Impact of Resilience and Conservation in Sri Lanka's Tourist Hotspots on Sustainability in a Dynamic and Uncertain Global Landscape

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ABSTRACT

Sri Lanka's socioeconomic environment, particularly in its well-known tourist destinations, is heavily influenced by tourism. This research did a thorough examination as the country attempts to reconcile the increasing tourist industry's expansion with environmental preservation and long-term viability. This research focuses into the complex interaction between resilience, conservation, and sustainability in the lively setting of Sri Lanka's popular tourist attractions. Resilience and conservation were considered as predictors of the study and their impact on sustainability was evaluated. Literature review data was supported to build the theoretical foundation for the study and primary data was collected through a questionnaire survey. The population was recognized as individuals who traveled to the popular tourist attractions in Sri Lanka. A total number of 384 questionnaires were distributed among these individuals and 380 completed responses were received which was recognized as the sample. Data was analyzed using SPSS which included descriptive statistics, reliability tests, correlation, and multiple regression. The findings revealed that the resilience and conservation in tourist hotspots in Sri Lanka is in an average level which is not sufficient. Further, there is a significant negative impact of resilience on sustainability. This surprising outcome highlights the crucial role resilience plays in tourism destinations and suggests that sustainability initiatives may be compromised by a lack of resilience. Conversely, conservation has a positive impact on sustainability. The conservation of the natural environments, biodiversity, and cultural legacy inside these hotspots has come to depend heavily on conservation programs. This positive impact emphasizes how important environmental protection and resource sustainability are to sustaining Sri Lanka's tourist sector. It was recommended that Sri Lankan tourism areas should prioritize and increase conservation activities while building resilience mechanisms to deal with unanticipated obstacles. These findings have significant relevance for politicians, tourism sector stakeholders, and local people trying to balance environmental conservation and tourism expansion in Sri Lanka's well-known tourist sites. It is necessary to do more research to examine potential confounding factors and the wider implications of these complex interactions. Further, it can be suggested that the future researchers may do a comparative study among different tourist destinations in Sri Lanka as a longitudinal study to evaluate more complex changes in conservation practices, resilience and sustainability.

Keywords: Conservation, Resilience, Sustainability, Tourist hotspots

INTRODUCTION

The tourism sector is a complex and dynamic sector with significant sway on economic, social, and environmental landscapes in any country (Karunarathne et al., 2021). Tourism has evolved

as a significant source of economic growth and development in Sri Lanka, a country known for its rich cultural legacy, pristine natural beauty, and historical attraction. In recent years, Sri Lanka's tourist industry has grown dramatically, attracting visitors from all over the world (Sivesan, 2019). The island nation's numerous attractions have enticed visitors and contributed greatly to the nation's economic viability, ranging from cultural heritage sites to beautiful coastlines and bio-diverse animal reserves. Sri Lanka's tourist industry has emerged as a critical economic engine, ranking third in terms of export earnings. It generated around 5% of the country's GDP in 2018 and saw significant growth in foreign exchange profits, nearly tripling over four years to reach US$4.3 billion. This increase is mirrored in the increasing number of tourists, which increased from 1.5 million to 2.3 million during the same period. This industry directly employs around 250,000 people and indirectly employs up to 2 million more. Notably, over 80% of tourist services are provided by the informal sector, which is often helped by the internet and online booking platforms. According to their policy objectives defined in 'Vistas of Prosperity and Splendor,' Sri Lanka intends to grow tourism as an ecologically and culturally friendly business with active community engagement (UNDP, 2021)The attractiveness of Sri Lanka as a tourism destination is centered on conservation. Its biodiversity-rich national parks, including Yala and Wilpattu, have gained international acclaim, drawing environment lovers and animal enthusiasts. Furthermore, the nation's dedication to maintaining its cultural history, as seen by UNESCO World History Sites like Sigiriya and Polonnaruwa, demonstrates the priority put on cultural conservation. The delicate balance between tourism development and conservation initiatives, on the other hand, provides a difficulty (Prakash et al., 2019).

However, both worldwide and in Sri Lanka, the tourist sector has faced a slew of significant problems, which are frequently worsened by the uncertainties inherent in the volatile global landscape (Rana & Paul, 2017). These difficulties have highlighted the crucial necessity of three related concepts: conservation, resilience, and sustainability. The advent of the COVID-19 pandemic, on the other hand, highlighted weaknesses in the industry, which were founded on an overreliance on mass tourism and a lack of resilience mechanisms (Karunarathne et al., 2021). As the industry dealt with the aftermath of the pandemic, the necessity of conservation initiatives, resilience methods, and sustainability principles became clear.

Sustainability is a guiding element for Sri Lanka's tourist industry's future. As the industry attempts to recover from the epidemic, the interaction between conservation, resilience, and sustainability becomes more obvious (UNDP,2020.). The tourism industry in Sri Lanka faces serious concerns of resilience and sustainability. As seen by the significant impact of the

COVID-19 pandemic, the industry has proved vulnerable to global crises, demonstrating its overreliance on mass travel. This susceptibility highlights the critical importance of establishing resilience techniques to better survive external shocks (Karunarathne et al., 2021). At the same time, issues about sustainability is becoming more important, with problems relating to responsible resource use, environmental protection, and community participation. These dual challenges highlight the need for a comprehensive approach that not only improves the sector's ability to recover from crises but also promotes long-term sustainability, making it a critical area of study for researchers and policymakers working to secure Sri Lanka's tourism industry's future. As the sector dealt with the devastation caused by the epidemic, the importance of conservation, resilience techniques, and sustainability principles became clear.

This paper provides a methodology that analyses the impact of resilience and conservation on the sustainability of tourist hotspots in Sri Lanka which is based on the deductive approach. The major question that drives the data analysis is; What is the impact of resilience and conservation on the sustainability of tourist hotspots in Sri Lanka?. Further, the variables are measured through the indicators identified through the literature review. Data analysis is then focused on analyzing the acceptance or rejection of hypotheses developed in the methodology. The purpose of this study is to investigate the intricate impact of these key factors, resilience, and conservation, in the context of Sri Lanka's tourism destinations' sustainability, offering insight into how they interact and adapt in the ever-changing global prospect.

LITERATURE REVIEW

Resilience

The capacity of a system, organization, or individual to tolerate, adapt to, and recover from adversity, shocks, or disruptions is referred to as resilience. It is the ability to recover and continue working successfully, or even to become stronger, in the face of adversity, such as natural catastrophes, economic crises, health problems, or other types of disturbance (Francis & Bekera, 2014). Resilience entails not only the ability to survive immediate shocks, but also the ability to learn from and adapt to these events, so making the system or individual more resilient and ready for future challenges (Jiang et al., 2019). Resilience may be applied to natural systems, communities, enterprises, and even personal well-being in a variety of circumstances, highlighting the necessity of adaptation and flexibility in negotiating the complexity of life and the environment (Duit, 2016).

Without a doubt, the tourist sector is vulnerable to crises and disasters, which can offer considerable problems, leading to economic downturns and employment losses. These crises, whether natural or man-made, have far-reaching consequences for the tourist industry's resilience and capacity to endure and recover from disturbances (Bui et al., 2020). Natural catastrophes such as earthquakes, hurricanes, and tsunamis, as well as man-made calamities such as financial crises, terrorism, health crises, etc. are acknowledged as severe hazards to the tourist sector. These accidents have the potential to significantly reduce visitor demand, resulting in economic and job losses (Rosselló et al., 2020).

Resilience in tourist destinations

In the tourist environment, resilience takes several forms, including economic resilience, social resilience, and organizational (or company) resilience. The capacity of a location to recover economically after a catastrophe is referred to as economic resilience. According to Filimonau & De Coteau, (2020) Tourism resilience is measured using a variety of metrics, each of which reflects a distinct facet of resilience. To be a resilient tourism destination, it should consider its social, economic, institutional, physical, and community capacity to absorb unexpected shocks (Wang et al., 2020). Sharifi, (2016) advocated for multidimensional metrics that take into consideration communities' temporal dynamism and risk management capacity. Kristjánsdóttir et al., (2018) stressed the indicators' interdependence and dynamic character. The capacity of a system to remain within specified limits even after a disruption, whether operational, functional, or performance-related, is a common thread throughout these definitions. Infrastructure readiness, emergency response plans, community participation, adaptive capability, and effective risk management are typically variables that impact these characteristics.

Tourism destination resilience, as discussed in the literature, is a notion that has gained popularity in recent years as more people become aware of the different problems and disruptions that tourism destinations confront. Ketter, (2022) adds to the literature by developing the Change and Resilience (SCR) Model. This model acknowledges that the rate of change in tourism can vary greatly over time and across different social and geographic regions. As a result, it advocates for individualized solutions based on the magnitude and timing of disruptions, highlighting the dynamic character of resilience in tourism.

Empirical research in this field has concentrated on the practical elements of increasing the resilience of tourism destinations. Capacity building, adaptive management, and adaptive

governance have emerged as essential components in improving tourist system resilience. Researchers have also investigated adaptation capability and destination vulnerability, particularly in light of climate change-related disturbances. These studies emphasize the necessity of long-term sustainability concerns and coordinated efforts among stakeholders to strengthen tourist destination resilience. However, the literature does not capture more specific frameworks to assess the resilience of tourist destinations which is a major limitation in the previous literature identified above. Further, no studies have been done to evaluate the resilience in Sri Lankan tourist hotspots which indicates a clear theoretical and contextual gap.

Conservation

The purposeful and responsible management, preservation, and protection of natural resources, biodiversity, cultural heritage, and other vital parts of the environment is referred to as conservation (Khoury et al., 2019; Xiao et al., 2018). It entails sustainably using resources to assure their availability for future generations while limiting negative consequences on ecosystems and cultural heritage. Conservation refers to purposeful attempts to maintain, preserve, and manage both the built and natural environments.

Conservation has developed over time, encompassing both environmental (natural) and cultural conservation (Runa et al., 2020). Environmental conservation aims to save certain places while being adaptable to change. Cultural conservation, on the other hand, is concerned with the preservation of physical items as well as social components. Both these dimensions have identical goals and are frequently pursued in tandem, with social conservation having primacy as it directs physical conservation efforts (Mondino & Beery, 2019). The preservation of ecosystem services has been a fundamental motivator and tactic throughout the history of conservation. Ecosystem services are the vital advantages provided by ecosystems to humans, such as clean water, rich soil, crop pollination, and climate management. Conservationists have strived to study, protect, and perpetuate these services, recognizing their value (Sannigrahi et al., 2019).

Every location has distinct socio-cultural features, and research on socio-cultural space frequently focuses on specific research locations during the time of study. However, many socio-cultural assumptions may be removed from one context and applied to others, although with modifications. When researchers go from one environment to another, they must explain and evaluate the distinct outcomes that arise, which leads to natural generalization, a hypothesis rather than a conclusion (Pourfaraj et al., 2020). In general, development seeks to protect a

country's cultural values, increase human dignity, to build identity, and to improve quality of life.

Conservation of tourist destinations

Cultural heritages are known to be popular destinations for tourists. Conservation of these cultural heritages is essential for preserving cultural identity, and development and conservation work in tandem. In practice, conservation must take into account technological, regulatory, and institutional factors (Fern ´ andez-Llamazares & Cabeza, 2018). Cultural legacy refers to a diverse spectrum of things, buildings, and constructions with a significant historical and cultural significance to human progress. Cultural heritage buildings are built to satisfy a variety of spatial requirements, whereas cultural heritage structures are developed for activity areas that are interwoven with nature. Locations and geographical spatial units having cultural heritage artifacts, buildings, or constructions are referred to as cultural heritage sites and areas (Latip et al., 2018). By involving the local community in heritage conservation, indigenous knowledge, customs, and histories can be preserved as revealed by Xiao et al., (2018). Indigenous groups frequently have unique insights into their past, such as previously unseen recordings or histories that may not be documented elsewhere. Heritage conservation programs can tap into this great source of knowledge by incorporating these groups, improving our understanding of cultural legacies.

Eco-tourism is an important dimension of tourism in the current era and Protected Areas (PAs) play a pivotal role in promoting eco-tourism hence the long-term conservation of these areas is important (Birendra, 2022). PA management systems are carried out to conserve these areas. The primary goal of PA management systems is to safeguard and conserve natural resources. However, there is rising fear about the harmful effects of tourism on these pristine landscapes. The protection of endangered species is one acknowledged conservation advantage of ecotourism. Early ecotourism articles focused on the effects on individual species, which were frequently the major draw in certain locales (Valverde Sanchez, 2018). Research on the conservation advantages of ecotourism includes effects not just on species but also on wider geographic areas. Researchers have documented ecotourism's (mainly) beneficial consequences in Tanzania's Ngorongoro Crater Conservation Area, Peru's Tambopata National Reserve, and Ecuador's Galapagos Islands National Park while investigating landscape-level conservation across protected areas (Stronza et al., 2022). Although these studies illustrate the institutional problems associated with implementing conservation across landscape sizes, they

also demonstrate the importance of ecotourism for the conservation of other competing uses of natural resources, as well as the contributions to local communities.

While this is a particular concern for UNESCO World Heritage Sites (WHSs) that lack proper management plans to handle growing visitor numbers and the associated strain on infrastructure, other PAs are expected to encounter similar problems (Job et al., 2017). A more regulatory-oriented strategy is required to guarantee that PAs are appropriately prepared to handle the consequences of tourism to solve these concerns and create resilience. Leung et al., (2018) developed recommendations for regulating recreational activities within PAs, providing important insights into how to combine conservation and tourism. However, the effectiveness of these principles is dependent on the availability of enough resources inside PAs. This underlines a major issue which is many PAs experience resource limits that impede their ability to handle tourism-related activities efficiently. This evidence highlights the need for infrastructure, biodiversity protection, and management of PAs which can be considered as indicators of conservation of tourist destinations.

Sustainability

Sustainability is a concept and method that attempts to fulfill current demands without threatening future generations' capacity to meet their own. It includes economic, social, and environmental factors in different facets of human existence and the environment (Verma & Raghubanshi, 2018). Sustainability attempts to find a balance between economic development, social justice, and environmental conservation in order to guarantee that resources are managed wisely and responsibly for both current and future generations' long-term well-being (Purvis, 2018).

Economic sustainability is an important component of sustainable development, emphasizing the need to preserve and improve economic well-being while reducing negative environmental and societal repercussions. The study done by Akadiri et al., (2019) examines the link between renewable energy consumption, economic sustainability, and pollution reduction in the context of 28 European Union (EU-28) countries. It emphasizes the positive and strong long-term links between these aspects and proposes that using renewable energy sources may help achieve environmental sustainability as well as economic progress. As revealed by Barbier & Burgess, (2020) several developing countries have faced challenges in achieving sustainability due to the COVID-19 economic crisis.

The study done by Ali et al., (2019) investigates the link between urban form and social sustainability in the context of research undertaken in Jordan, especially in the city of Irbid. The research examines the influence of five fundamental features of urban design, namely density, land-use distribution, building height, housing kinds, and accessibility, on social equity and community sustainability. Social sustainability is a complicated term with several aspects and consequences that overlap with wider concepts of sustainable development (Ma et al., 2020). Social fairness is one crucial component underlined in this review. It is noted that the architecture and layout of urban areas may have a substantial impact on citizens' living circumstances and possibilities (Ali et al., 2019). Interestingly local governance has resulted in sustainability according to Armstrong & Li, (2022).

Environmental sustainability refers to the responsible and equitable use of natural resources, as well as the conservation and preservation of the natural environment, to satisfy the requirements of the current generation without jeopardizing future generations' capacity to meet their own needs (Han, 2021). It entails methods and tactics aimed at reducing the negative environmental effects of human activities while maintaining long-term ecological stability and health. Industrialization has caused several environmental issues due to environmentally unfavorable production processes Oláh et al., (2020). However, the same study proves that the integration of Industry 4.0 can facilitate sustainable development through better ecological support and environmental performance.

Within the global tourism industry, the issue of tourism sustainability is receiving more attention and discussion. Tourism must be closely monitored for its effects to be sustainable, and when required, corrective or preventative action must be taken. Instead of being thought of as a special type of tourism, sustainable tourism should be seen as an industry-wide objective. However, the feasibility of accomplishing this objective has been hotly debated, with some believing it to be impossible. A common belief is that tourism may never fully attain sustainability. Despite these difficulties, there is a strong argument in favor of continuing to assess the performance and effects of tourism. In earlier studies on tourism sustainability, one of the conventional elements, such as the economic one, or a combination of the economic, sociocultural, and environmental dimensions, received the majority of the attention. Even the framework's inclusion of institutional sustainability has been enhanced in several research (Asmelash & Kumar, 2019).

Resilience and sustainability

There are numerous connections between the ideas of sustainability and resilience, and they are frequently used interchangeably for a range of purposes. It is also worth noting that the application of these notions necessitates that sustainability and resilience be descriptors of something else rather than unique things in and of themselves (Marchese et al., 2018). Both the terms sustainability and resilience are used to describe a system. Sustainability and resilience share common study approaches, such as life-cycle analysis, structural analysis, and socioeconomic analysis, as a result of their shared focus on system survival (Jiménez-Medina et al., 2021). Resilience and sustainability are also related to global political developments, such as the development of global frameworks and multilateral agendas that promote sustainability and resilience in urbanization.

Organizational resilience is an important dimension of resilience. The study Souza et al., (2017) emphasizes the need for organizational resilience in accomplishing sustainability goals. The study demonstrates that encouraging resilience toward sustainability needs long-term planning, frequent communication, benchmarking, collaborations, and eco-efficient activities through a qualitative multi-case analysis of Brazilian firms. Furthermore, human factors, notably leadership behavior and shared company culture, are critical in ensuring organizational sustainability. This study stresses how resilience improves organizational, human, and technical sustainability capacities, implying that resilience-building initiatives are essential to sustainability strategies.

PAs as conservation and economic development drivers is a generally accepted technique, particularly in developing nations. This strategy is based on the assumption that the success of conservation initiatives is inextricably linked to long-term economic prosperity (Brandt & Buckley, 2018). In the sphere of tourism, the idea of resilience in the context of sustainability is a varied and critical subject of research. While resilience and sustainability have comparable goals in terms of maintaining social, economic, and environmental well-being in destination communities, their relationship has not gotten the scholarly attention it deserves (Espiner et al., 2017). The sustainability of the tourist system is particularly sensitive to external disturbances emerging from the larger socio-political, economic, and environmental systems when resilience is inadequate or in its early stages (Jones & Wynn, 2019). However, well-developed resilience mechanisms in destinations or enterprises operate as crucial buffers against sustainability risks (Wieczorek-Kosmala, 2022). The ultimate objective is for the relationship

to reach a "mature" state in which all aspects of resilience and sustainability effortlessly overlap. In this ideal condition, tourism not only sustains its continuity but also greatly helps community resilience, particularly in the face of globalization, integration, and other restrictions. This conceptual analysis highlights the need for a more in-depth knowledge of how resilience might improve tourist sustainability (Espiner et al., 2017). This critical examination sets the path for future research and practical solutions targeted at enhancing the important link between sustainability and resilience in the tourist industry.

The study done by Elmqvist et al., (2019) emphasizes the need for resilience in the goal of urban sustainability, especially as people reach the urban century. Cities confront a slew of environmental issues, including greenhouse gas emissions and sensitivity to climate change. Resilience is required to properly confront these difficulties. Confusion and ambiguous notions of 'urban sustainability' and 'urban resilience', on the other hand, might stymie transformational solutions. It is critical to acknowledge that resilience and sustainability might have opposing purposes at times, and a thorough understanding of their interplay is critical for moving transformational initiatives toward urban sustainability forward.

Conservation and sustainability

The late 1980s saw the birth of the idea of sustainable development, which sought to strike a balance between protecting natural resources and supporting economic and social advancement (Kurniawan & Managi, 2018). Ecotourism is one significant project that has arisen from this paradigm. It is a type of tourism that is firmly anchored in natural regions and is intended to benefit local people while also providing tourists with educational opportunities (Latip et al., 2018). Productive community interaction is seen vital in the context of indigenous tourism. Participation of the local population in conservation and tourist development activities is critical to the long-term viability of such programs (Rasoolimanesh et al., 2017). Effective conservation efforts may lay the groundwork for long-term development, particularly when local communities are actively involved in decision-making and benefit from development projects (Latip et al., 2018).

The study done by Kowarik et al., (2020) emphasizes the complex interplay between conservation and sustainability in the context of biodiversity and urbanization. Urbanization, which is frequently connected with environmental difficulties, may also play a critical role in defining biodiversity's future. Surprisingly, cities may serve as havens for varied plant and animal species, providing a rich urban biodiversity that, in turn, provides a wide range of

ecosystem services such as control, resource availability, and cultural advantages. This viewpoint emphasizes the crucial necessity to turn cities into biodiversity-friendly habitats, in accordance with the concepts of sustainable urban development and human well-being enhancement. The concept advocates for a holistic strategy that incorporates conservation techniques into urban planning and development by recognizing the possibility for cohabitation between urban areas and biodiversity.

Cities that value biodiversity have a close connection to sustainable urban growth and human well-being. Urban nature creates and supports a wide range of regulating, provisioning, and cultural ecosystem services, enhances physical and mental health, and keeps people connected to nature (Ives et al., 2017). Importantly, there is mounting evidence that bio-diverse urban environments outperform just 'green' ones. Biodiversity is frequently, but not always, associated with the provision of ecological services that benefit urban populations (Ives et al., 2017). As a result, both the amount and quality of urban nature matter to people and contribute to their well-being. Enhancing biodiversity in urban contexts is a crucial step toward making cities more habitable.

The study done by Kariyawasam et al., (2020) examines the conservation and its contribution to socio-economic sustainability with special reference to the Udawalawa National Park, Sri Lanka. The findings emphasize that the conservation of the national park has not taken the initiative to share the benefits of conservation practices with the residents which does not create socio-economic sustainability. Therefore, Kariyawasam et al., (2020) analyses the relationship between environmental sustainability and the socio-economic sustainability of the local residents and it does not capture the impact of conservation practices and its impact on the sustainability of the park specifically. Forest-based conservation outcomes in Sri Lanka were examined by Zoysa, (2022) and it does not contribute to the analysis of the impact of these conservation outcomes on the sustainability of these destinations. These findings highlight the lack of research on the impact of conservation on the sustainability of tourist destinations in Sri Lanka.

METHODOLOGY

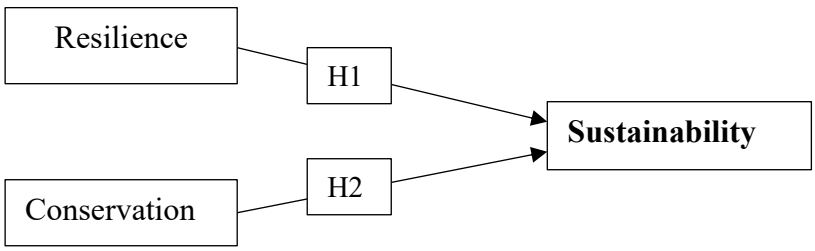
Research Approach: The deductive approach is used for this study. A deductive approach is a logical and systematic research strategy that begins with a broad idea or hypothesis and then gathers and analyzes evidence to test, confirm, or deny these theories. You have already developed precise hypotheses on the connections between conservation, resilience, and

sustainability in Sri Lanka's tourism destinations. Deductive research begins with existing hypotheses or notions and aims to put them to the test through actual data (Al-Ababneh, 2020). Current research is based on theoretical concepts it seeks to determine how- conservation and resilience, which are well-established concepts in environmental and tourist studies, impact sustainability.

Research Strategy: Questionnaire surveys is the strategy used to collect data from the respondents. This is based on a 5 point likert scale (1 – Strongly Disagree to 5 – Strongly Agree). The questionnaire was developed based on the indicators relevant to each variable according to the findings of the previous scholars (Table 1).

Conceptual Framework

Figure 1: Conceptual Framework



Source: Adapted from Rasoolimanesh et al., (2017); Espiner et al., (2017)

Operationalization

Table 1: Operationalization

Variable	Indicators	Source	Measurement
Resilience	Infrastructure readiness Emergency response plans Community engagement Adaptive capacity Risk management	(Filimonau & De Coteau, 2020; Sharma et al., 2021)	5 Point Likert scale 1- Strongly Disagree 2- Disagree 3- Neutral 4- Agree

Conservation	Protected areas and their management Resource usage Biodiversity monitoring and protection Community involvement in conservation efforts Tourism practices.	(Birendra, 2022; Runa et al., 2020; Xiao et al., 2018)	5- Strongly Agree
Sustainability	Economic Sustainability Environmental Sustainability Social Sustainability	(Asmelash & Kumar, 2019; Purvis, 2018; Verma & Raghubanshi, 2018)	

Source: Developed by Author

Hypotheses Development

When resilience mechanisms are well-developed, they operate as critical buffers against threats to sustainability, enabling tourist continuity and boosting community resilience, all while fitting with sustainability goals (Wieczorek-Kosmala, 2022). This emphasizes the importance of additional study to investigate and develop the relationship between resilience and sustainability in the tourist sector (Espiner et al., 2017).

H1- There is a significant impact of resilience in Sri Lanka's Tourist Hotspots on sustainability.

Sustainable development seeks to strike a balance between natural resource conservation and economic and social growth (Kurniawan & Managi, 2018). Ecotourism supports local communities while also educating tourists (Latip et al., 2018). Community engagement in conservation and tourist development is critical for long-term viability and sustainability in the context of indigenous tourism (Rasoolimanesh et al., 2017). Effective conservation activities can pave the way for long-term development, especially when local communities are actively involved (Latip et al., 2018).

H2- There is a significant impact of conservation in Sri Lanka's Tourist Hotspots on sustainability.

Data Collection and analysis

Secondary data was collected through the literature review. The terms of resilience, conservation and sustainability were analyzed and there connections have been derived from literature. Questionnaire survey was used to collect primary data. This questionnaire was distributed among 384 tourists in Sri Lanka and collected 380 usable responses which was considered as the sample size of the study based on the random sampling method. Data analysis was done using SPSS. Reliability test, correlation and multiple regression analysis were used to deliver a reliable and meaningful outcome.

RESULTS AND DISCUSSION

Table 2: Demographics

Demographics	Categories	N	Percentage %
Gender	Male	91	23.9
	Female	289	76.1
	Total	380	100.0
Age	21 - 30 Years	162	42.6
	31 - 40 Years	218	57.4
	Total	380	100.0
Frequency of Travel to tourist hotspots	Weekly	7	1.8
	Monthly	146	38.4
	Few Times a Year	205	53.9
	Rarely	22	5.8
	Total	380	100.0

Source: Survey Data, 2023

Table 2 shows the demographics of the study's participants. In terms of gender, the data reveals that 23.9% of the 380 respondents were male, while the majority, 76.1%, were female. When it comes to age distribution, the data shows that 42.6% of participants were between the ages of 21 and 30, while 57.4% were between the ages of 31 and 40. These demographics give insight into the study's sample composition, indicating a primarily female and middle-aged participant group. Further 53.9% of the respondents, majority, travels few times a year whereas

2% travels weekly which demonstrates their interest and ability to travel the popular tourist destinations in Sri Lanka.

Table 3: Descriptive Statistics

Variable	Items	Mean	Overall Mean	Std. Deviation
Resilience	R1	2.400	2.7863	0.852
	R2	2.690		0.583
	R3	2.410		0.850
	R4	2.420		0.854
	R5	3.110		1.022
	R6	2.940		1.109
	R7	3.100		0.909
	R8	2.830		0.866
	R9	3.120		1.017
	R10	2.840		0.931
Conservation	C1	2.820	2.9189	1.069
	C2	2.520		1.231
	C3	2.610		1.223
	C4	2.860		1.287
	C5	2.830		1.290
	C6	2.830		1.126
	C7	2.870		1.070
	C8	3.280		0.970
	C9	3.270		0.909
	C10	3.290		0.956
Sustainability	S1	4.000	3.3947	0.509
	S2	3.700		0.586
	S3	3.520		0.800
	S4	3.260		0.757
	S5	2.760		0.832
	S6	2.970		0.832
	S7	3.340		0.677
	S8	3.590		0.783
	S9	3.340		0.691

Source: Survey Data, 2023

Table 3 provides descriptive statistics for the variables of Resilience, Conservation and Sustainability. This provides the mean and standard deviation values for each of the indicators under all the variables which helps to understand the respondents' stance for each factor considered. There are 10 items under the resilience variable. The mean values are in the range

of 2.4 to 3.12. Further, the overall mean value of the variable is 2.79 which is less than 3 and this indicates that the respondents are more in to disagree stance according to the 5-point Likert scale. The conservation variable also has 10 items and the mean values are from 2.52 to 3.29. The overall mean value for Conservation is 2.92 and hence it can be argued that there is a neutral stance from the respondents since it is less than 4. Further, there are 9 items under Sustainability and the mean values are in the range of 2.76 to 3.59. The overall mean value is 3.39 and therefore, it can be argued that the respondents have an agreed stance since it is higher than 3 and closer to 4. The lower level of standard deviation for all the variables proves that there is less fluctuation or dispersion among the data points, implying that the data has a lower degree of consistency or precision.

Table 4: Reliability

Reliability Statistics

	Cronbach's Alpha	N of Items
Resilience	0.919	10
Conservation	0.942	10
Sustainability	0.812	9

Source: Survey Data, 2023

Table 4 summarizes the study's core components, including resilience, conservation, and sustainability. Cronbach's Alpha values are provided in the table, which assess the internal consistency or dependability of each construct. The Cronbach's Alpha rating for resilience is 0.919, indicating a good level of internal consistency among the 10 items assessing resilience. Similarly, the conservation construct has a Cronbach's Alpha of 0.942, suggesting that its 10 elements have a high level of internal consistency. The sustainability construct, on the other hand, has a somewhat lower internal consistency across its nine elements, with a Cronbach's Alpha of 0.812, although this is still regarded adequate. These results indicate that the survey tools employed in the study to measure resilience, conservation, and sustainability are reliable and consistent in evaluating the desired dimensions.

Table 5: Correlation

Correlations

	Resilience	Conservation	Sustainability

Resilience	Pearson Correlation	1	.821**	.723**
	Sig. (2-tailed)		.000	.000
	N	380	380	380
Conservation	Pearson Correlation	.821**	1	.927**
	Sig. (2-tailed)	.000		.000
	N	380	380	380
Sustainability	Pearson Correlation	.723**	.927**	1
	Sig. (2-tailed)	.000	.000	
	N	380	380	380

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Survey Data, 2023

The table shows the coefficients of connection between the variables of resilience, conservation, and sustainability. The Pearson connection between resilience and sustainability is given as .723, showing a positive and high connection between these two domains at the 0.01 level (two-tailed). Similarly, conservation and sustainability have a very significant positive association, with a Pearson association of .927 at the 0.01 level (two-tailed). These correlation data imply that in the setting of the study, there is a strong positive association between resilience and sustainability, as well as conservation and sustainability, emphasizing the association of these constructs.

Table 6: Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.930[a]	.864	.864	.16860

a. Predictors: (Constant), Conservation, Resilience

Source: Survey Data, 2023

Table 6 summarizes the model utilized in the study. The model comprises two predictors, Conservation and Resilience, as well as a constant factor. The table provides some essential data for evaluating the model's performance. The multiple correlation coefficient R value is 0.93, showing a significant positive association between the predictors and the outcome variable. The R Square value of 0.864 indicates that the predictors in the model can explain

86.4% of the variability in the dependent variable (Sustainability). The Adjusted R Square, a slightly modified version of R Square that takes into consideration the number of predictors, stays high at 0.864.

Table 7: ANOVA

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	68.246	2	34.123	1200.429	.000[b]
	Residual	10.716	377	.028		
	Total	78.962	379			

a. Dependent Variable: Sustainability

b. Predictors: (Constant), Conservation, Resilience

Source: Survey Data, 2023

Table 7 shows the results of an ANOVA performed on the model, with Sustainability as the dependent variable. The ANOVA test is used to determine the statistical significance of the regression model. The regression model is extremely significant in this situation (F = 1200.429, p 0.000), showing that the independent variables, Conservation and Resilience, have a considerable influence on explaining the variability in Sustainability scores. The model explains a significant percentage of the variance in Sustainability, as evidenced by the high R-squared value of 0.864.

Table 8: Coefficients

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.093	.036		58.263	.000
	Resilience	-.077	.022	-.117	-3.526	.001
	Conservation	.520	.017	1.023	30.823	.000

a. Dependent Variable: Sustainability

Source: Survey Data, 2023

Table 8 demonstrates the coefficients derived from multiple regression analysis. Resilience has a negative significant impact on the dependent variable of Sustainability (B=-.117, p = 0.001). Therefore, the $H1_0$ is rejected. This impact is weak however since the Beta value is lower. On the other hand Conservation, the predictor variable, has a significant positive impact on the sustainability (B = 1.023, p = .000) and hence $H2_0$ is rejected.

DISCUSSION

The discovery of a considerable negative impact of resilience on sustainability in tourist destinations in Sri Lanka appears to contradict the usually favorable connections between resilience and sustainability identified in the literature. While the connection between resilience and sustainability in tourism has gotten less attention, it is recognized as a crucial and emerging topic of research. As complex systems, tourism destinations can benefit from resilience techniques to sustain their social, economic, and environmental well-being. These destinations' resilience mechanisms operate as buffers against threats to sustainability, especially when dealing with external shocks from sociopolitical, economic, and environmental systems (Espiner et al., 2017). The study by Elmqvist et al., (2019) underlines the critical significance of resilience in attaining urban sustainability, especially as the globe gets more urbanized. Within urban settings, resilience is viewed as critical in managing environmental concerns such as greenhouse gas emissions and climate change susceptibility. These literature findings are in contrary to the findings of the current study therefore.

The current analysis demonstrates that conservation has a considerable beneficial influence on sustainability in the context of Sri Lanka's tourism attractions. This discovery is consistent with the larger conservation and sustainability literature, offering insight on the varied advantages of conservation initiatives. Conservation initiatives that actively involve local populations in decision-making processes and ensure they benefit from development projects can provide the groundwork for long-term sustainable development (Latip et al., 2018). Furthermore, Kowarik et al. (2020) underline the complex relationship between conservation and sustainability, particularly in the context of urbanization and biodiversity.

CONCLUSION

The overall findings from the respondents in Sri Lanka's tourist hotspot resilience reveal a sense of neutrality on several factors relating to tourism infrastructure, disaster preparedness, community involvement, flexibility, and risk management according to descriptive statistics. This neutrality reflects a balanced viewpoint with no strong positive or negative feeling, indicating that these areas have room for growth. Hence it can conclude that, the respondents are not confident enough of the readiness of the tourist hotspots in Sri Lanka in an emergency situation or in a crisis. The neutral approach implies that chances to improve adaptation and resilience in tourism infrastructure, crisis management, and community participation may exist. While there may be existing infrastructure and strategies in place, the findings suggest that

more steps may be done to improve preparedness for unanticipated occurrences such as natural catastrophes or swings in visitor demand. During an emergency, efficient and effective communication and coordination among essential authorities and stakeholders are required to promote smooth collaboration.

The findings suggest that the respondents are neutral with the conservation in tourism hotspots in Sri Lanka as revealed in the descriptive statistics, suggesting a balanced approach on these key problems. The neutral approach implies that, while there are continuous attempts to efficiently manage protected areas and maintain natural ecosystems and species, there is still potential for improvement in these activities. Similarly, while respondents do not strongly agree or disagree, it is clear that resource allocation and financing for preserving and improving protected areas may require further care and study. While there are continuing projects and good elements, there is need for development and a continuous focus to maintain the long-term preservation of natural ecosystems, wildlife, and sustainable tourism practices in these key sites.

The overall findings demonstrate the tourist industry's good economic and community development benefits in Sri Lanka's hotspots. The overwhelming agreement on these points emphasizes the industry's importance in the region. However, more efforts and attention are needed to guarantee that cultural preservation, community well-being, and sustainable practices are successfully incorporated into the tourist sector in order to increase its overall impact.

The main objective of this study was to analyze the impact of reliance and conservation in Sri Lankan tourist hotspots on the Sustainability of tourism. Based on the findings, it was revealed that resilience has a negative impact on sustainability in tourism. This does not mean that the resilience in the tourist hotspots reduces the sustainability but it can argue that the insufficient level of resilience in the Sri Lankan tourist hotspots can reduce the sustainability. The selected predictors explains 87.4% of the variability of the dependent variable. This means that there are confounding variables that can explain the variability of the dependent variable, sustainability, which is not covered in this study. As revealed in the literature, economic crisis and local governance can determine the sustainability of a country which could have been impacted on the sustainability. Moreover, the conservation of Sri Lankan tourist hotspots has positively impacted on the sustainability.

Based on the study's results, many significant recommendations for improving the sustainability and resilience of Sri Lanka's tourism attractions emerge. To begin, it is critical to use an integrated planning strategy that takes both sustainability and resilience into account, while also encouraging collaboration among local governments, tourist stakeholders, and environmental agencies. To encourage sustainable practices, adequate investment in tourism-related infrastructure, such as waste management and energy-efficient facilities, is required. Furthermore, community engagement should be stressed, with local inhabitants actively participating in decision-making processes to ensure their perspectives are recognized. Efforts to maintain biodiversity must continue and increase, with an emphasis on the preservation of native flora and wildlife, especially endangered species. Sri Lanka may improve the long-term viability and resilience of its beloved tourism attractions by following these ideas.

The current study is limited to two predictors and there can be different factors that may affect the tourism destination sustainability which were not captured in the current study. Therefore, future researchers can identify more factors that can impact on sustainability in the tourism destinations in Sri Lanka. There are several tourist attraction in the country and future researchers can examine the sustainability in a different tourist destination in Sri Lanka and carry out a comparative study to gain more novel insights. Further, it can be suggested that the future researchers may conduct a longitudinal study to evaluate the resilience, conservation and sustainability in tourist hotspots in Sri Lanka to obtain more insightful outcomes.

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