being disconnected but the internalization of that experience as a meaningful insight into one's digital habits (Abreu & Campos, 2022).

Theoretical perspectives from self-regulation, media literacy, and mindfulness scholarship suggest that awareness is a necessary precursor to behavior change. Without first recognizing the extent and implications of digital overuse, individuals are unlikely to initiate sustainable modifications to their technology practices. In the context of tourism, this awareness may be triggered more readily due to the removal of habitual digital stimuli, the presence of novel environmental cues, and the freedom from normative pressures to remain constantly connected. When tourists are placed in environments that disrupt routine device use—such as those lacking connectivity, offering compelling offline alternatives, or embedding disconnection in the social fabric—they are more likely to experience a reflective decentering of their digital practices.

Despite its conceptual significance, awareness of digital overuse remains under-represented in empirical tourism research. Existing measures often rely on proxy indicators such as intentions to reduce screen time or short-term emotional relief, which do not adequately capture the reflective, cognitive dimension of awareness. Furthermore, few studies have examined the environmental antecedents of this awareness within tourism settings, even though destination attributes may play a decisive role in shaping tourists' perceptual and cognitive responses.

Applying the Stimulus–Response (S–R) model offers a compelling framework for addressing this gap (Russell & Mehrabian, 1974). The model posits that specific environmental stimuli can elicit corresponding psychological responses, which in turn influence behavior. In digital detox tourism, destination-level features act as stimuli that may induce a reflective recognition of digital overuse. Attributes such as natural remoteness, limited digital infrastructure, symbolic framing of disconnection, availability of analog activities, perceived safety while offline, and social norms that endorse detox behaviors may all serve to heighten this awareness. However, the relative influence of each attribute on this cognitive response remains empirically untested. This study advances the application of the S–R model by proposing and testing the following hypothesis:

Hypothesis 1: Destination attributes (i.e., natural remoteness, low connectivity infrastructure, destination narrative framing, availability of analog activities, perceived safety while disconnected, and social norms supporting detox) positively affects awareness of digital overuse.

In addition to estimating the direct effects of five servicescape dimensions on experiential satisfaction via PLS-SEM with consistent (PLSc) estimation, this study examines the relative strategic importance of each servicescape element. Although wellness operators may invest heavily in particular environmental features—whether high-fidelity aromatherapy diffusers or intricately designed meditation pods—these investments do not always translate into greater guest satisfaction. To uncover which features yield the strongest returns on investment in terms of satisfaction, we employ Importance–Performance Map Analysis (IPMA) (Ringle & Sarstedt, 2016).

IPMA juxtaposes each dimension's importance (total standardized effect on satisfaction) against its performance (mean latent score), thereby identifying those servicescape elements that are both highly influential and underperforming. Those attributes occupying the “high importance, low performance” quadrant represent critical leverage points for resource allocation and experience design. By integrating structural path analysis with IPMA, this research not only clarifies which servicescape stimuli most powerfully shape digital-detox satisfaction but also provides actionable guidance on where wellness retreats should focus enhancement efforts to maximize visitor well-being.

Methods

Measurement Development

The study employed a structured questionnaire to measure six environmental stimulus constructs—Natural Remoteness (NRM), Low Connectivity Infrastructure (LCI), Destination Narrative Framing (DNF), Availability of Analog Activities (AAA), Perceived Safety While Disconnected (PSD), and Social Norms Supporting Detox (SNS)—as antecedents to the psychological outcome variable, Cognitive Awareness of Digital Overuse (CAO).

Each construct was measured using three reflective indicators developed from validated instruments in servicescape theory (Bitner, 1992), digital detox tourism, and digital well-being research (Gong et al., 2023; Radtke et al., 2022). All items were anchored on a 7-point Likert scale (1 = Strongly Disagree, 7 = Strongly Agree). The items were reviewed by three academic experts in tourism behavior and digital media and were pre-tested with a pilot sample (n = 30) of wellness tourists. Minor refinements were made to enhance clarity and contextual appropriateness.

Data Collection

Data were collected over a one-month period (March 2025) from domestic tourists attending digital detox programs in wellness retreats across Thailand. Respondents were eligible if they had completed a minimum 1-night stay in a retreat that explicitly marketed itself as tech-free or device-restricted.

A total of 185 valid responses were obtained through online distribution, with the support of retreat facilitators. Participants were informed of the voluntary and anonymous nature of the study.

Respondents' demographics showed diversity in age (predominantly 25–44 years), gender (60% female, 40% male), and professional background (majority employed full-time with moderate-to-high daily technology use).

Analysis Methods

The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) implemented in SmartPLS 4. This method was chosen for its suitability in estimating complex models with reflective constructs and its robustness under conditions of non-normality, which are typical in behavioral tourism research. Prior to assessing the structural model, the quality of the measurement model was rigorously evaluated. This included examining indicator reliability, where all outer loadings were expected to exceed the threshold of 0.70, and internal consistency reliability, which was assessed through both Cronbach's alpha and composite reliability values, each of which were required to exceed 0.70 to be considered acceptable. Convergent validity was evaluated using the Average Variance Extracted (AVE), which was expected to be above 0.50 for all constructs. Discriminant validity was tested using the HTMT ratio. In addition, multicollinearity diagnostics were conducted by inspecting variance inflation factor (VIF) values, which were required to remain below the threshold of 3.3 to confirm the absence of collinearity issues.

Following the confirmation of the measurement model, the structural model was assessed by analyzing the path coefficients and their statistical significance using bootstrapping with 5,000 subsamples. The explanatory power of the model was evaluated based on the coefficient of determination (R^2) for the endogenous variable, Cognitive Awareness of Digital Overuse. To supplement the structural findings and provide managerial insight, the study applied Importance–Performance Map Analysis (IPMA). This analysis allows for the identification of destination attributes that exert a strong influence on the outcome variable (high importance) but exhibit relatively low performance (low mean scores). Such attributes represent key areas for strategic improvement. The IPMA approach thus enhances the practical relevance of the findings by guiding resource prioritization in the design and delivery of digital detox experiences.

Findings

Measurement Model Assessment

All constructs in this study were modeled reflectively, and their measurement properties were rigorously assessed to ensure validity and reliability. The standardized loadings for all indicators exceeded the recommended threshold of 0.70 and were statistically significant at the 95% confidence level, supporting indicator reliability (see Table 1). Following Sarsted et al. (2021), these findings confirm that each indicator contributes meaningfully to the underlying latent construct it was designed to measure.

Convergent validity was established through the Average Variance Extracted (AVE) values, all of which exceeded the 0.60 threshold, indicating that the constructs explain a substantial portion of the variance in their respective indicators. Construct reliability was confirmed using both Cronbach's alpha and composite reliability (CR), with all values surpassing 0.70, indicating strong internal consistency across the items measuring each construct.

Discriminant validity was evaluated using the Heterotrait–Monotrait (HTMT) ratio of correlations. All HTMT values were below the conservative threshold of 0.85, affirming the distinctiveness of the six destination attribute constructs and the outcome variable, cognitive awareness of digital overuse. In addition, the correlations among constructs were positive and aligned with the study's theoretical framework, consistent with prior research on environmental

stimuli and reflective awareness in tourism contexts. These results collectively demonstrate the robustness of the reflective measurement model and support the subsequent structural path analysis.

Table 1
Measurement Model Assessment

Construct	Indicator	Sample 1: International tourists (n = 453)			
		AVE	rho_a	$\hat{w}_i$	$\hat{\lambda}_i$
Natural remoteness	NRM1: I felt physically separated from urban or developed areas.	0.657	0.863	0.359	0.807
	NRM2: The environment offered a sense of escape from daily routines.			0.272	0.734
	NRM3: The location made it easier to disconnect from the digital world.			0.578	0.884
Low connectivity infrastructure	LCI1: There was little to no access to Wi-Fi or mobile networks.	0.662	0.756	0.457	0.872
	LCI2: Digital technology (screens, ads) was visibly absent in the environment.			0.366	0.757
	LCI3: The destination was intentionally designed to limit online access.			0.402	0.808
Destination narrative framing	DNF1: The destination promoted itself as a space for digital disconnection.	0.68	0.95	0.399	0.837
	DNF2: Detox messaging was consistent across marketing, signage, and staff communication.			0.605	0.913
	DNF3: The overall identity of the place emphasized simplicity and presence.			0.159	0.712
Availability of analog activities	AAA1: I had access to meaningful non-digital activities (e.g., journaling, hiking).	0.643	0.727	0.424	0.801
	AAA2: The destination offered resources for engaging offline (e.g., books, physical maps).			0.379	0.788
	AAA3: Analog experiences were well-integrated into the overall offering.			0.442	0.817
Perceived safety while disconnected	PSD1: I felt secure even without constant access to digital communication.	0.606	0.727	0.547	0.855
	PSD2: I did not worry about emergencies or missing important updates.			0.333	0.717
	PSD3: The environment reassured me that disconnection was safe and appropriate.			0.389	0.756
Social norms supporting detox	SNS1: Other visitors and staff supported the idea of staying offline.	0.654	0.788	0.528	0.854
	SNS2: I did not feel social pressure to use my phone.			0.283	0.768
	SNS3: Being disconnected felt socially acceptable at this destination.			0.414	0.801
Awareness of digital overuse	CAO1: I became more conscious of how much I rely on digital devices.	0.87	0.925	0.356	0.929
	CAO2: The experience made me reflect critically on my tech habits.			0.359	0.942
	CAO3: I realized that my digital consumption is often unnecessary or excessive.			0.357	0.928

Note. $\hat{w}_i$ = estimated weights, $\hat{\lambda}_i$ = estimated loadings, VIF = Variance Inflation Factor, and AVE = Average Variance Explained

Structural Model Assessment

The structural model was assessed to evaluate the hypothesized relationships between the six destination attribute constructs and the outcome variable, Cognitive Awareness of Digital Overuse (CAO). All proposed paths were statistically significant at the 95% confidence level, supporting the predictive validity of the model (see Table 2). Among the predictors, Availability of Analog Activities (AAA) emerged as the strongest determinant of cognitive awareness ($\beta =$

0.602, $p < 0.001$), indicating that destinations offering engaging non-digital alternatives—such as journaling, physical exploration, or creative workshops—are most effective in triggering tourists' reflective recognition of their digital overuse. This finding underscores the value of intentional offline programming in shaping meaningful detox experiences. Low Connectivity Infrastructure (LCI) also demonstrated a substantial effect ($\beta = 0.457$, $p < 0.001$), affirming that infrastructural limitations on digital access serve as critical enablers of disconnection and awareness. Similarly, Perceived Safety While Disconnected (PSD) ($\beta = 0.399$, $p < 0.001$) significantly influenced CAO, highlighting that tourists must feel physically and emotionally secure to disengage confidently from digital devices. Natural Remoteness (NRM) had a moderate yet significant impact on awareness ($\beta = 0.288$, $p < 0.001$), suggesting that physical separation from urban environments contributes to cognitive distancing from digital routines. While less pronounced, Social Norms Supporting Detox (SNS) ($\beta = 0.225$, $p = 0.011$) also significantly predicted CAO, indicating that socially reinforced expectations for disconnection help normalize and legitimize device-free behavior. Finally, Destination Narrative Framing (DNF), although statistically significant ($\beta = 0.085$, $p = 0.005$), had the weakest influence among all predictors. This suggests that while symbolic cues and detox messaging may prime expectations, they alone are insufficient to drive deeper cognitive reflection without being supported by tangible environmental or social mechanisms.

Overall, the model confirms that all six destination-level attributes play a significant role in shaping cognitive awareness of digital overuse. However, their relative effects vary, offering important insights for destination managers seeking to design environments that not only support disconnection but also foster lasting self-awareness.

Table 2

Structural Model Assessment (n = 185)

Relationship	Estimate	p-value
NRM -> CAO	0.288	0.001**
LCI -> CAO	0.457	0.001**
DNF -> CAO	0.085	0.005**
AAA -> CAO	0.602	0.001**
PSD -> CAO	0.399	0.001**
SNS -> CAO	0.225	0.011**

Note. NRM = Natural remoteness, LCI = Low connectivity infrastructure, DNF = Destination narrative framing, AAA = Availability of analog activities, PSD = Perceived safety while disconnected, SNS = Social norms supporting detox, CAO = Awareness of digital overuse, ** = significant at 95% confidence level.

IPMA Results

The Importance–Performance Map Analysis (IPMA) is a decision-support tool that enables both descriptive and predictive analysis of structural model results (Ringle & Sarstedt, 2016). It is particularly useful in identifying strategic priorities for resource allocation, as it contrasts the importance (i.e., total effect size of predictor constructs on a target variable) with performance (i.e., mean latent scores of those constructs) in relation to a specific outcome. In this study, IPMA was used to evaluate how different destination attributes influence cognitive awareness of digital overuse—the central outcome of digital detox tourism.

As noted by Henseler (2021), IPMA extends traditional path analysis by layering in performance metrics, offering a multidimensional interpretation of how well individual

constructs are performing relative to their influence. Constructs that show high importance but low performance signal critical leverage points—areas where improvements can yield significant gains in the outcome. Conversely, constructs with low importance and low performance may be considered lower priorities, while high-performing, low-importance attributes could be viewed as potential over-investments.

To visualize these strategic insights, average performance scores of all six destination attributes were plotted along the y-axis, and their corresponding importance scores (total effects on awareness) along the x-axis. A vertical line was drawn at the mean of the importance scores and a horizontal line at the mean of performance scores, resulting in a four-quadrant matrix. This matrix helps to interpret the attributes as follows (see Figure 1):

Quadrant 1 – Keep Up the Good Work. This quadrant includes attributes that are both highly important in predicting cognitive awareness and are performing well. The analysis revealed that Availability of Analog Activities (AAA), Low Connectivity Infrastructure (LCI), and Perceived Safety While Disconnected (PSD) fall within this category. These attributes are critical to the success of digital detox experiences, and their current execution appears effective. Continued investment and refinement in these areas are warranted to maintain their strong performance and contribution to awareness outcomes.

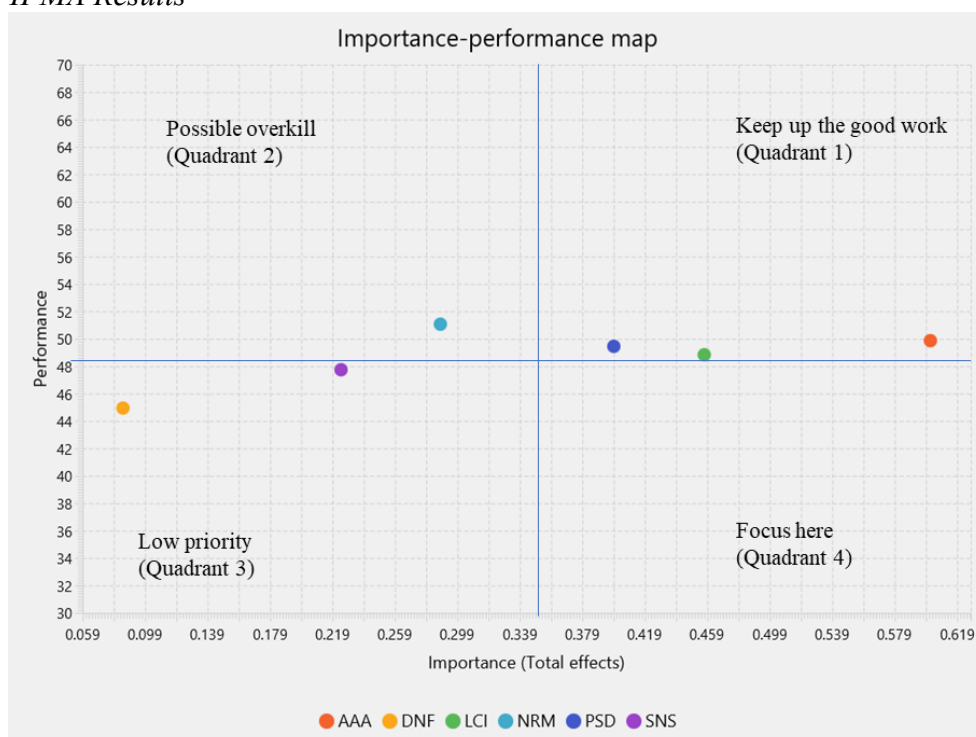
Quadrant 2 – Possible Overkill. Constructs in this quadrant show relatively high performance but have limited importance in explaining the outcome. Natural Remoteness (NRM) was positioned here, suggesting that although tourists rate this attribute favorably, its influence on cognitive awareness is comparatively modest. While NRM may enhance the general appeal of a destination, it may not directly trigger reflective recognition of digital overuse. This finding invites critical evaluation of potential overinvestment in remote settings without concurrent emphasis on experiential or psychological design.

Quadrant 3 – Low Priority. This quadrant consists of attributes with both low importance and low performance. Destination Narrative Framing (DNF) and Social Norms Supporting Detox (SNS) were found to reside here. Their limited performance and weak predictive relevance suggest they are currently underdeveloped and not central to shaping cognitive awareness. While these dimensions may offer indirect value or future potential, they are currently not key drivers of outcome effectiveness and may be considered lower priority in immediate destination strategy.

Quadrant 4 – Focus Here. Typically, this quadrant identifies high-importance but underperforming constructs, representing areas with the greatest strategic opportunity. In this analysis, no attributes were found in Quadrant 4. This suggests that, among the six studied attributes, those with the strongest predictive relevance also exhibit adequate performance, implying no immediate gaps in under-leveraged high-impact features. However, the absence of constructs in this quadrant does not negate the potential for optimization, especially in refining aspects of Quadrant 1 to achieve even greater awareness outcomes.

The IPMA thus offers an actionable framework for destination managers, highlighting where to maintain performance (AAA, LCI, PSD), where to reconsider over-investment (NRM), and where limited current returns suggest lower strategic priority (DNF, SNS). These insights contribute not only to the theoretical advancement of digital detox tourism but also to practical decision-making in experience design.

Figure 1
IPMA Results



Discussion and Implications

Theoretical Implications

This study makes several important theoretical contributions to the evolving discourse on digital detox tourism and the application of the Stimulus–Response (S–R) model in tourism behavior research. By operationalizing six destination-level attributes as environmental stimuli, and cognitive awareness of digital overuse as the psychological response, the study extends the application of S–R theory to the underexplored domain of digital disengagement. The significant positive effects of all six attributes on cognitive awareness affirm the theoretical plausibility of using environmental stimuli to explain reflective psychological responses within tourism settings. This shifts the analytical focus beyond immediate affective reactions (e.g., satisfaction, relaxation) to more enduring cognitive processes such as metacognitive insight and digital self-awareness.

The findings also address critical gaps in digital detox literature, which has traditionally emphasized individual motivations or qualitative interpretations of detox experiences. Through the use of reflective constructs and validated measurement models, this study brings empirical precision to previously anecdotal claims about the role of environment in facilitating disconnection. Notably, attributes such as Availability of Analog Activities (AAA), Low Connectivity Infrastructure (LCI), and Perceived Safety While Disconnected (PSD) were found to be both high in importance and performance, substantiating the multidimensional nature of effective detox design. Conversely, the relatively lower influence of Destination Narrative Framing (DNF) and Social Norms Supporting Detox (SNS) suggests that symbolic messaging and social cues, while frequently invoked in conceptual discourse, may be insufficient on their own to trigger deep cognitive reflection.

In applying Importance–Performance Map Analysis (IPMA), the study also contributes a methodological advancement. While IPMA has gained traction in service and marketing research, its application in digital wellness tourism remains rare. By visualizing which attributes are strategically overinvested (e.g., NRM) or underleveraged (none in Quadrant 4), the IPMA matrix offers a structured, theoretically informed basis for prioritization, thus enhancing the decision utility of theoretical constructs.

Practical Implications

The findings yield actionable insights for destination planners, wellness retreat managers, and policymakers aiming to design environments that support tourists’ reflective disengagement from digital technologies. The identification of AAA, LCI, and PSD as high-impact, high-performance attributes suggests that investment in tangible and functional design features—rather than symbolic messaging alone—is key to fostering meaningful digital detox experiences. For example, ensuring the integration of offline engagement opportunities such as journaling stations, forest walks, or analog tools (e.g., sketchbooks, compasses) provides not just distraction from devices, but purposeful immersion that encourages deeper cognitive recalibration.

Likewise, engineering low-connectivity infrastructure—either through deliberate design or natural constraints—can aid tourists who may lack the willpower to self-regulate device usage. This aligns with “digital nudge” strategies, wherein the environment passively supports behavioral goals by minimizing temptation. Furthermore, prioritizing perceived safety—such as through emergency protocols, staff visibility, and orientation briefings—can mitigate one of the key psychological barriers to disconnection: fear of being unreachable. This affirms the importance of addressing both physical and emotional safety in detox program design.

The results also advise caution regarding overinvestment in natural remoteness as a proxy for digital detox efficacy. Although remote locations are often romanticized in detox branding, their actual impact on digital self-awareness may be limited without complementary experiential or interpretive features. Similarly, destination narrative framing and social detox norms, while useful as supporting cues, should not be treated as standalone solutions. Operators should integrate these features within a broader environmental strategy that also includes structured offline engagement and infrastructural control.

For tourism boards and marketers, the implications are twofold: first, to realign branding efforts with those attributes empirically shown to influence cognitive outcomes (e.g., analog immersion rather than just “remote and wild” imagery); and second, to use performance audits (such as IPMA) regularly in program evaluations to ensure that strategic investments are driving the desired psychological impact.

Research Limitations

While this study provides valuable insights into the environmental antecedents of cognitive awareness of digital overuse in tourism settings, several limitations should be acknowledged. First, the cross-sectional nature of the data constrains the ability to draw causal inferences. Although the Stimulus–Response (S–R) model offers a theoretically grounded rationale for directional relationships, future studies employing longitudinal or experimental designs could better capture the evolution of cognitive awareness over the course of a digital detox experience.

Second, the sample was limited to domestic tourists in Thailand attending wellness retreats with explicit digital detox programs. While this enhances contextual relevance, it limits the generalizability of findings to international tourists, urban destinations, or non-wellness-oriented travel contexts. Cultural norms and infrastructural expectations around digital use vary significantly across settings; therefore, replication in other geographic and sociocultural contexts would be essential to validate the model's robustness.

Moreover, while the study successfully prioritized six environmental attributes, it did not account for possible interaction effects or moderating influences, such as personal traits (e.g., digital dependence, mindfulness disposition) or group travel dynamics. Exploring how individual differences shape the salience of destination attributes could yield a more nuanced understanding of how environmental and personal factors interact in fostering digital reflection.

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