

## **Sustainable Religious Tourism Product Development and the Mediating Role of Tourist Satisfaction**

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### **Abstract**

*The sustainable development of religious tourism products increasingly requires the delicate integration of tangible infrastructure with intangible spiritual values; however, the mechanisms linking site attributes to sustainability remain insufficiently examined. This study addresses this gap by investigating how attraction, accessibility, and spiritual atmosphere influence sustainability outcomes, with tourist satisfaction conceptualized as a mediating mechanism.*

*A correlational research design and quantitative approach were employed, using structural equation modeling (SEM) to analyse variable relationships. Data were collected through a purposive sampling survey at six religious sites in Nepal. Of the 600 distributed questionnaires, 483 valid responses were retained after removing incomplete entries and outliers. Findings reveal that attraction and accessibility affect sustainability only indirectly via tourist satisfaction, whereas spiritual atmosphere exerts a distinctive direct effect that bypasses satisfaction. On this basis, the study advances a dual-pathway model of sustainability: one mediated by satisfaction and another driven by spirituality. Theoretically, the study refines expectancy-disconfirmation theory by demonstrating the mediated influence of site attributes, while extending Butler's Tourist Area Life Cycle (TALC) model to foreground spiritual dynamics in sustainability discourse. Practically, the findings highlight the necessity for destination managers to adopt a dual strategy that simultaneously strengthens infrastructure and accessibility while safeguarding spiritual ambience and cultural authenticity as pillars of long-term sustainability. Future studies should broaden geographic scope, integrate mixed-methods designs, and incorporate variables such as cultural attachment, perceived value, and destination image to further enrich sustainability models in religious tourism.*

**Keywords:** Sustainability; religious tourism products; tourist satisfaction; spiritual atmosphere; accessibility; structural equation modeling

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### **Introduction**

Religious tourism is pivotal in the global economy, contributing substantially to economic growth across numerous regions (Gyekye et al., 2014; Ayorekire et al., 2020). Religious tourism products contribute to sustainable tourism development by ensuring high tourist satisfaction and delivering meaningful, unique

experiences (Lopez, 2013). Furthermore, this product must promote sustainability by safeguarding natural ecosystems, preserving cultural heritage, and upholding traditional community values, thereby securing long-term economic and social benefits (Romanelli et al., 2021). However, the rapid expansion of this sector exerts significant pressure on local ecosystems and communities, posing critical challenges for religious tourism destinations (Ibanescu et al., 2018). Consequently, the imperative of sustainability in religious tourism has garnered increasing attention and remains a subject of ongoing debate practically and academically (Kim et al., 2020).

Sustainable religious tourism integrates environmental, social, and economic dimensions (WCED, 1987; Farrell & Twining, 2005). According to the WTO (1998), sustainable tourism seeks to optimise environmental resource use, respect the cultural authenticity of host communities, ensure equitable economic benefits, and foster intercultural understanding. Within this context, sustainable religious tourism fosters opportunities for responsible economic growth, enhances employment opportunities and quality of life, and supports infrastructure development in local communities (Romanelli et al., 2021). The sustainability of the religious tourism sector hinges significantly on effective religious product development, which acts as a pivotal driver influencing travel choices (Lee, 2009). Religious products are indispensable for attaining sustainable outcomes in religious tourism destinations (Haid & Albrecht, 2021), as they enhance tourist satisfaction through meaningful experiences while concurrently advancing sustainability objectives (Weaver, 2007). Thus, sustainable religious product development has emerged as a critical agenda, aligning with broader efforts to achieve sustainability in religious destinations.

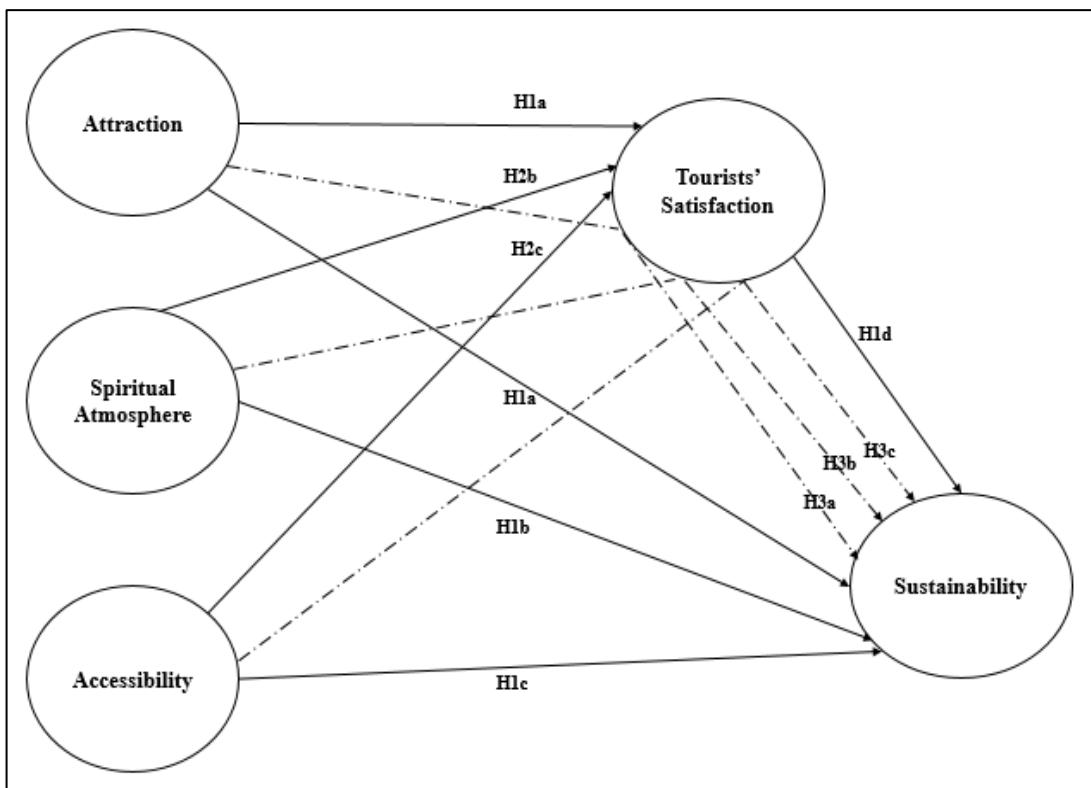
Varying studies have confirmed that the religious products constitute complex constructs shaped by diverse factors, including attraction (Wang et al., 2016; Robustin, 2018), spiritual atmosphere (Shackley, 2001; Timothy & Olsen, 2006; Cvelbar et al., 2017; Gupta & Basak, 2018; Patwardhan et al., 2020), and accessibility (Sereettrakul, 2012; Rajesh, 2013; Ngoc & Trinh, 2015; Castro et al., 2017). Additionally, tourist satisfaction is a pivotal determinant of the long-term sustainability of religious products. While prior studies have examined relationships between these predictors, particularly the mediating role of satisfaction in sustainability, their findings remain inconclusive (Zabkar et al., 2010; Jasrotia et al., 2023). For example, Nilplub et al. (2016) posited that satisfaction fully mediates the effects of attraction, accessibility, amenities, and spiritual atmosphere on sustainability. Similarly, Jiang et al. (2018) demonstrated that attraction directly influences satisfaction and indirectly impacts sustainability through satisfaction. Conversely, Sugiyama et al. (2024) indicated that attraction, accessibility, and amenities predict satisfaction and sustainability, though amenities exhibit a weaker influence. Ismail and Rohman (2019) further revealed that while attraction alone significantly affects satisfaction, accessibility and amenities do not; however, all three factors indirectly influence sustainability when mediated by satisfaction. These inconsistencies may stem from methodological constraints, particularly the reliance on context-specific settings and models in a narrow range of predictors for sustainable religious product development.

The study addresses existing research gaps and reconciles divergent findings and is relevant to identifying the factors influencing tourists' satisfaction and sustainability in religious tourism products. Existing researchers have predominantly centred on tourism product development in leisure tourism, with limited scholarly attention directed toward religious tourism. Moreover, studies often adopt a marketing-oriented lens rather than a sustainability-focused perspective. This study bridges these gaps by systematically identifying determinants of sustainable product development in religious tourism through a quantitative approach. Specifically, the primary objective is to test a conceptual model incorporating key predictors of

product development, attraction, spiritual atmosphere, and accessibility, and investigate how tourist satisfaction mediates their impact on achieving sustainability in religious tourism.

This study is important for resolving theoretical discrepancies about how attractiveness, accessibility, and spiritual atmosphere influence the sustainability of religious tourism product development. It presents and evaluates a dual-pathway model that investigates how infrastructure-related qualities, spiritual atmosphere, and tourist satisfaction affect the long-term viability of the religious tourism offering. As a result, this study enhances conceptual understanding of the Expectancy-Confirmation Theory and the Tourism Area Life Cycle (TALC) paradigm. Furthermore, the practical findings provide evidence-based guidance for Nepalese destination managers and policymakers in designing long-term plans for establishing religious tourism products that effectively combine infrastructure development with the preservation of spiritual and cultural integrity.

Figure 1: *Conceptual Framework of the Study*



This study examines the intricate relationships between attraction, spiritual atmosphere, accessibility, tourist satisfaction, and sustainability, highlighting how these elements collectively influence the development of sustainable religious tourism products. Prior research has shown that these dimensions are critical in determining the quality and long-term viability of religious tourism product (Rinschede, 1992; Shackley, 2001; Leask, 2016; Aulet & Duda, 2020). The assumption here is that when attractions are appealing, spiritual environments are immersive, and sites are easily accessible, religious tourism can better align with sustainable outcomes.

Tourist satisfaction is a significant factor in the development of sustainable religious tourism products. It is both an immediate outcome of the experience and a key factor in long-term sustainability. The literature repeatedly shows that basic product features, like attraction, spiritual atmosphere, and accessibility, affect how satisfied visitors feel with their experience (Oliver, 1980; Yoon & Uysal, 2005). When these expectations are fulfilled or surpassed, tourists are more inclined to exhibit behaviours that promote sustainability, such as destination loyalty, responsible conduct, and favourable word-of-mouth communication (Kozak, 2001; Chen & Chen, 2010; Joseph et al., 2020). This indicates that satisfaction functions as a mediation mechanism via which both tangible and intangible site features influence sustainable tourism outcomes.

Research indicates that religious tourism environments offer a unique sensory context wherein emotionally and spiritually significant interactions significantly enhance visitor satisfaction. While infrastructural and logistical factors like accessibility and amenities contribute to functional satisfaction (McKercher & Cros, 2002; Wang et al., 2016), spiritual atmosphere—exemplified by sacred spaces, rituals, and symbolic environments—elicits profound emotional responses that enhance visitor commitment and destination resilience (Sharpley & Jepson, 2011; Collins, 2010; Willson et al., 2013). This is in line with the expectancy-disconfirmation theory (Oliver, 1980), which says that contentment turns good reviews of site features into long-term plans to act. It also aligns with Butler's (1980) Tourist Area Life Cycle model, which underscores happiness as a fundamental component for the long-term sustainability of a destination.

The literature suggests that attractions and accessibility affect sustainability through satisfaction-driven mechanisms, while spiritual atmosphere may have both direct and indirect impacts. Scholars assert that the development of sustainable religious tourism products necessitates a balance of physical attraction, accessibility and the maintenance of spiritual legitimacy (Shackley, 2001; Timothy & Olsen, 2006; Khadka & Malviya, 2023). Therefore, literature collectively establishes a conceptual framework for analysing the interaction between site attributes (attraction, accessibility, and spiritual atmosphere) and tourist satisfaction in influencing the sustainability of religious tourism products.

The integration of these assumptions elucidates the influence of attractions, spiritual atmosphere, and accessibility on tourist satisfaction, hence informing the development of sustainable religious tourism products. The study offers a rational perspective on how Nepal might advance sustainable religious tourism product development, considering the development and expansion of direct and mediated factors that affect sustainability. This strategy effectively correlates tourist satisfaction with developments in quality infrastructure, culturally original attractions, and the maintenance of a profound spiritual atmosphere.

## Methods

This study employed a correlational research design to examine hypothesized relationships among variables using Structural Equation Modeling (SEM). The study used a quantitative approach, and primary data were collected through a structured questionnaire. The instrument was developed by the researcher and reviewed for content validity by a panel of two academic experts, and all items were measured using a 5-point Likert scale to capture respondents' perceptions. A pilot test was conducted on March 8, 2024, with 55 religious tourists at Pashupatinath Temple in Kathmandu during the Maha Shivaratri festival. The pilot results confirmed the reliability of the instrument, with Cronbach's alpha values exceeding 0.7 for all items and an overall alpha of 0.789 (Cronbach, 1951). Based on these validations, the final questionnaire consisted of 28 items and 84 statements across five constructs.

Purposive sampling was employed to select participants relevant to the study's objectives (Hair et al., 2019). The final questionnaire was personally administered by the researcher to 600 religious tourists, with 100 respondents from each of six major religious sites in Nepal: Janaki Temple (Dhanusa), Pashupatinath (Kathmandu), Muktinath (Mustang), Lumbini (Rupandehi), Bala Tripurasundari (Dolpa), and Saileshwori Temple (Doti). Data were collected between March 20 and July 12, 2024. After rigorous data screening and removing incomplete responses or missing data and outliers, 483 valid questionnaires were retained for analysis, exceeding the minimum sample size according to Cochran's formula (1977) for SEM.

Before conducting SEM, key statistical assumptions, including normality and multicollinearity, were assessed using SPSS 22. The study analysed the descriptive statistics of respondents, followed by an exploratory factor analysis (EFA) to simplify the data and refine the constructs. Confirmatory factor analysis (CFA) using AMOS 22 was employed to evaluate the validity of the measurement model through CR, AVE, and fit indices, including CFI, GFI, RMSEA, and chi-square statistics (Bagozzi & Yi, 1988). Subsequently, the study tested the hypothesised relationships, with assessments of model fit and analysis of both direct and indirect effects based on the conceptual framework. In addition, the study strictly adhered to ethical considerations. Specifically, participation was voluntary, and informed consent was obtained before data collection. Moreover, respondents were assured of confidentiality and anonymity, and no personally identifiable information was recorded. Furthermore, data collection was conducted respectfully to ensure the dignity and comfort of all participants.

## **Results**

This section presents the empirical findings derived from the survey of 483 religious tourists across six major sites in Nepal. Results are structured into four key stages: demographic and tour-related characteristics, exploratory factor analysis (EFA), measurement validation through confirmatory factor analysis (CFA), and hypothesis testing via structural equation modeling (SEM). Together, these analyses provide a comprehensive assessment of how attraction, accessibility, and spiritual atmosphere influence sustainability, both directly and through the mediating role of tourist satisfaction.

**Demographic Profile and Tour-Related Characteristics:** The demographic profile of the respondents provides important insights into the composition and travel behaviour of pilgrims and tourists visiting the study site. As shown in Table 1, female visitors (53.42 percent) slightly outnumbered males (46.58 percent), indicating

ng a relatively balanced gender distribution with a modest predominance of women. This finding resonates with previous studies suggesting that women often play a central role in religious travel and pilgrimage activities, both for personal devotion and family-oriented purposes.

In terms of nationality, most respondents (79.50 percent) were Indian nationals, while the remaining 20.50 percent were from other countries. This dominance of Indian visitors is not unexpected, as the site holds deep spiritual and cultural significance for Hindu devotees from India. The data highlights the strong cross-border religious ties that sustain religious tourism in Nepal, reinforcing the pilgrimage's embeddedness in shared cultural traditions and practices.

Visitors' experience patterns further reveal that most respondents (74.74 percent) were first-time visitors, while 25.26 percent were repeat visitors. This predominance of newcomers underscores the site's enduring appeal and capacity to attract new waves of religious tourists. At the same time, the presence of repeat visitor's points toward a segment of loyal tourists who continue to derive value, meaning, and spiritual fulfilment from revisiting the site. Such patterns suggest opportunities for site managers to

design tailored experiences that cater to both first-time and repeat visitors, thereby enhancing long-term sustainability.

*Table 1: Demographic and tour-related characteristics of the respondents*

Characteristics		No. of respondents	% of respondents
Gender	Male	225	46.58
	Female	258	53.42
Nationality	Indian	384	79.50
	Others	99	20.50
Experience	First time visitors	361	74.74
	Repeat visitors	122	25.26
Mode of travel	Independent	208	43.06
	With travel group	275	56.94

*N* = 483

The mode of travel offers further insight into tourist behaviour, with a majority (56.94 percent) preferring organised group tours over independent travel (43.06 percent), reflecting the logistical convenience, cost-sharing, and collective spiritual experience that group travel provides. This aligns with Lopez (2013), who underscored the role of group dynamics in deepening shared religious experiences, and Gyekye et al. (2014), who noted the predominance of Indian pilgrims in South Asian religious tourism. Complementing these findings, the descriptive statistics of latent constructs (Table 2) show mean scores ranging from 3.0 to 4.3 on a five-point Likert scale, indicating moderate to high agreement with factors linked to sustainable religious tourism product development. The variability in responses ( $SD = 0.912-1.370$ ) reflects diverse cultural backgrounds, spiritual expectations, and prior travel experiences (Wang et al., 2016), highlighting the need for sustainability strategies that address a heterogeneous visitor base.

**Exploratory Factor Analysis:** Before conducting exploratory factor analysis, the study conducted rigorous data screening, and 93 questionnaires were excluded due to incomplete responses or missing data, yielding an 84.5 percent response rate (Hair et al., 2010). An additional 24 outliers were identified and removed using Mahalanobis distance ( $D^2$ ) analysis to enhance data quality (Hair et al., 2010). Consequently, 483 valid questionnaires were retained for EFA and CFA analysis, exceeding the minimum sample size of 384 calculated via Cochran's formula (1977) for SEM.

The study rigorously assessed the underlying statistical assumptions to ensure the robustness of the analysis. Normality was examined using skewness and kurtosis, supported by the Kolmogorov-Smirnov test. As presented in **Table 2**, skewness values fell within the acceptable range of  $\pm 3$  (Coakes & Steed, 2003), while kurtosis values were below the recommended threshold of 2 (Kim, 2013), confirming that the data followed a normal distribution. Multicollinearity was not detected, as tolerance values (0.608-0.851) exceeded the cut-off of 0.10 and variance inflation factors (VIF: 1.175-1.646) remained well below the threshold of 10 (Hair et al., 2010; Bougie & Sekaran, 2019). Furthermore, internal consistency was established with Cronbach's alpha values ranging from 0.763 to 0.853, surpassing the 0.70 benchmark and demonstrating acceptable reliability of the measurement scales (Cronbach, 1951).

To refine the scale and uncover latent dimensions, Principal Component Analysis (PCA) with varimax rotation was conducted (Suhr, 2005). The sampling adequacy and suitability for factor analysis were confirmed by a high Kaiser-Meyer-Olkin (KMO =

Table 2: Descriptive statistics, reliability and validity metrics

Construct	Indicator	Mean	SD	Skewness	Kurtosis	Collinearity Statistics		Total Variance Explained		Communalities
						Tolerance	VIF	Eigenvalues	% of Variance	
Attraction	Att1	3.918	0.912	-0.278	0.015	0.681	1.468	8.236	16.30%	0.756
	Att2	3.855	0.948	-0.454	0.067	0.669	1.495			0.798
	Att3	3.89	0.921	-0.459	0.079	0.8	1.25			0.741
	Att4	4.324	1.145	-0.645	0.326	0.765	1.354			0.782
	Att6	4.029	0.95	-0.303	0.042	0.788	1.27			0.694
Spiritual Atmosphere	Spr2	3.855	0.918	-0.415	0.284	0.844	1.185	6.325	15.84%	0.537
	Spr3	3.511	1.204	-0.581	0.311	0.633	1.579			0.611
	Spr5	3.954	1.1	-0.485	0.215	0.812	1.357			0.753
	Spr6	3.449	1.267	-0.37	0.099	0.736	1.358			0.589
Accessibility	Acc1	3.605	1.192	-0.286	-0.756	0.642	1.559	4.124	12.62%	0.778
	Acc2	3.621	1.13	-0.469	-0.336	0.781	1.281			0.702
	Acc3	3.655	1.157	-0.473	-0.281	0.608	1.646			0.822
	Acc4	3.712	1.086	-0.481	0.078	0.846	1.182			0.74
	Acc6	3.687	1.098	-0.566	-0.004	0.776	1.289			0.812
Tourist Satisfaction	Ts1	3.632	1.114	-0.342	-0.046	0.774	1.291	2.568	12.27%	0.633
	Ts2	4.059	1.047	-0.351	-0.512	0.819	1.222			0.703
	Ts3	4.047	1.023	-0.442	-0.35	0.761	1.313			0.734
	Ts4	3.724	1.195	-0.401	-0.177	0.823	1.215			0.511
	Ts5	3.625	1.155	-0.442	-0.132	0.817	1.224			0.585
Sustainability	Sus1	3.954	0.924	-0.436	-0.256	0.737	1.357	1.235	11.77%	0.555
	Sus2	3.878	1.122	-0.597	0.187	0.851	1.175			0.504
	Sus3	3.711	1.077	-0.55	0.158	0.749	1.335			0.593
	Sus4	3.68	1.112	-0.293	-0.455	0.838	1.194			0.572
	Sus5	4.041	0.924	-0.381	-0.218	0.769	1.301			0.566

0.892) value and a significant Bartlett's Test of Sphericity ( $\chi^2 = 0.00, p < 0.05$ ) (Bartlett, 1954; Kaiser, 1974). The first five components yielded eigenvalues greater than 1.0 (8.236, 6.325, 4.124, 2.568, and 1.235), accounting for a cumulative variance of 68.80 percent, which is considered satisfactory for social science research. In line with Comrey and Lee's (1992) guidelines, four items (Att5, Spr1, Sp4, Acc5) with factor loadings below 0.45 were excluded, resulting in a refined structure of 24 items across five constructs for confirmatory analysis.

Taken together, these diagnostic assessments and factor analytic results confirm that the dataset is statistically sound, reliable, and well-structured for subsequent hypothesis testing. The exclusion of weaker indicators enhanced the clarity and strength of the constructs, while the retained items demonstrated high explanatory power. Importantly, the results suggest that the five-construct measurement framework is both theoretically coherent and empirically valid, providing a solid foundation for examining the relationships among attraction, spiritual atmosphere, accessibility, tourist satisfaction, and sustainability in the context of religious tourism.

**Measurement Validation:** Confirmatory Factor Analysis (CFA) was employed to validate the measurement model and its latent constructs before Structural Equation Modeling (SEM). The analysis, conducted via AMOS, adhered to a two-stage approach (Anderson & Gerbing, 1988).

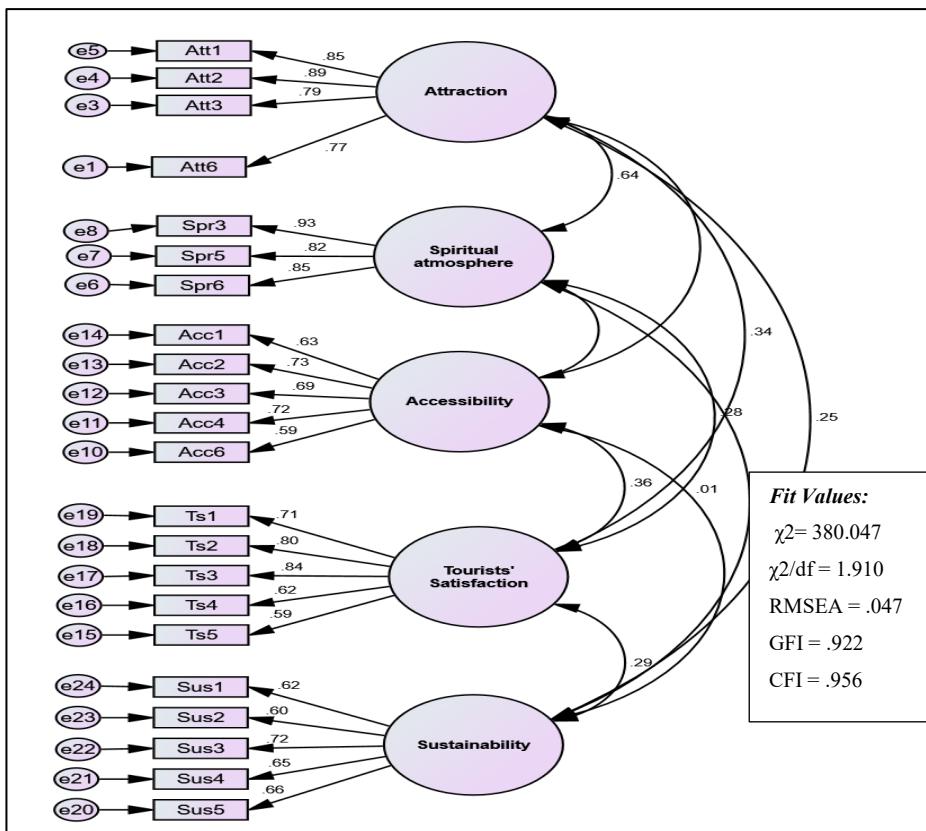
*Table 3: Reliability and validity metrics*

	Cronbach $\alpha$	CR	AVE	MSV	Att	Spr	Acc	Ts	Sus
Attraction (Att)	0.905	0.895	0.682	0.414	0.826				
Spirituality (Spr)	0.916	0.901	0.753	0.414	0.644	0.868			
Accessibility (Acc)	0.821	0.805	0.553	0.132	0.065	0.057	0.743		
Tourist Satisfaction (Ts)	0.887	0.841	0.518	0.132	0.337	0.283	0.363	0.72	
Sustainability (Sus)	0.801	0.786	0.524	0.122	0.246	0.35	0.006	0.29	0.723

Table 3 presents the reliability and validity statistics, including Cronbach's alpha, composite reliability (CR), average variance extracted (AVE), and maximum shared variance (MSV) for all constructs. The results confirmed strong internal consistency, with Cronbach's alpha ranging from 0.786 to 0.916, well above the 0.70 threshold (Cronbach, 1951). CR values (0.786-0.901) also exceeded the 0.60 benchmark (Bagozzi & Yi, 1988), while high factor loadings ( $\geq 0.50$ ) supported convergent validity (Cheung et al., 2024). Further, AVE values were above 0.50 and lower than CR values, confirming convergent validity (Hair et al., 2010). Discriminant validity was also established, as AVE values exceeded MSV, and the square roots of AVE for each construct were greater than their inter-construct correlations (Fornell & Larcker, 1981).

The initial measurement model, comprising five latent constructs (attraction, accessibility, spiritual atmosphere, tourist satisfaction, and sustainability) with 24 indicators, exhibited suboptimal fit indices:  $\chi^2/df = 1.826$ , GFI = 0.846, CFI = 0.887, and RMSEA = 0.042, falling short of recommended thresholds (GFI/CFI  $\geq 0.90$ ; RMSEA  $\leq 0.07$ ) (Hair et al., 2010). The study removed two items ("Att4" and "Spr2") with weak factor loadings based on modification indices and standardised residuals to enhance model fit (Anderson & Gerbing, 1988). The revised model (Figure 1) of the study demonstrated significant improvement in achieving acceptable fit indices:  $\chi^2/df = 1.910$ , GFI = 0.922, CFI = 0.956, and RMSEA = 0.047.

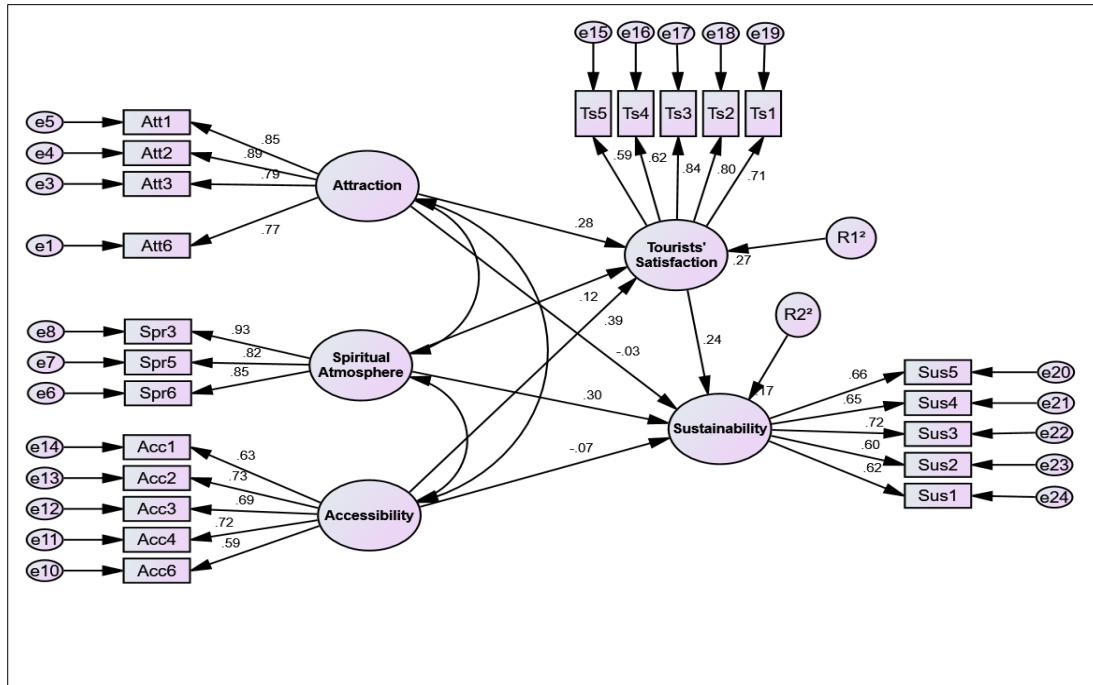
*Figure 2: Modified measurement model of the study*



Finally, the study validated the model measuring standardized regression weights (SRW) for retained items ranging from 0.59 to 0.93 ( $\geq 0.50$ ), confirming robust relationships between observed variables and their respective latent constructs (Byrne, 2013; Hair et al., 2010). Squared multiple correlations (SMC: 0.351-0.859) indicated substantial variance explained by the latent factors (Cohen, 1988). All t-values exceeded 1.96 ( $p < 0.05$ ), confirming item significance, while statistically significant factor covariances validated the structural integrity of the model. The final measurement model, comprising 22 indicators across five constructs, was deemed suitable for structural analysis.

**Structural Model:** Following validation of the measurement model, the study developed the structural equation model (SEM) using AMOS 22 (Figure 3). The model demonstrated acceptable fit indices: Goodness-of-Fit Index (GFI = 0.922), Comparative Fit Index (CFI = 0.956), and Root Mean Square Error of Approximation (RMSEA = 0.047), meeting recommended thresholds (GFI/CFI  $> 0.90$ ; RMSEA  $< 0.07$ ) (Hair et al., 2010). The coefficient of determination ( $R^2$ ) revealed that 27 percent of the variance in tourist satisfaction ( $R_1^2 = 0.27$ ) was explained by attraction, spiritual atmosphere, and accessibility, while 17 percent of the variance in sustainability ( $R_2^2 = 0.17$ ) was accounted for by all predictors, including satisfaction (Falk & Miller, 1992). These results confirm the model's explanatory adequacy for hypothesis testing.

*Figure 3: Structural hypothesized model of the study*



**Results of the Hypothesis Testing:** Table 4 summarizes the standardized path coefficients ( $\beta$ ) and significance levels for direct hypotheses. Spiritual atmosphere ( $\beta = 0.30, p < 0.01$ ) and tourist satisfaction ( $\beta = 0.24, p < 0.01$ ) exerted significant direct effects on sustainability, supporting H1<sub>b</sub> and H1<sub>d</sub>. Attraction ( $\beta = -0.023, p = 0.697$ ) and accessibility ( $\beta = -0.06, p = 0.309$ ) showed no significant direct impacts on sustainability, leading to the rejection of H1<sub>a</sub> and H1<sub>c</sub>. For tourist satisfaction, accessibility ( $\beta = 0.39, p <$

0.01) and attraction ( $\beta = 0.28, p < 0.01$ ) were strong predictors, with spiritual atmosphere exerting a marginal yet significant effect ( $\beta = 0.12, p = 0.044$ ). Thus, H2<sub>a</sub>, H2<sub>b</sub>, and H2<sub>c</sub> were supported.

Table 4: Direct hypotheses testing results

Hypothesis	Path	B	SE	CR	p-value	Result
H1 <sub>a</sub>	Sus ← Att	-0.023	0.06	-0.39	0.697	NS
H1 <sub>b</sub>	Sus ← Spr	0.224	0.059	3.821	***	S
H1 <sub>c</sub>	Sus ← Acc	-0.06	0.059	-1.017	0.309	NS
H1 <sub>d</sub>	Sus ← Ts	0.219	0.065	3.349	***	S
H2 <sub>a</sub>	Ts ← Att	0.237	0.061	3.91	***	S
H2 <sub>b</sub>	Ts ← Spr	0.122	0.057	2.14	0.044*	S
H2 <sub>c</sub>	Ts ← Acc	0.385	0.065	5.955	***	S

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$  S = Supported NS = Not Supported

The study tested the indirect effect of bootstrapping with 2000 times (sampling distribution) and bias-corrected confidence intervals (95 percent) in AMOS, as suggested by Awang (2015). Bootstrapping is also a preferred strategy for computing more accurate confidence intervals for indirect effects (Baron & Kenny, 1986). Therefore, the study examined both the values of standardized direct effect and standardized indirect effect in addition to their two-tailed significance level for mediation testing using the bootstrap method. Table 5 delineates the statistical significance of hypothesized indirect relationships within the mediation model.

Table 5: Indirect hypothesis testing

Hypothesis	Path	Direct Effect	Indirect Effect (p-value)	Total Effect	Results
H3 <sub>a</sub>	Sus ← Ts ← Att	-0.031	0.068 (0.001***)	0.037	S
H3 <sub>b</sub>	Sus ← Ts ← Spr	0.297	0.03 (0.084)	0.327	NS
H3 <sub>c</sub>	Sus ← Ts ← Acc	-0.067	0.093 (0.002**)	0.026	S

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$  S = Supported NS = Not Supported

The analysis reveals that tourist satisfaction significantly mediates the relationship between *attraction* ( $p < 0.01$ ) and *accessibility* ( $p < 0.01$ ) with sustainability, thereby supporting hypotheses H3<sub>a</sub> and H3<sub>c</sub>. Conversely, the mediating role of tourist satisfaction between the *spiritual atmosphere* and sustainability was statistically not significant ( $p = 0.084$ ), leading to the rejection of H3<sub>b</sub>. Notably, no direct effects of attraction or accessibility on sustainability were observed ( $p > 0.05$ ); however, both constructs exerted significant indirect effects via tourist satisfaction, indicating full mediation. These findings underscore that attraction and accessibility are insufficient in isolation to foster sustainable religious product development unless they enhance tourist satisfaction. Furthermore, while the spiritual atmosphere demonstrated a direct and positive influence on sustainability ( $p < 0.05$ ), its impact was not mediated by tourist satisfaction, suggesting distinct pathways through which spiritual ambience contributes to sustainable outcomes. These findings highlight the necessity of addressing both experiential (satisfaction-driven) and intrinsic (spirituality-driven) factors in holistic strategies for religious tourism product development and sustainability.

## Discussion and Conclusions

This study advances the discourse on sustainable religious tourism product development by clarifying the mediating role of tourist satisfaction in linking site attributes, namely attraction, spiritual atmosphere, and accessibility, to sustainability outcomes. While earlier scholarship primarily emphasized the direct

influence of these determinants (Shackley, 2001; Timothy & Olsen, 2006; Wang et al., 2016), the present findings reveal more nuanced effects, demonstrating both mediated and direct pathways.

A central contribution lies in showing that attraction and accessibility do not directly ensure sustainability but operate through the mediating mechanism of tourist satisfaction. This resonates with Butler's (1980) Tourist Area Life Cycle (TALC) model, which cautions that without continual renewal of satisfaction, destinations risk stagnation or decline. Similarly, McKercher and Cros (2002) argued that logistical improvements or physical features alone cannot sustain engagement unless they generate meaningful experiences. The results also align with Yoon and Uysal's (2005) proposition that satisfaction is the critical process by which site attributes are transformed into sustainable outcomes, reinforcing Oliver's (1980) expectancy-disconfirmation theory. From this perspective, sustainability arises when tourist satisfaction, grounded in attractive amenities and accessible facilities, leads to loyalty-driven behaviors such as repeat visitation and advocacy (Kozak, 2001; Chen & Chen, 2010). Satisfaction thus acts as a transformative mechanism that converts investment in tangible features, such as culturally authentic attractions and eco-friendly infrastructure, into enduring sustainability outcomes.

In contrast, the spiritual atmosphere exerts a direct influence on sustainability, independent of satisfaction. This underscores the distinctive character of religious tourism, where sacred ambience, rituals, and existential fulfillment generate profound connections that bypass cognitive appraisals of satisfaction (Sharpley & Jepson, 2011; Collins, 2010). Such experiences embody intrinsic value, fostering loyalty, cultural resilience, and long-term conservation (Willson et al., 2013; Collins, 2016; Khadka & Malviya, 2023). This outcome is consistent with Sharpley and Sundaram's (2005) assertion that spirituality occupies a unique role in religious tourism, shaping sustainability through emotional resonance and transcendental engagement rather than transactional evaluation.

Global pilgrimage sites illustrate the broader relevance of these findings. At Santiago de Compostela in Spain and Mecca in Saudi Arabia, for instance, infrastructure, accessibility, and heritage management ensure operational viability, but long-term sustainability is ultimately anchored in profound spiritual experiences (Romanelli et al., 2021). Similarly, at Lourdes in France, rituals and the healing atmosphere contribute directly to sustainability, while satisfaction mediates the impact of accommodation and accessibility improvements (Harris, 2013). These parallels reinforce that satisfaction-driven and spirituality-driven pathways coexist universally in shaping the sustainable development of religious tourism products.

Theoretically, this study contributes to religious tourism and sustainability scholarship in three key ways. First, it refines the expectancy-disconfirmation framework (Oliver, 1980) by showing that attraction and accessibility affect sustainability indirectly through satisfaction. Second, it identifies spiritual atmosphere as a distinct direct pathway, thereby extending Butler's (1980) TALC model and related frameworks that have historically underemphasized intangible spiritual factors. Third, by integrating both mediated and direct pathways and validating them against global pilgrimage cases, the study enhances generalizability and supports a dual-process perspective that balances experiential satisfaction with intrinsic spiritual value. From a practical standpoint, the findings indicate that destination managers should pursue a dual strategy: while investments in infrastructure and accessibility are vital to enriching visitor experiences, preserving spiritual atmosphere, through rituals, sacred spaces, and cultural authenticity, is equally critical for sustaining religious tourism development. This integrated approach thus promotes the economic, cultural, and environmental sustainability of religious tourism globally.

This study also acknowledges several limitations. First, its focus on Nepalese religious sites may limit generalizability, necessitating cross-cultural validation of the dual-pathway framework. Second, the study examined only six religious sites in Nepal, which may restrict the applicability of the findings. Third, the

use of purposive sampling and a valid response rate of 483 participants constrains external validity. Fourth, exclusive reliance on quantitative methods may have overlooked nuanced insights that qualitative approaches could uncover. Finally, the study focused only on attraction, spiritual atmosphere, and accessibility, excluding potentially influential factors such as community engagement and environmental management.

Future research should therefore broaden the scope to include more diverse sites, larger and more representative samples, and comparative cross-regional studies. Mixed-methods approaches, integrating both quantitative and qualitative techniques, could provide richer and more holistic insights. Additional variables, such as cultural attachment, perceived value, and destination image, should also be incorporated to further strengthen sustainability models. A deeper exploration of spiritual atmosphere, including architectural symbolism, ritual participation, and eco-spiritual elements, may yield valuable insights into its role in sustainable tourism practices.

In conclusion, this study demonstrates that sustainable religious tourism is shaped by dual pathways: satisfaction-driven mechanisms tied to attractions and accessibility and direct spirituality-driven mechanisms rooted in sacred ambience. By clarifying these dynamics, the study offers both theoretical refinement and practical guidance, affirming that long-term sustainability in religious tourism depends on simultaneously enriching visitor experiences and preserving the intrinsic spiritual essence of sacred destinations.

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