International Journal of Green Tourism Research and Applications
Volume 7 Issue 2 Year 2025 Pages 167-177
DOI: 10.31940/ijogtra.v7i2.167-177
URL: http://ojs.pnb.ac.id/index.php/IJOGTRA

Green Behaviour of Tourists in the Cultural Heritage Destination of Borobudur Temple

Nathaniel Aji Prinanda[1]*, Ni Made Tirtawati[2], I Wayan Mertha[3]

[1,2,3]*Tourism Destination, Politeknik Pariwisata Bali, Indonesia*

*Corresponding Author: *nathanielajiprinanda@gmail.com*

Abstract: Tourism is one of the economic sectors that has a major impact on ecosystems, so its sustainability is receiving increasing attention in academic literature. The sustainability approach cannot be seen from the destination as the supply side only, but also from the demand side, namely tourists. However, limited research has examined the behavioral side of tourists, particularly the factors driving green behavior in cultural heritage destinations leaving a critical gap in understanding demand-side sustainability. As a UNESCO World Heritage site, Borobudur Temple faces challenges in maintaining sustainability amid high tourist activity. Although conservation efforts have been implemented, the extent and drivers of tourists' green behavior remain unclear. This study employs a quantitative design using a structured questionnaire distributed to 160 purposively selected domestic tourists at Borobudur Temple. Data were analyzed using descriptive statistics and Structural Equation Modeling (SEM) with SmartPLS to identify the influence of internal and external factors on green behavior. The findings reveal that environmental aspects dominate tourist green behavior, followed by social and economic aspects. Internal factors, particularly trusted values, show a slightly stronger influence than external factors, although aesthetic experience also plays a key role. Conversely, destination knowledge and habitual green actions were found to be weak points. These results highlight the need for sustainability strategies that combine value-based education, improved informational tools, and behavioral nudges to help translate environmental awareness into consistent tourist actions.

Keywords: Borobudur temple; cultural heritage destinations; green behavior; sustainable tourism; tourist behavior.

History Article: Submitted 23 June 2025 | Revised 5 November 2025 | Accepted 12 November 2025

How to Cite: Prinanda, N. A., Tirtawati, N. M., & Mertha, I. W. (2025). Green behaviour of tourists in the cultural heritage destination of Borobudur temple. *International Journal of Green Tourism Research and Applications*, *7*(2), 167–177. https://doi.org/10.31940/ijogtra.v7i2.167-177.

Introduction

Tourism is a major economic sector with a significant impact on ecosystems, and its sustainability has become a central focus in recent academic literature (Niñerola et al., 2019). If managed properly, tourism can drive regional development and contribute to the preservation of local culture, especially in destinations that are rich in cultural heritage (Job et al., 2017; Silva & Henriques, 2021). Recent studies emphasize that the future of tourism depends on how well destinations can meet increasing tourist demand while minimizing damage to the environment and host communities (UNWTO, 2017).

Cultural heritage sites such as Borobudur Temple illustrate the double-edged nature of tourism. While tourism can support conservation and local livelihoods, it can also pose threats to fragile heritage structures due to high visitor numbers (Chenavaz et al., 2022). As a UNESCO World Heritage Site, Borobudur holds spiritual, educational, and economic significance. Built during the Sailendra Dynasty (780–840 AD), the temple functions as a place of Buddhist pilgrimage and worship (Yatno, 2022). Today, Borobudur is designated as one of Indonesia's five super-priority tourist destinations

(Ardhanariswari & Pratiwi, 2021) and is included in the National Tourism Strategic Area (Devi & Kesumasari, 2020).

In terms of supply-side sustainability, Taman Wisata Candi Borobudur (TWCB) has implemented several Sustainable Development Goals (SDGs)-aligned initiatives, including infrastructure improvements, community empowerment programs, the introduction of electric vehicles, and environmentally friendly digital marketing strategies (Purwaningsih et al., 2021; Susiyanto, 2022). The TWCB's sustainability index reflects moderate progress across environmental, social, economic, and institutional dimensions (Purwaningsih et al., 2021).

However, existing research on Borobudur tends to emphasize the supply side only, while the demand side, specifically tourists' behavior, remains underexplored. In fact, recent studies show that many of the negative environmental impacts at heritage sites are caused by irresponsible tourist actions (Vu et al., 2024). This action such as touching statues or sitting on temple structures at Borobudur that are often influenced by misinformation or myth (Hermawan et al., 2019). In response to these issues, the site management has introduced several protective measures, such as limiting daily visitor numbers, mandating guided tours, and requiring the use of special footwear to preserve the temple structure (Tempo.co, 2023).

Despite these efforts, there is limited understanding of the extent to which tourists actually engage in sustainable practices or demonstrate green behavior during their visits. This is concerning, as tourist behavior plays a crucial role in supporting sustainable tourism (Ibnou-Laaroussi et al., 2020). Therefore, this study aims to examine the green behavior of tourists visiting Borobudur Temple by identifying key internal and external factors that influence their environmentally responsible actions.

To guide the analysis, the Theory of Planned Behavior (TPB) is employed as a theoretical framework. TPB is well-suited for this context as it explains how individuals' actions are driven by behavioral intentions, which are in turn shaped by attitudes, subjective norms, and perceived behavioral control (Ajzen, 2020). This framework allows for a comprehensive understanding of how personal motivations and contextual influences interact in shaping sustainable tourist behavior. This is absolutely urgent due to the factors described above, particularly the imbalance between supply-side sustainability efforts and the limited understanding of tourist behavior that continues to threaten the integrity of Borobudur's heritage site.

Accordingly, this study is designed to answer the following research questions:

(1) How is the green behavior of tourists visiting Borobudur Temple?
(2) How do internal factors influence the green behavior of tourists visiting Borobudur Temple?
(3) How do external factors influence the green behavior of tourists visiting Borobudur Temple?

This study fills a critical gap in the literature by focusing on the demand side of sustainability in heritage tourism, an area often overlooked. It contributes both theoretically and practically to understanding and promoting tourist green behavior in vulnerable heritage destinations such as Borobudur. The findings are expected to inform effective strategies for encouraging green practices among visitors and can serve as a model for similar cultural heritage destinations (Ulker-Demirel & Ciftci, 2020).

Methodology

A quantitative approach was employed in this study, with data collected through a structured survey. This method was chosen for its ability to gather systematic, measurable data from a sample representing a larger tourist population (Hox & Dillman,

2012; Schwarz et al., 1998). Questionnaires were distributed in person to tourists who had completed their visit, ensuring that responses were based on actual experiences.

Data collection was carried out between January and March 2025, during the first quarter of the year. Before completing the questionnaire, each participant was given an explanation of the research purpose and asked to provide informed consent. Participation was voluntary, and all responses were treated anonymously to ensure ethical research practice.

Purposive sampling was used, targeting domestic tourists who had completed their visit and had a minimum senior high school education. This criterion helped ensure respondents could understand and complete the questionnaire accurately. Additionally, a maximum of two individuals per travel group were surveyed to reduce potential response bias due to group influence. This approach was considered appropriate because it allowed the researchers to target respondents who could most reliably describe their behaviors and perceptions related to sustainable tourism.

The sample size was determined based on the recommended range of five to ten respondents per indicator (Hair et al., 2006). This study included 16 behavioral indicators (8 environmental, 7 social, and 7 economic), resulting in a minimum required sample of 80 and a maximum of 160. The sample size was set at 160 respondents to ensure sufficient statistical power. To maintain focus and consistency, only domestic tourists were included in this study.

Two types of statistical analysis were applied. First, descriptive statistics were used to identify patterns of green behavior among tourists. Frequencies and percentages were calculated to determine which behaviors were most and least common. Second, Structural Equation Modeling (SEM) was employed to assess the influence and the significance of internal and external factors on tourist behavior. SEM was conducted using SmartPLS 4.0 software, which is suitable for exploratory models and studies with relatively small to medium sample sizes.

Results and discussions

Results

Tourists Green Behaviour

To determine the form of green behavior of tourists, descriptive statistical analysis techniques were used, through frequency calculations of the data obtained as in table 1 below.

Table 1. Tourists Green Behavior at Borobudur Temple

Sub-Variable	Indicator	Ave-rage	Cap-tion	Ave-rage	Caption	Ave-rage	Caption
Enviromental Aspects	Water Use	3,59	Strongly Agree	3,64	Strongly Agree	3,40	Strongly Agree
	Trash-related Habits	3,62	Strongly Agree				
	Energy Use	3,64	Strongly Agree				
	Transportation related Habits	3,56	Strongly Agree				
	Conservation	3,78	Strongly Agree				

Social Aspects	Equality	3,95	Strongly Agree	3,35	Strongly Agree		
	Tolerance	3,44	Strongly Agree				
	Solidarity	3,23	Agree				
	Shared Responsibility	2,79	Agree				
Economy Aspects	Green Purchasing	3,21	Agree	3,21	Agree		
	Green Accommo-dation	3,23	Agree				

Source: Data Processing Results (2025)

The results show that the overall average green behavior score is 3.40, indicating that tourists generally agree with and demonstrate sustainable tourism practices. Among the three sub-variables, environmental behavior scores highest (3.64), followed by social behavior (3.35) and economic behavior (3.21). This shows that tourists' awareness and responsibility towards the environment and society are quite good, although economic contributions still need to be improved.

Factors Influencing Tourists Green Behavior

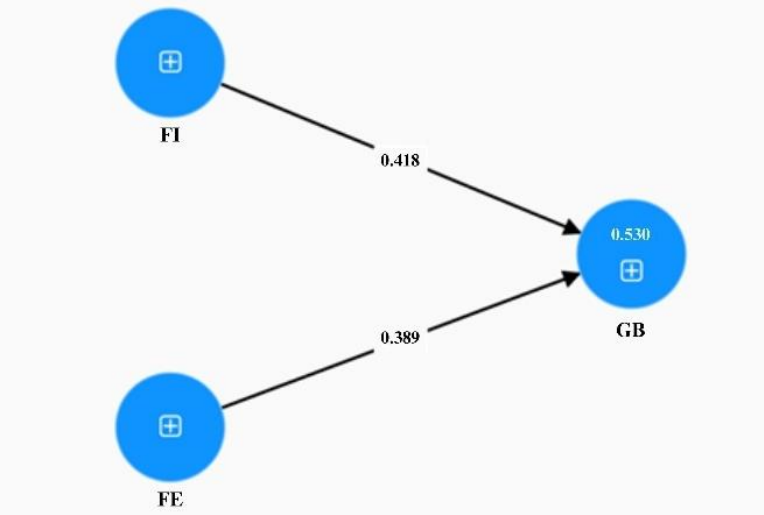
To determine the influence of internal and external factors on green behavior of tourists, several analysis steps were carried out, the analysis began with descriptive statistics, as shown in Table 2 below.

Table 2. Internal and External Influencing Factors Variables

Variable	Indicator	Average	Caption	Average	Caption
Internal Factors	Habit	3,47	Strongly Agree	3,58	Strongly Agree
	Trusted Values	3,69	Strongly Agree		
External Factors	Knowledge of Destination	3,67	Strongly Agree	3,74	Strongly Agree
	Aesthetic Experience	3,83	Strongly Agree		
	Sense of Unity with Nature and the Environment	3,72	Strongly Agree		

Source: Data Processing Results (2025)

Statistically, external factors have a greater value than internal factors. However, descriptive averages do not necessarily reflect the strength of statistical influence, which is further examined using Structural Equation Modeling (SEM) conducted in SmartPLS 4.0.



(Source: Data Processing Results, 2025)
Figure 1. Outer Model Variables

Figure 1 shows that the green behavior variable of tourists visiting Borobudur Temple is given the symbol letter GB, influenced by 2 variables, the internal factor variable with the letter FI and the external factor is given the symbol letter FE.

Table 3. Variable R Square Model

	R-square	**R-square adjusted**
GB	0.530	0.524

Source: Data Processing Results (2025)

The adjusted R Square value of variable GB or green behavior of tourists at Borobudur Temple is 0.524, this indicates that the internal factor variables (FI) and external factors (FE) are able to explain the green behavior variable of tourists at Borobudur Temple (GB) by 52.4%. This suggests that the model has moderate explanatory power.

Table 4. Hypothesis test

	Original sample (O)	***Sample mean (M)***	***Standard deviation (STDEV)***	***T statistics (|O/STDEV|)***	***P values***
FI -> GB	0.418	0.424	0.062	6.716	0.000
FE -> GB	0.389	0.397	0.066	5.925	0.000

Source: Data Processing Results (2025)

In table 4, it can be concluded that the internal factor variable (FI) obtained a t-statistic value of 6.717> 1.96 and a p-value of 0.000 <0.05, so H1 is accepted, that internal factors have a significant effect on the green behavior of tourists at Borobudur Temple.

Meanwhile, the external factor variable (FE) obtained a t-statistic value of 5.925> 1.96 and a p-value of 0.000 <0.05, so H1 for this variable is also accepted, that external factors have a significant effect on the green behavior of tourists at Borobudur Temple.

Based on all the analysis using SEM, it can be concluded that both internal and external factors have moderate significance on the green behavior of tourists at Borobudur Temple. Although external factors have slightly higher mean scores in the descriptive statistics, the SEM results indicate that internal factors exert a slightly stronger statistical influence on green behavior. This is evidenced by the path coefficient for internal factors (0.418), which is marginally higher than that of external factors (0.389). This suggests that tourists' personal values and beliefs are more predictive of sustainable behavior than environmental stimuli alone.

Discussions

Tourist Green Behaviour

The findings of this study indicate that tourists visiting Borobudur Temple tend to demonstrate environmentally friendly behavior, especially in the environmental aspect. The highest score was recorded on the conservation indicator, reflecting tourists' awareness in preserving the physical integrity of the temple, such as avoiding contact with stupas or refraining from sitting on temple structures. This behavior is further supported by management regulations that limit the number of visitors and require guided tours to the top of the temple (Jamaliah et al., 2021; Tempo.co, 2023). However, the environmentally friendly transportation indicator showed the lowest score. Although public transportation facilities are available, tourists continue to prefer private vehicles for reasons of practicality and convenience (Tang et al., 2020; Zhou et al., 2024). This suggests that tourists' green behavior tends to be situational, they may behave sustainably in some aspects, but revert to unsustainable habits when convenience is at stake. This aligns with findings regarding identity shifts between home and travel contexts, where comfort and autonomy often take precedence (Holmes et al., 2021).

In the social aspect, the highest score was obtained on the equality indicator, reflecting tourists' respect for the local community, in line with the principles of the UNWTO's tourism ethics. However, the lowest score was found in the shared responsibility indicator. This implies that although tourists show respect, they are less inclined to be actively involved in collective social efforts. This lack of shared responsibility may stem from tourists' unfamiliarity and emotional detachment from local communities, highlighting the need for destinations to actively facilitate meaningful interactions rather than relying on spontaneous engagement (Xiang et al., 2021).

In the economic aspect, tourists were found to have a degree of awareness regarding environmentally conscious consumption. However, behavior such as purchasing local products or selecting eco-friendly accommodations has not been widely adopted. Green consumption behavior is known to involve not only awareness, but also emotional connection and a sense of impact (Kaufmann et al., 2012). In this context, the lack of emotional attachment to the destination may hinder tourists from translating their awareness into real purchasing decisions, as emotional proximity and product authenticity are critical drivers for green purchasing (Pekerşen & Canöz, 2022). Emotional proximity and product authenticity are vital in influencing green consumer behavior, especially when tourists are asked to make conscious choices in a temporary, unfamiliar setting.

Factors Influencing Tourists Green Behavior

Although descriptive statistics show that external factors received slightly higher mean scores than internal factors, the Structural Equation Modeling (SEM) analysis indicates that internal factors exert a somewhat stronger influence on tourists' green behavior. This finding is consistent with the Theory of Planned Behavior (Ajzen, 2020), which emphasizes the role of attitudes, subjective norms, and perceived behavioral control in predicting behavior. It also aligns with the Value-Belief-Norm (VBN) theory, which posits that environmentally responsible behavior stems primarily from deeply internalized values and moral obligations (Stern, 2000).

Among the internal factors, trusted values recorded the highest score, indicating that many tourists possess pro-environmental attitudes and personal norms, such as a desire to reduce emissions and preserve nature. However, habits scored the lowest, highlighting a gap between belief and action. This gap reflects the well-documented attitude–behavior inconsistency, where individuals support green principles in theory but fail to enact them in practice, particularly in unfamiliar or leisure-driven settings (Holmes et al., 2021; MacInnes et al., 2022). According to habit theory, consistent environmental behavior depends on stable contextual cues, which are often disrupted during travel (Neal et al., 2012; Wood, 2017).

Interestingly, even though internal factors had a slightly stronger influence on tourists' green behavior, external factors still play a critical supporting role in shaping tourists' behavior. Aesthetic experience scored the highest among all external indicators, suggesting that the architectural and natural beauty of Borobudur leaves a profound emotional impression on visitors (Saddhono et al., 2024). This supports earlier research in heritage destinations like Japan and Taiwan, where aesthetic appreciation was found to significantly influence sustainable behavioral intentions (Lee et al., 2023; Wynn & Nwe, 2022). Similarly, emotional connectedness with nature also scored high, suggesting that sensory and emotional immersion can catalyze pro-environmental actions (Cao et al., 2022).

External elements such as destination aesthetics and emotional immersion do not merely provide rational inputs, but also foster deep psychological engagement (Cao et al., 2022), which is essential for the adoption of sustainable practices. The more beautiful and meaningful a place is perceived to be, the stronger the intention to behave sustainably (Lee et al., 2023). These insights suggest that destination design and atmosphere can serve as powerful enablers of green behavior when supported by information and emotional resonance.

However, destination knowledge received the lowest score among external indicators. This indicates a general lack of tourist awareness regarding Borobudur's sustainability programs, such as conservation efforts, local regulations, or the role of community stakeholders. Tourists who are not well-informed may struggle to link their values with specific, supportive actions during their visit (Gomes & Lopes, 2023; Hu & Wall, 2005). This suggests that the availability of accessible, visible, and engaging information tools is crucial to reinforce sustainable behavior.

To address this gap, destination management at Borobudur should prioritize strategic communication tools, such as educational signage, interactive digital platforms, and guide-led briefings that communicate both cultural significance and environmental responsibility. Informational storytelling that links heritage with sustainability could deepen tourists' emotional engagement and translate values into action. This approach is particularly relevant for enhancing green behavior in the social and economic domains, where value–action gaps remain.

Additionally, providing accessible information about eco-labels, conservation programs, and sustainable tourism products not only encourages environmentally friendly choices but also enhances visitor satisfaction, strengthens destination loyalty, and boosts local economic outcomes (Bergin-Seers & Mair, 2009; Gomes & Lopes, 2023). Therefore, Borobudur's management should also consider offering tourist packages that incentivize green purchasing, such as discounts for staying in eco-certified hotels or purchasing local crafts made from sustainable materials.

Finally, campaigns that reinforce daily green habits in tourism settings, such as reducing plastic use, choosing low-emission transport, or saving energy, could help tourists transfer sustainable values from their home lives to travel contexts. These campaigns should be visible at multiple touchpoints across the tourist journey and be tied to emotionally relevant narratives.

Conclusions & Limitations

Conclusions

This study shows that in response to the first research question, tourists visiting Borobudur Temple generally demonstrate environmentally friendly behavior, with the environmental aspect scoring the highest compared to the social and economic aspects. Tourists show a high commitment to conservation, such as obeying the rules and maintaining the temple structure, where local guides play an important role in directing tourist behavior towards sustainability. This finding provides an overview of how green behavior is manifested in practical actions among visitors at Borobudur.

Regarding the second research question, this commitment is also driven by internal values such as responsibility to protect the environment and reduce carbon footprints. Internal factors, particularly environmental values, attitudes, and perceived behavioral control, emerge as key motivators influencing tourists' green behavior. On the other hand, as reflected in the third research question, external factors such as the aesthetic beauty of Borobudur and a sense of emotional connection with nature also influence tourist actions during the visit.

In the social aspect, tourists highly value equality and tolerance but are less active in shared social responsibility. This is influenced by tourists' unfamiliarity with the local environment which makes them tend to be passive. In the economic aspect, although there is interest in sustainable purchases and accommodation, this behavior has not been fully adopted. This indicates that tourists' green behavior in the social and economic dimensions still requires stronger behavioral reinforcement and situational engagement. The low emotional attachment to the destination is one of the reasons why tourists have not been motivated to contribute economically to green tourism practices.

Internal and external factors both have a moderate influence on tourist green behavior, with internal factors showing slightly greater significance. From external factors, aesthetic experience and sense of connectedness with nature scored high, while destination knowledge was the lowest, indicating a lack of information related to sustainability practices in Borobudur. From internal factors, values that are believed scored the highest, while habits scored the lowest, indicating an inconsistency between values that are held and real behavior in daily life, due to changes in context when traveling. As well as this findings, this is also a critic for development in near future, emphasizing the need for stronger integration between tourists' environmental values and their on-site practices.

To improve sustainable tourism at Borobudur, destination management should prioritize targeted actions such as installing educational signage, incentivizing green

purchasing through tourist packages, and promoting campaigns that help transfer green habits from daily life into tourism contexts. These strategies directly address the research objectives by strengthening both internal motivation and external support systems that shape tourists' green behavior. They could also bridge the gap between values and behavior, especially in the economic and social aspects.

Limitations

This study has several limitations. It was conducted only at Borobudur Temple Tourism Park during the first quarter of 2025, so the results may not be generalizable to other heritage or ecotourism destinations or different time periods. The sample consisted of 160 respondents, all of whom were domestic tourists. While this allows a focused understanding of green behavior within the local cultural context, it limits the generalizability of the findings to international tourist populations, who may have different environmental attitudes, values, and behaviors.

In addition, this study emphasizes a quantitative approach with limited qualitative observations, so tourists' deeper motivations and reasoning behind their behavior may not be fully explored. Other potentially influential factors, such as education level, home environment, income, and group dynamics, were not analyzed in this study, even though they may play a significant role in shaping sustainable tourist behavior.

Future research should consider including international tourists for comparative analysis, exploring how cultural background influences green behavior. It is also recommended to adopt mixed-method approaches, integrating interviews or focus group discussions to gain richer insights. Researchers could further test intervention strategies such as behavioral nudges, reward-based systems, or environmental storytelling to assess which tools are most effective in promoting green behavior in heritage tourism settings.

References

Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, *2*(4), 314–324. https://doi.org/10.1002/hbe2.195

Ardhanariswari, K. A., & Pratiwi, K. W. (2021). Strengthening of Collaboration Strategy through Pentahelix Model in Borobudur as a Super Priority Tourist Destination. *RSF Conference Series: Business, Management and Social Sciences*, *1*(4), 150–161. https://doi.org/10.31098/bmss.v1i4.360

Bergin-Seers, S., & Mair, J. (2009). Emerging Green Tourists in Australia: Their Behaviours and Attitudes. *Tourism and Hospitality Research*, *9*(2), 109–119. https://doi.org/10.1057/thr.2009.5

Cao, X., Qiu, J., Wang, L., & Zhou, G. (2022). An Integrative Model of Tourists' Pro-Environmental Behavior Based on the Dual Path of Rational Planning and Embodied Emotion. *International Journal of Environmental Research and Public Health*, *19*(13). https://doi.org/10.3390/ijerph19137910

Chenavaz, R. Y., Leocata, M., Ogonowska, M., & Torre, D. (2022). Sustainable tourism. *Journal of Economic Dynamics and Control*, *143*, 104483. https://doi.org/10.1016/J.JEDC.2022.104483

Devi, M. C., & Kesumasari, D. (2020). Visitors' Management in Borobudur Park, Indonesia. *Digital Press Social Sciences and Humanities*, *4*, 00014. https://doi.org/10.29037/digitalpress.44361

Gomes, S., & Lopes, J. M. (2023). Insights for Pro-Sustainable Tourist Behavior: The Role of Sustainable Destination Information and Pro-Sustainable Tourist Habits. *Sustainability (Switzerland)*, *15*(11). https://doi.org/10.3390/su15118856

Hermawan, B., Salim, U., Rohman, F., & Rahayu, M. (2019). Making Borobudur a Buddhist Religious Tourist Destination: An Effort to Preserve Buddhist Temples in Indonesia. *International Review of Social Research*, *9*(1), 71–77. https://doi.org/10.2478/irsr-2019-0008

Holmes, M. R., Dodds, R., & Frochot, I. (2021). At Home or Abroad, Does Our Behavior Change? Examining How Everyday Behavior Influences Sustainable Travel Behavior and Tourist Clusters. *Journal of Travel Research*, *60*(1), 102–116. https://doi.org/10.1177/0047287519894070

Hox, J., & Dillman, D. A. (2012). International Handbook of Survey Methodology. *International Handbook of Survey Methodology*, *May 2020*. https://doi.org/10.4324/9780203843123

Hu, W., & Wall, G. (2005). Environmental management, environmental image and the competitive tourist attraction. *Journal of Sustainable Tourism*, *13*(6), 617–635. https://doi.org/10.1080/09669580508668584

Ibnou-Laaroussi, S., Rjoub, H., & Wong, W. K. (2020). Sustainability of green tourism among international tourists and its influence on the achievement of green environment: Evidence from North Cyprus. *Sustainability (Switzerland)*, *12*(14). https://doi.org/10.3390/su12145698

Jamaliah, M. M., Mgonja, J. T., Alazaizeh, M. M., & Powell, R. B. (2021). How does interpretive tour guiding promote tourists' pro-environmental behaviour? Evidence from Tanzania. *Tourism Recreation Research*, *49*. https://doi.org/https://doi.org/10.1080/02508281.2021.1992953

Job, H., Becken, S., & Lane, B. (2017). Protected Areas in a neoliberal world and the role of tourism in supporting conservation and sustainable development: an assessment of strategic planning, zoning, impact monitoring, and tourism management at natural World Heritage Sites. *Journal of Sustainable Tourism*, *25*(12), 1697–1718. https://doi.org/10.1080/09669582.2017.1377432

Joseph. Hair, William C. Black, Barry J. Babin, R. E. A. (2006). *Multivariate_Data_Analysis_7th_Edition.pdf* (pp. 1–761).

Kaufmann, H. R., Panni, M. F. A. K., & Orphanidou, Y. (2012). *Factors Affecting Consumers' Green Purchasing Behavior: An Integrated Conceptual Framework*. http://creativecommons.org/licenses/by/4.0/

Lee, Y. J., Tsai, I. Y., & Chang, T. Y. (2023). Exploring Tourist Behavior in a Reused Heritage Site. *Journal of Hospitality and Tourism Research*, *47*(6), 1071–1088. https://doi.org/10.1177/10963480211020089

MacInnes, S., Grün, B., & Dolnicar, S. (2022). Habit drives sustainable tourist behaviour. *Annals of Tourism Research*, *92*. https://doi.org/10.1016/j.annals.2021.103329

Niñerola, A., Sánchez-Rebull, M. V., & Hernández-Lara, A. B. (2019). Tourism research on sustainability: A bibliometric analysis. In *Sustainability (Switzerland)* (Vol. 11, Issue 5). MDPI. https://doi.org/10.3390/su11051377

Pekerşen, Y., & Canöz, F. (2022). Tourists' attitudes toward green product buying behaviours: the role of demographic variables. *Tourism and Management Studies*, *18*(4), 7–16. https://doi.org/10.18089/tms.2022.180401

Purwaningsih, R., Ameliafidhoh, Z., Susanty, A., Pramono, S. N. W., & Agusti, F. (2021). Sustainability Status Assessment of The Borobudur Temple using The Rap-Tourism with Multi-Dimensional Scaling (MDS) Approach. *E3S Web of Conferences*, *317*. https://doi.org/10.1051/e3sconf/202131705004

Saddhono, K., Sukmono, I., Saputra, A. D., Aditya, M., & Wardana, W. (2024). The Charm of Borobudur Temple Architecture: Perspectives of Foreign Narrators in Understanding Indonesian Cultural Heritage. *ISVS E-Journal*, *11*. https://doi.org/10.61275/ISVSej-2024-11-06-01

Schwarz, N., Groves, R., & Schuman, H. (1998). *Survey methods*. https://www.researchgate.net/publication/232562918

Silva, H. E., & Henriques, F. M. A. (2021). The impact of tourism on the conservation and IAQ of cultural heritage: The case of the Monastery of Jerónimos (Portugal). *Building and Environment*, *190*, 107536. https://doi.org/10.1016/J.BUILDENV.2020.107536

Stern, P. (2000). Toward a Coherent Theory of Environmentally Significant Behavior. *Journal of Social Issues*, *56*, 407–424. https://doi.org/10.1111/0022-4537.00175

Susiyanto, S. (2022). Concept Application Analysis Green Tourism in the Development of Borobudur Temple as a Super Priority Destination. *Ideas: Jurnal Pendidikan, Sosial, Dan Budaya*, *8*(4), 1371. https://doi.org/10.32884/ideas.v8i4.1080

Tang, X., Wang, D., Sun, Y., Chen, M., & Waygood, E. O. D. (2020). Choice behavior of tourism destination and travel mode: A case study of local residents in Hangzhou, China. *Journal of Transport Geography*, *89*. https://doi.org/10.1016/j.jtrangeo.2020.102895

Tempo.co. (2023). *Naik ke Candi Borobudur Masih dibatasi 1.200 Pengunjung Per Hari, Tidak Ada Tiket Seharga 750 Ribu | tempo.co*. https://www.tempo.co/hiburan/naik-ke-candi-borobudur-masih-dibatasi-1-200-pengunjung-per-hari-tidak-ada-tiket-seharga-750-ribu-168862

Ulker-Demirel, E., & Ciftci, G. (2020). A systematic literature review of the theory of planned behavior in tourism, leisure and hospitality management research. *Journal of Hospitality and Tourism Management*, *43*, 209–219. https://doi.org/10.1016/j.jhtm.2020.04.003

UNWTO. (2017). *Tourism and the Sustainable Development Goals – Journey to 2030, Highlights*. World Tourism Organization (UNWTO). https://doi.org/10.18111/9789284419340

Vu, A. D., Vo-Thanh, T., Nguyen, T. T. M., Bui, H. L., & Pham, T. N. (2024). Tourism social sustainability in remote communities in Vietnam: Tourists' behaviors and their drivers. *Heliyon*, *10*(1). https://doi.org/10.1016/j.heliyon.2023.e23619

Wood, W., & Rünger, D. (2016). Psychology of Habit. *Annual Review of Psychology*, *67*, 289–314. https://doi.org/10.1146/annurev-psych-122414-033417

Xiang, K., Xu, C., & Wang, J. (2021). Understanding the relationship between tourists' consumption behavior and their consumption substitution willingness under unusual environment. *Psychology Research and Behavior Management*, *14*, 483–500. https://doi.org/10.2147/PRBM.S303239

Yatno, T. (2022). Fungsi dan Nilai Candi Borobudur di Era Globalisasi. *Jurnal Sabbhata Yatra Jurnal Pariwisata Dan Budaya*, *3*. https://radenwijaya.ac.id/jurnal/index.php/sabbhata_yatra/article/download/636/375

Zhou, H., Chi, X., Norman, R., Zhang, Y., & Song, C. (2024). Tourists' urban travel modes: Choices for enhanced transport and environmental sustainability. *Transportation Research Part D: Transport and Environment*, *129*, 104144. https://doi.org/10.1016/J.TRD.2024.104144