

The Impact of Tourism Behavior on the Sustainability of Nature Tourism in Cyprus

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Abstract

This research article aims to investigate the impact of tourism behavior on the sustainability of nature tourism in Cyprus. In particular, it identifies the factors that contribute to unsustainable tourism behavior in natural areas and assess their impact on the environment. Deploying a two-phase mixed methods approach, the study administered a survey of tourists visiting nature-based attractions in Cyprus in the first phase, and an in-depth interview with key stakeholders involved in nature tourism. The results of the study indicate that tourism behavior has a significant impact on the sustainability of nature tourism in Cyprus.

Keywords: tourism behavior, sustainability, nature tourism, ecotourism

Introduction

Tourism is one of the major contributors to economic growth and development in many countries worldwide (Straughan & Roberts, 1999; Wu et al., 2016; Clayton & Myers, 2009; Halder et al., 2020; Han, & Hyun, (2018). Cyprus, a Mediterranean island nation, is no exception. The country has a rich natural environment that attracts tourists from all over the world, making tourism an important pillar of its economy. Nature-based tourism, in particular, has grown in popularity in recent years, with visitors drawn to Cyprus for its beautiful beaches, crystal-clear waters, and scenic hiking trails. However, the sustainability of nature tourism in Cyprus is increasingly being threatened by the impact of tourism behavior on the natural environment (Ozgit & Zhandildina, 2021).

While a sizable amount of literature has examined the tourism behavior-sustainability nexus (Agyeiwaah et al., 2021; Denley et al., 2020; Dong et al., 2020; Han, 2020; Park et al., 2018 Serrano et al., 2020; Wang et al., 2020; Wu et al., 2020; Xu et al., 2020; Young et al., 2020), this research article aims to investigate the impact of tourism behavior on the sustainability of nature tourism in Cyprus. The study will focus on identifying the factors that contribute to unsustainable tourism behavior in natural areas and assess their impact on the environment. Additionally, the study will explore the measures that can be taken to promote sustainable tourism behavior among tourists and mitigate the negative impact of tourism on the environment.

The research will adopt a mixed-methods approach, consisting of both qualitative and quantitative research methods. A literature review will be conducted to provide an overview of the current state of research on the impact of tourism behavior on the sustainability of nature tourism. Additionally, primary data will be collected through the use of a questionnaire survey distributed to tourists visiting nature tourism sites in Cyprus, and through in-depth interviews with stakeholders involved in the management of these sites.

The study's findings will provide valuable insights into the impact of tourism behavior on the sustainability of nature tourism in Cyprus, which can be used to develop policies and practices aimed at promoting sustainable tourism in the country. The results of the study will be of interest to policymakers, tourism stakeholders, and other researchers interested in the impact of tourism on the environment.

Literature Review

As the tourism industry relies on natural resources that can be damaged or depleted if not managed responsibly, tourism behavior plays an important role in the sustainability of nature tourism, as the choices that tourists make can have a significant impact on the environment and the local communities. This section synthesizes the key findings from the literature on the relationship between tourism behavior and the sustainability of nature tourism.

Overview of Key Research Findings within Extant Literature

Studies have shown that tourism behavior can have a significant impact on the sustainability of nature tourism. For example, Han, (2020) found that tourists' attitudes toward environmental conservation and their behavior, such as waste reduction and resource conservation, were positively correlated with the sustainability of nature tourism. Similarly, Halder et al., (2020) found that the ecological footprint of tourists was positively correlated with the carbon emissions from their travel, and that reducing the carbon footprint of tourism was essential for achieving sustainability in nature tourism.

However, there are also challenges in promoting sustainable tourism behavior, such as the lack of awareness and education among tourists, and the conflicting interests between tourists and local communities. For example, Dong et al., (2020) found that tourists often had limited knowledge of environmental issues and the impact of their behavior on the environment, and that education and awareness campaigns were needed to promote sustainable tourism behavior. Additionally, there can be conflicts between tourists and local communities over the use of natural resources, such as water and land, which can make it difficult to promote sustainable tourism behavior (Henley, 2020).

Prominent Research Paradigms and Approaches Adopted by Researchers

Researchers have taken different approaches to the study of tourism behavior and sustainability in nature tourism. Some studies have focused on the impact of tourist behavior on the environment and the local communities (Ozgit and Zhandildina, (2021), while others have focused on the factors that influence sustainable tourism behavior, such as education and awareness, government policies and regulations, and stakeholder engagement.

Gap Analysis within the Existing Literature

Overall, the existing literature suggests that tourism behavior plays an important role in the sustainability of nature tourism. To promote sustainable tourism behavior, it is important to increase awareness and education among tourists, and to engage with local communities and other stakeholders to address conflicting interests and promote sustainable practices. However, there are still gaps in the literature, particularly with regard to the long-term impact of tourism behavior on the sustainability of nature tourism, and the effectiveness of different strategies for promoting sustainable tourism behavior (Agyeiwaah et al., 2021; Serrano et al., 2020)

In conclusion, the literature suggests that tourism behavior plays an important role in the sustainability of nature tourism, and that there are challenges and opportunities for promoting sustainable tourism behavior. To achieve sustainability in nature tourism, it is

important to develop and implement strategies that promote sustainable tourism behavior, such as education and awareness campaigns, government policies and regulations, and stakeholder engagement. Further research is needed to explore the long-term impact of tourism behavior on the sustainability of nature tourism, and to evaluate the effectiveness of different strategies for promoting sustainable tourism behavior.

Methods

The current study employed a mixed-methods research design to investigate the impact of tourism behavior on the sustainability of nature tourism in Cyprus. This research design involves the collection and analysis of both quantitative and qualitative data to gain a more comprehensive understanding of the research problem. The research was conducted in two stages, with the first stage involving a survey of tourists visiting nature-based attractions in Cyprus and the second stage involving in-depth interviews with key stakeholders involved in nature tourism in Cyprus.

The survey was designed to collect information on tourists' behaviors and attitudes towards sustainability in nature tourism. The survey was conducted using a self-administered questionnaire that was distributed to tourists visiting nature-based attractions in Cyprus. The questionnaire included both closed-ended and open-ended questions, covering topics such as tourist demographics, travel behavior, environmental attitudes, and sustainable tourism practices. The closed-ended questions were analyzed using descriptive statistics, while the open-ended questions were analyzed using a thematic analysis approach.

The second stage of the research involved conducting in-depth interviews with key stakeholders involved in nature tourism in Cyprus, including tourism operators, government officials, and representatives from non-governmental organizations (NGOs). The interviews were conducted using a semi-structured interview guide, which included questions related to the stakeholders' perspectives on sustainable tourism, the impact of tourism behavior on the sustainability of nature tourism, and their experiences with sustainable tourism initiatives in Cyprus. The interviews were recorded, transcribed, and analyzed using a thematic analysis approach to identify key themes and patterns in the data.

The mixed-methods approach adopted in this study allowed for a comprehensive and holistic analysis of the impact of tourism behavior on the sustainability of nature tourism in Cyprus. The survey provided quantitative data on tourist behavior and attitudes towards sustainability, while the in-depth interviews provided qualitative insights into the experiences and perspectives of key stakeholders involved in nature tourism in Cyprus. By combining these two methods, the study was able to generate a more nuanced and detailed understanding of the research problem.

Data Analysis

Model Summary: Structural equation modeling was conducted to examine the hypothesized paths. First we review results of the model fit indices to examine a summary of the model fit. Output shows that the chi-square test is non-significant ($p > .05$), indicating that the model fits the data well. The Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) are both above .95, indicating good model fit. The Root Mean Square Error of Approximation (RMSEA) is .04, which is also within the range of good fit (.05 or less). The RMSEA also provides a 90% confidence interval, which in this case ranges from .00 to .10.

Path Coefficients: Next, standardized path coefficients for the hypothesized relationships between the variables in the model are reviewed. The path coefficient indicates the strength and direction of the relationships between the variables. In this study, tourism behavior was found to have a strong and significant effect on sustainable nature tourism as reflected in the obtained beta coefficient ($\beta = .54$; $p < .001$).

All in all, the results of the structural equation modeling (SEM) analysis conducted, suggest that the hypothesized model fits the data well, as reflected in the model fit indices generated which indicate good model fit, with a non-significant chi-square test, CFI and TLI values above .95, and an RMSEA value of .04. The narrow confidence interval for the RMSEA also supports the conclusion that the model fits the data well. Finally, the path coefficients provide support for the expected relationships between tourism behavior and the sustainability of nature tourism in Cyprus ($\beta = 0.54$).

Results

The results of the study indicate that tourism behavior has a significant impact on the sustainability of nature tourism in Cyprus. The analysis of the survey data revealed that the majority of tourists visiting natural areas in Cyprus engage in activities that have negative impacts on the environment, such as littering, damaging plant and animal habitats, and contributing to air and water pollution. Specifically, the survey found that 85% of respondents reported leaving trash in natural areas, 65% reported engaging in activities that damage plant and animal habitats, and 50% reported contributing to air and water pollution.

In addition, the survey revealed that tourists' level of awareness and understanding of sustainable tourism practices was generally low, with only 30% of respondents reporting that they were familiar with sustainable tourism practices. Furthermore, only 20% of respondents reported actively seeking out sustainable tourism options, indicating a lack of demand for sustainable tourism products and services among tourists.

The results of the study also revealed that the negative impacts of tourism behavior on the environment are exacerbated by inadequate infrastructure and management practices in natural areas. For example, many natural areas in Cyprus lack sufficient waste management facilities, leading to high levels of littering and pollution. In addition, some natural areas lack adequate visitor management practices, such as designated trails and signage, leading to damage to plant and animal habitats.

Overall, the results of the study suggest that there is a need for improved tourism management practices and infrastructure in natural areas in Cyprus to mitigate the negative impacts of tourism behavior on the environment. Furthermore, the results highlight the importance of increasing tourists' awareness and understanding of sustainable tourism practices and promoting demand for sustainable tourism products and services.

It should be noted that the study has some limitations, including a relatively small sample size and a focus on a specific geographic location. Therefore, caution should be taken when generalizing the results to other regions or contexts.

Discussion

The results of this study provide important insights into the impact of tourist behavior on the sustainability of nature tourism in Cyprus. The findings suggest that while nature tourism

is growing in popularity in Cyprus, there are significant challenges associated with promoting sustainability in this sector. Tourist behavior is one of the key factors influencing the sustainability of nature tourism, with many tourists engaging in activities that have negative impacts on the environment, such as littering, disturbance of wildlife, and damage to natural habitats.

One of the key findings of the study is that there is a lack of awareness among tourists about the impact of their behavior on the sustainability of nature tourism. This is consistent with findings from other studies conducted outside the region (Boo & Park, 2013; Mayer & Frantz, 2004; Montgomery & Stone, 2009; Poon et al., 2015; Ramkissoon et al., 2013; Singh & Verma, 2017; Tranget al., 2019). Many tourists do not realize that their actions can have negative consequences for the environment, and are therefore unlikely to modify their behavior to reduce their impact. This highlights the need for education and awareness-raising initiatives aimed at promoting responsible tourism practices among visitors.

Another important finding is that there is a need for better regulation of tourist activities in natural areas. The study found that many tourists engage in activities that are prohibited, such as off-road driving and camping in non-designated areas. This not only has negative impacts on the environment but can also lead to conflicts with local communities and other stakeholders. The results of the study suggest that stricter enforcement of regulations and greater cooperation between stakeholders is needed to promote more sustainable tourism practices in natural areas.

The study also highlights the need for greater involvement of local communities in the management of nature tourism. Local communities can play an important role in promoting sustainability by providing information to tourists, helping to enforce regulations, and contributing to the development of sustainable tourism practices. The result joins other extant studies (Matthies et al., 2012; Onwezen et al., 2013; Ouellette & Wood, 1998; Schultz, 2001; Shi et al., 2017; Stern, 2000; Untaru et al., 2016; Zhao et al., 2014), in suggesting that there is a need for greater engagement of local communities in the planning and management of nature tourism particularly in Cyprus.

Overall, the results of this study provide important insights into the challenges and opportunities associated with promoting sustainability in nature tourism in Cyprus. The findings suggest that a multi-faceted approach is needed, involving education and awareness-raising, regulation and enforcement, and greater involvement of local communities in the management of tourism activities. By working together, stakeholders can promote more sustainable tourism practices that help to protect the environment and support the long-term viability of nature tourism in Cyprus.

However, it should be noted that this study has some limitations. The sample size was relatively small, and the findings may not be representative of all tourists visiting natural areas in Cyprus. In addition, the study only focused on the impact of tourist behavior on sustainability, and did not consider other factors such as infrastructure development and management practices. Further research is needed to explore these issues and to develop more comprehensive strategies for promoting sustainability in nature tourism in Cyprus.

Conclusion

In conclusion, the findings of this study highlight the need for sustainable tourism practices and responsible behavior to ensure the sustainability of nature tourism in Cyprus. The

results indicate that although visitors to Cyprus have generally positive attitudes towards sustainability, there is a gap between their attitudes and their actual behavior. The study also revealed that certain groups of tourists, such as those on package tours and those with lower levels of education, may be less inclined to engage in sustainable behavior.

The study's results have implications for policymakers, tourism industry stakeholders, and tour operators. Policymakers may consider implementing policies and regulations that incentivize sustainable behavior among tourists and promote environmental protection. Tour operators and tourism industry stakeholders can play a crucial role in promoting sustainable tourism practices and educating tourists about the importance of responsible behavior. This could include providing information on sustainable tourism practices, promoting eco-friendly tourism activities, and incorporating sustainable tourism principles into their operations.

Overall, this study contributes to the growing body of literature on sustainable tourism and nature tourism in Cyprus, and highlights the importance of responsible tourism behavior for the sustainability of nature tourism. Future research could explore other factors that influence tourist behavior and how these can be addressed through targeted interventions. Additionally, further research could investigate the economic and social impacts of sustainable nature tourism, including the benefits to local communities and the potential for sustainable tourism to contribute to economic development in Cyprus.

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