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Original Scientific Article

Relevance of Place Attachment towards Sustainability in Tourism: A Bibliometric Analysis

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Sustainability is a core and primary outcome of place attachment studies, an increasingly popular research topic in the tourism industry. It is a significant concern in daily life because of social and environmental issues and the need to preserve legacy and facilities to maintain tourism destinations. In this study, the Scopus database and keywords related to place attachment, sustainability, and tourism were used to identify the papers. The result revealed that 720 papers were found in the Scopus database from 1988 to 2023. After filtering the data, only 448 papers were included for further analysis. In this study, authors use the bibliometrics analysis technique, VOSviewer, and RStudio software to quantify and visualise the existing literature on place attachment and sustainability and evaluate the main overview of the research summary. This study aims to present a bibliometric overview of place attachment towards sustainability in tourism research. The study employed co-occurrence of keywords, most prolific authors, most cited countries, most cited articles, and co-authorship by country analyses. The findings show significant growth in the field of place attachment and sustainability research, including authors, significant journals, research papers, and countries.

Keywords: place, place attachment, sustainability, tourism, bibliometric analysis

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Introduction

Sustainability has garnered growing interest in travel and tourism, which is accepted as a primary sector globally with the potential to significantly contribute towards sustainable development of regions (Powell & Ham, 2008). Tourism, with its activities, has boosted residents' standard of living with increased income, generating employment, attracting business owners, enhancing infrastructure, preserving cultural significance, and fostering cross-cultural exchange (Ji et al., 2015; Mathew & Sreejesh, 2017; Wang & Chen, 2015). However, beyond financial advantages, tourism-related activities negatively impact the environment's ecological system (Pan et al., 2018). Climate change-related issues have become a global concern (Zhang & Zhang, 2020). The development of tourism has many adverse effects, as noted by academics, including rising living expenses (Rasoolimanesh et al., 2015), environmental damage (Badola et al., 2017), and uneven distribution of tourism earnings (Alam & Paramati, 2016). Tourism cannot exist without travel, and there is a close relationship between sustainable mobility concepts and sustainable tourism (Høyer, 2000). Previous studies suggest that human activity is the main factor contributing to environmental deterioration (Halpenny, 2010; Kurz, 2002). Carbon emissions have been steadily increasing daily; recently, data published by Nature Climate Change show that tourism contributes 8% of all greenhouse gas emissions from transport and food consumption. Tourism-related carbon emissions total nearly 4.3 billion metric tonnes (Lenzen et al., 2018). Thus, an appropriate kind of tourism must be developed to attain long-term sustainability. Developing a sustainable tourism destination requires maximizing profit and reducing cost while fulfilling the needs of tourists with effective decision making (Cottrell et al., 2013; López et al., 2018). However, researchers argue that little attention has been paid to this significant research subject, making it challenging to reach conclusive findings regarding how, why, and what circumstances promote place attachment towards sustainable behaviour (Scannell & Gifford, 2010b). Further, there is a shortage of literature investigating the relationship between place attachment and environment-related studies (sustainability), which is scattered, fragmented, and 'disorganised' (Jorgensen & Stedman, 2001), and understanding its importance has been an area of interest for academicians in multiple domains of tourism in recent times (Aytekin et al., 2023; Zhou et al., 2023). Within the tourism discourse, a highly acknowledged parallel to UN Sustainable Development goals brings a clear direction towards creation of low-carbon communities with active community participation (Lu, Lu et al., 2023), an initiative towards place attachment. Similar actions play a crucial role in achieving sustainability in tourism. Place attachment is a central study issue in environmental psychology and tourism literature, encompassing the positive affective connections between individuals and their socio-physical surroundings (Strzelecka & Boley, 2017). For this purpose, a bibliometric analysis was carried out on published papers in the Scopus database. According to the World Commission on Environment and Development, the definition of sustainability was developed in 1987, while in a search in the Scopus database, the first paper referring to the terms 'place attachment' and 'sustainability' appeared in 1988. Therefore, the time range selected for this research covers the period from 1988 to 2023 which further helps to give an overview of the trends and applicability of the domain. The intricate understanding of the same led to the following research questions:

RQ1. What is the volume of published articles on the issue of place attachment and sustainability in tourism?

RQ2.Which publications, authors, and research articles significantly impact place attachment and sustainability in tourism?

RQ3. What is the relationship among topics in terms of the co-occurrence of keywords?

Analysing the outcomes will aid in developing research plans. The study findings will contribute to the progress of the field by identifying and analysing publications and emerging trends.

Review of Literature

Place

Discussions on place attachment make it challenging to differentiate between the 'space' and 'place'. Space is a fundamental part of the natural world, with abstract qualities not subject to cultural interpretation (Gieryn, 2000). Space becomes place with an interaction of humans in space, giving places certain features, meanings, and values (Gieryn, 2000; Tuan, 1977, p. 6). Recently, place-related research has gained more attention, especially in environmental psychology and management, as many highlighted environmental issues that are endangering places are significant to people and society (Sanders et al., 2003). In terms of the recreation and tourism perspective, it has also come from an idea that places serve as destinations for the experiences of visitors, which is another reason for leisure and tourism research to be motivated to undermine the ideas of tourist, tourism and place attachment (Snepenger et al., 2007) and establish a framework using social and psychological aspects designed using people's interactions with places. Adams et al. (2013), Agyeman and Evans (2004), and Tuan (1977) assert that people have emotional bonds and form strong emotional connections with place, repre-

Table 1 Definition of Place Attachment-related Concepts Across Academic Fields

Terminology	Disciplines	Definitions	References
Topophilia	Geography	'Affective bond between people and place or settings.'	Tuan (1974, p. 4)
Sense of place	Sociology	'People's subjective perceptions of their environments and their more or less conscious feelings about those environments.'	Hummon (1992, p. 254)
Sense of place	History/landscape studies	'Something that we create over time, the result of habit or custom.'	Jackson (1994, p. 151)
Place attachment	Anthropology	'Symbolic relationship formed by people giving culturally shared emotional/affective meanings to a particular space of a piece of land that provides the basis for the individuals' and groups' understanding of, relation to, and bonding with the environment.'	Altman and Low (1992, p. 165)
Place attachment	Environmental Psychology/ Geography	'A complex, multivalent, dynamic experience based on the complex process of place.'	Seamon (2014)

Source Chen et al. (2021).

sented in a range of meanings, values, and emotions connected to a particular area. Numerous researchers suggest the necessity of place attachment and place-related concepts (Brehm et al., 2013; Scannell & Gifford, 2010a, 2010b).

Place Attachment

Place attachment is a growing and vital concept in leisure and tourism literature (Prayag et al., 2018), emerging from attachment theory (Bowlby, 1969, 1973) and widely studied globally. According to Milligan (1998) and Wiles et al. (2009), attachment theory has been utilised as a construct in various social settings. For an individual, the environment includes one's local community (Brown et al., 2003; Lewicka, 2010) and other destinations (Garrod, 2009; Morgan, 2010). In the 1980s, place attachment as a concept was first introduced in the tourism domain (Tsai, 2016), with the 1990's showcasing better clarity. Later, place attachment is described as a connection between a person and a place built on feeling, cognition, and practice. Theoretical and empirical studies have supported a similar notion, widely acknowledged by researchers (Williams & Roggenbuck, 1989) and encompassing various similar concepts and terms related to the human-environment relationship, including 'topophilia', 'place identification', 'insidedness', 'genres of place', 'sense of place', 'environmental embeddedness', and communal feeling (Altman & Low, 1992).

Place attachment is a term used to characterise an individual's connection, which is an outcome of an attachment measured towards an emotional, cognitive, and functional level for a place or a region (Lin & Lee, 2019), as well as their psychological locality (Scannell & Gifford, 2010b). The investigation of human-land interactions is crucial because place attachment is an outcome of a strong and positive emotional bond with a place (Dwyer et al., 2019). It creates an emotional bond between people and the physical environment (Hidalgo & Hernandez, 2001; Altman & Low, 1992) and encompasses person, process, and place dimensions – the 'tripartite model of Place attachment' (Scannell & Gifford, 2010a). Researchers acknowledge that place attachment is a complex concept (Chen & Dwyer, 2018; Eusébio et al., 2018; Scannell & Gifford, 2010a). The literature on place attachment provides a clear overview where place attachment cannot be measured as a unidimensional construct to undermine the concept. Still, an analytical multi-dimensional construct comprising of place attachment using place identity, place dependence, place affect, and place social bonding, provides better understanding of its establishment of links with other constructs (Chen et al., 2018; Eusébio et al., 2018, Ramkissoon et al., 2013). It is also an essential factor affecting individuals' attitudes, emotions, and behavioural intentions towards a particular community or environment (Lewicka, 2011). The notion of place attachment, rooted in environmental psychology, is a significant concept reflecting complex meanings that both visitors and locals assign to their physical surroundings. Place attachment is an essential concept for understanding and measuring the behavioural intentions of both visitors and residents (Chen et al., 2014a, 2014b, 2015; 2018; Chen & Dwyer, 2018; Hosany et al., 2017; Lee et al., 2012; Tsai, 2012). Ramkissoon et al. (2013), and Xu and Gursoy (2020) emphasise that place attachment is a crucial antecedent for understanding behaviour among individuals. For this reason, place attachment is considered a factor influencing sustainable behaviour in the current study.

Sustainability

The World Commission on Environment and Development (United Nations, 1987) defines sustainable development as 'a process to meet the needs of the present without compromising the ability of future generations to meet their own needs'. The term 'sustainability' includes various approaches to maintaining equilibrium among economic, social, and ecological concerns (Purvis et al., 2019). UNESCO also proposed that to create 'cities and human settlements [that are] inclusive, safe, resilient, and sustainable', it would be essential to reinforce them with specific regulations, as mentioned in Goal 11 of the Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda (Jaramillo, 2020, p. 99). Industry stakeholders believe tourism may contribute to sustainable development and catalyse conservation and environmental preservation (United Nations, 1999). Tourism development acknowledges and includes positive and negative consequences (Archer, 2005; Hunter & Green, 1995; Ryan, 1991). According to Walker and Chapman (2003), knowledge of a place may help individuals feel more connected to it, showcasing protection and caring about the places (Relph, 1976). To better comprehend the relationship between humans and the natural environment, Lewicka (2011) proposed rethinking the concept of 'place attachment' and taking a more sophisticated look at human emotions concerning physical surroundings. Place attachment has become a powerful instrument for promoting sustainable development and environmental conservation (Fresque-Baxter & Armitage, 2012). Travellers travelling to choose-based travel place more deep attachment to destinations with an active role in environmental preservation (Chiu et al., 2014; Fairweather et al., 2005; Walker & Ryan, 2008). Environmental Responsibility Behaviour (ERB) encompasses activities like voluntarily collecting litter (Halpenny, 2006; Walker & Chapman, 2003), classifying trash, preserving water (Vaske & Kobrin, 2001), acting to prevent illegal ecological harm (Stedman, 2002), responsibility towards advancing science, and safeguarding the environment as well as natural resources (Gosling & Williams, 2010; Halpenny, 2010; Scannell & Gifford, 2010a, 2010b). Ramkissoon et al. (2012), with research in an Australian national park, point out that visitors' emotional connection to a place positively influences their ecologically responsible actions. The global economic recession brought on by the COVID-19 epidemic and the ensuing place stagnation made people rethink how people and place interact as well as place, emphasise the critical connections between health, and well-being (Masterson et al., 2019). The competitive environment of the tourism business, particularly the travel sector, is significantly influenced by the advancement of information and communication technologies (Avilas Hernández et al., 2023). In addition, it is imperative to establish a sustainable travel infrastructure in order to ensure long-term financial stability with an aim to create profitable, stable, and resilient tourism systems (Gössling et al., 2016) to maximise its economic benefits (Biggs et al., 2012). Communities with a strong sense of place attachment are more capable of effectively managing hazards such as climate change, resource depletion, and social problems, encouraging behaviours and practices that promote sustainability objectives, such as social fairness and economic success (Razem & El Kaftangui, 2020), with an increase of the community's resilience, assisting it while overcoming obstacles related to the environment, society, and economy and promoting overall sustainability (Lu, Zhang et al., 2023). The emotional bond encourages responsibility and concern for the local environment, which results in the local population's great affinity for rural landscape acting as a strong motivation to participate in land conservation and preservation efforts, thus enhancing the sustainability of rural areas and economies (Yang et al., 2021). Understanding and implementing components that enhance place attachment can help with sustainable urban planning and design, enhancing a place's overall sustainability (Hacıoğlu & Polatoğlu, 2023). Kukanja and Planinc (2023) suggested that sustainable practices at the destination are also the result of eliminating societal barriers with equitable inclusion of persons with disabilities. However, most issues are related to ecologically irresponsible human activity (Hopkins, 2020; Xu & Gursoy, 2020). Thus, when visitors establish a sense of place attachment to a destination, they become attached to the destination and acquire identity by relying on the place and showing towards sustainability.

Methodology

Data Collection

Web of Science and Scopus are the most popular and trustworthy databases (Garrigos-Simon et al., 2018).

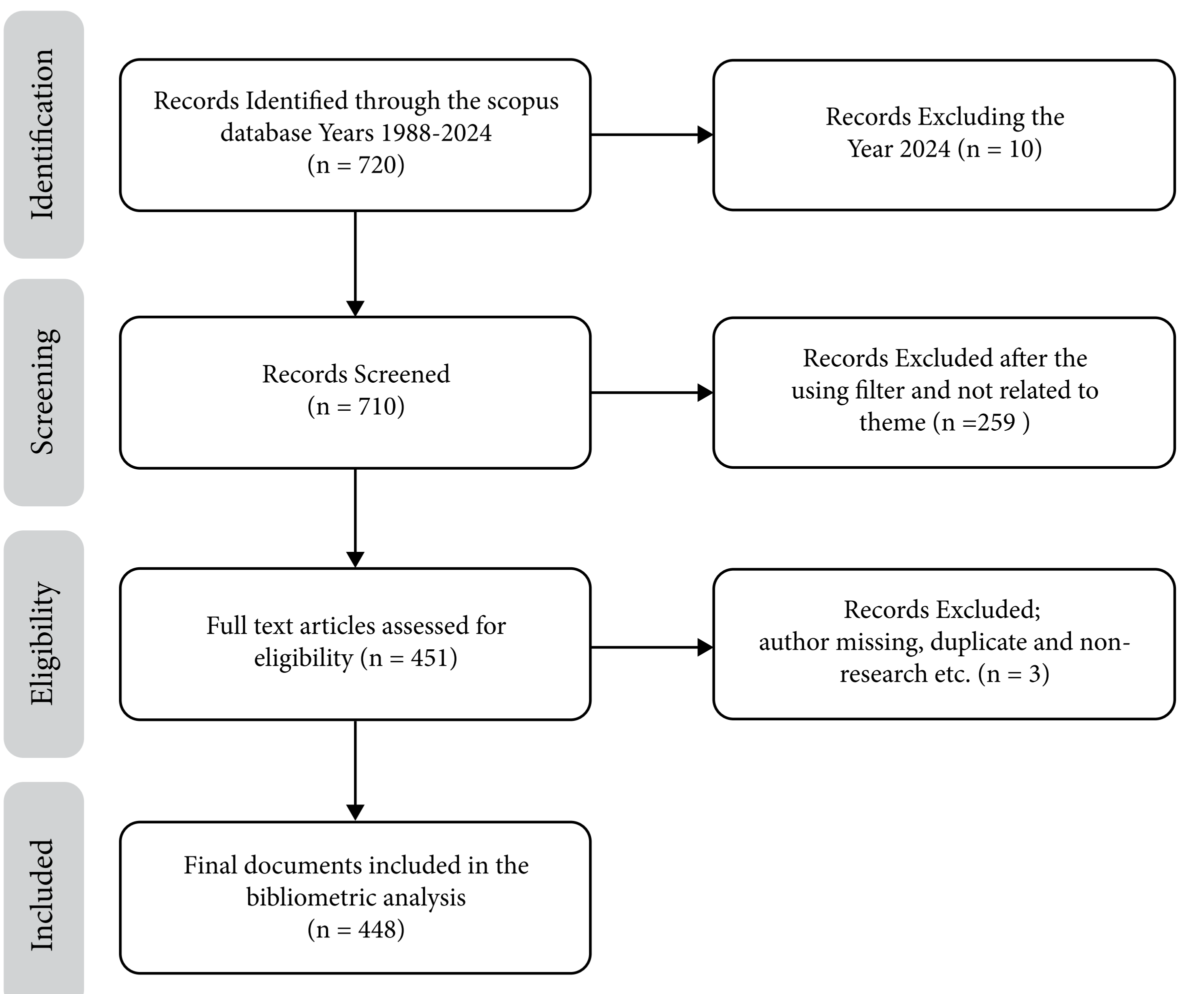

Figure 1 PRISMA Framework

Figure 2 Main Information about Place Attachment and Sustainability in Tourism

In the current study, data was retrieved from only the Scopus database. The identification of keywords to find the relevant research papers is the most important step in bibliometric analysis.

Data Analysis

A research methodology known as 'bibliometric analysis' employs bibliographic data as the primary source of material and is predicated on the notion of bibliometrics. The analysis technique for analysing literature holds the power to showcase academic progress both statistically and objectively. It has gained extensive use across numerous study domains. Bibliometrics is a quantitative analytic technique that uses methods based on statistics and mathematics to evaluate the significance and value of a research paper within a particular subject area (Santos-Rojo et al., 2023) with where more comprehensive and detailed analysis of the knowledge acquired throughout time. Based on the initial finding, a more accurate way to determine the sample database was adopted, and the PRISMA framework was taken as the right kind of approach in a similar situation developed by the researchers (Moher et al., 2010). On February 12, 2024, we conducted a search in the Scopus database using such keywords as "place attachment" and "sustainability" or "tourism". These keywords were used as a search item combined with the Boolean operators "AND" and "OR" in the title section of the articles in order to find more accurate articles that met the study objectives. The bibliographic archive produced records of more than 720 articles from different subjects. 10 articles from 2024 were excluded because the study is still in progress. To find accurate documents, using a filtering process, only English articles (1988–2023) from social sciences, environmental sciences, arts and humanities, and multidisciplinary fields were included in the data, and 259 unrelated articles were excluded. After the filtering process, 3 documents were also removed due to missing authors and duplicates. Following Boolean operators and filters, 448 bibliographic resources obtained are examined in this study. The extracted records support the bibliometric study and are based on the visualisation of similarities method. Later, it led to extracting and exporting the data to a CSV file, including results, abstracts, bibliographical data, citations, keywords, and other significant information.

Results

Information of publication records

The current research paper's analysis is based on publications in journals included in the Scopus database from 1988 to 2023. Only the Scopus database till 2023 is included, and the year 2024 is excluded since the study is still in progress and it is impossible to estimate the precise number of research papers. The sample included 448 papers generated by 169 journal sources, and 1,158 authors from 90 different countries

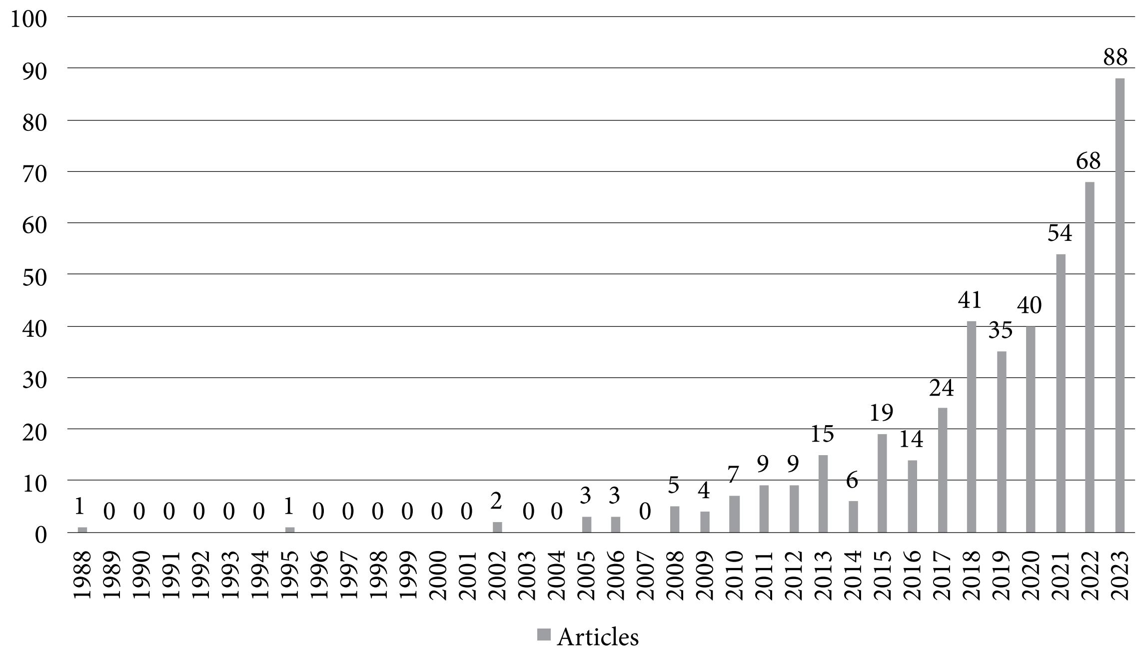

Figure 3 Annual Production of the Place Attachment and Sustainability Research Articles

contributed to the work. There are only 53 articles written by a single author, while 1,105 authors contributed to collaborative writing (Figure 2).

An Overview of Research Publications on Place Attachment and Sustainability

The analysis of existing literature shows that research on place attachment and sustainability experienced minimal activity between 1995 and 2004. A gradual increase began in 2005, accelerating notably after 2008. Significant growth occurred from 2013 onwards, with major surges in publication volume, especially between 2020 and 2023, culminating in a peak of 88 publications in 2023. This trend reflects a clear and rapid expansion in academic interest over the past decade.

Table 2 Top Authors and Countries on Place Attachment and Sustainability

No.	Authors	TC	TP	Countries	TC	TP
1.	Ryan, C.	1,653	9	China	3,098	95
2.	Ramkissoon, H.	1,505	9	Australia	2,191	28
3.	Brown, G.	619	5	United Kingdom	1,275	34
4.	Adger, W. N.	349	5	USA	1,165	36
5.	Chen, N.	331	6	France	884	3
6.	Woosnam, K. M.	303	5	New Zealand	523	9
7.	Stylidis, D.	283	5	Israel	443	1
8.	Zhang, H.	97	7	Korea	389	21
9.	Zhang, Y.	86	6	Portugal	345	11
10.	Li, Y.	71	6	Hong Kong	327	9

Notation(s) TP = total publications, TC = total citations.

Table 3 Key Journals

Journal	TC	TP
Tourism Management	3,189	25
Journal of Sustainable Tourism	2,070	24
Journal of Travel Research	1,906	14
Sustainability	1,363	61
Current Issues in Tourism	719	23
International Journal of Tourism Research	621	11
Asia Pacific Journal of Tourism Research	531	25
Tourism Geographies	469	12
Annals of Tourism Research	189	5
Anatolia	108	6

Notation(s) TP = total publications, TC = total citations.

The statistical analysis of the existing literature revealed that publications related to place attachment and sustainability remained at a dormant stage from 1995 to 2004, but later showed substantial growth in 2005 and 2006, with publications increasing to 3 per year. The trend accelerates notably from 2008, with a total of 5 publications, and continues to grow steadily in the following years, reaching a peak of nine publications in both 2011 and 2012. The number of publications had a significant surge in 2013, starting with 15 publications, indicating a period of fast expansion. Despite a little decline to 6 in 2014, the trend quickly recovers and continues its upward path, with 19 publications in 2015. The rise has been ongoing, with significant annual increases, especially starting in 2017. In that year, the figures reached 24, followed by 41 in 2018, and 35 in 2019. In the most recent years, there has been a significant increase in publications, with the numbers rising sharply: 40 in 2020, 54 in 2021, and 68 in 2022, reaching a peak of 88 in 2023. This data demonstrates a substantial and more rapid expansion in publication activity, particularly in the past decade. The pattern highlights a shift from minimal to extensive publishing, reflecting a dynamic increase in the production of publications over time.

Top Author and Countries on Place Attachment and Sustainability

Table 2 summarises the contributions of individual authors and countries to scholarly publications based on their total citations (TC) and total publications (TP).

Among authors, C. Ryan and H. Ramkissoon stand out with the highest number of citations (1,653 and 1,505, respectively) from 9 publications each, indicating their significant influence in the respective fields. G. Brown and W.N. Adger also have substantial citations, with 619 and 349 citations from 5 publications each, respectively. Among the authors listed, Li, has the fewest citations, with 71 from 6 publications, suggesting a lesser impact compared to others. In terms of country contributions, China leads significantly with 3,098 citations from 95 publications, followed by Australia with 2,191 citations from 28 publications. The UK and USA contributions are significant, with 1,275 citations from 34 articles and 1,165 from 36 publications, respectively. France has 884 citations from 3 articles, showing a high impact per publication, whereas New Zealand has fewer publications but still has a large number of citations. Israel has only one publication yet 443 citations, signifying a very important single article. This statistic shows author and country-specific intellectual production and influence.

Table 4 Most Cited Articles with Journals

Authors	Title	Journal	TC
Prayag & Ryan, 2012	'Antecedents of Tourists' Loyalty to Mauritius: The Role and Influence of Destination Image, Place Attachment, Personal Involvement, and Satisfaction'	Journal of Travel Research	874
Ramkissoon et al., 2013	'Testing the dimensionality of place attachment and its relationships with place satisfaction and pro-environmental behaviours: A structural equation modelling approach'	Tourism Management	588
Eizenberg & Jabareen, 2017	'Social sustainability: A new conceptual framework'	Sustainability (Switzerland)	443
Hwang et al., 2005	'The relationship among tourists' involvement, place attachment and interpretation satisfaction in Taiwan's national parks'	Tourism Management	360
Gu & Ryan, 2008	'Place attachment, identity and community impacts of tourism – the case of a Beijing hutong'	Tourism Management	351
Ramkissoon et al., 2012	'Place attachment and pro-environmental behaviour in national parks: The development of a conceptual framework'	Journal of Sustainable Tourism	336
Gross & Brown, 2008	'An empirical structural model of tourists and places: Progressing involvement and place attachment into tourism'	Tourism Management	321
Lee et al., 2012	'The Mediating Effect of Place Attachment on the Relationship between Festival Satisfaction and Loyalty to the Festival Hosting Destination'	Journal of Travel Research	310
Lee, 2011	'How recreation involvement, place attachment and conservation commitment affect environmentally responsible behaviour'	Journal of Sustainable Tourism	291
Ram et al., 2016	'Authenticity and place attachment of major visitor attractions'	Tourism Management	277

Notation(s) TP = total publications, TC = total citations.

Most Cited Journals

Table 3 summarises key journals' impact on place attachment and sustainability research through total citations (TC) and total publications (TP).

Tourism Management leads in citations with 3,189 from 25 publications. The *Journal of Sustainable Tourism* follows with 2,070 citations from 24 publications, and the *Journal of Travel Research* has 1,906 citations from 14 publications. *Sustainability* has 1,363 citations from 61 publications. *Current Issues in Tourism* shows 719 citations from 23 publications, while the *International Journal of Tourism Research* has 621 citations from 11 publications. The *Asia Pacific Journal of Tourism Research* and *Tourism Geographies* have 531 and 469 citations from 25 and 12 publications, respectively. *Annals of Tourism Research* and *Anatolia* have fewer publications and lower citations, indicating lesser influence. Overall, the journals show varying levels of productivity and impact.

Most Cited Articles with Journals

Table 4 presents key scholarly articles along with their authors, journals, and total citations (TC) in the field of place attachment and sustainability.

Prayag and Ryan (2012) lead with 874 citations for their study titled, 'Antecedents of Tourists' Loyalty to Mauritius: The Role and Influence of Destination Image, Place Attachment, Personal Involvement, and Satisfaction', published in the *Journal of Travel Research*, followed by Ramkissoon et al. (2013), with an article titled 'Testing the dimensionality of place attachment and its relationships with place satisfaction and pro-environmental behaviours: A structural equation modelling approach', which has 588 citations

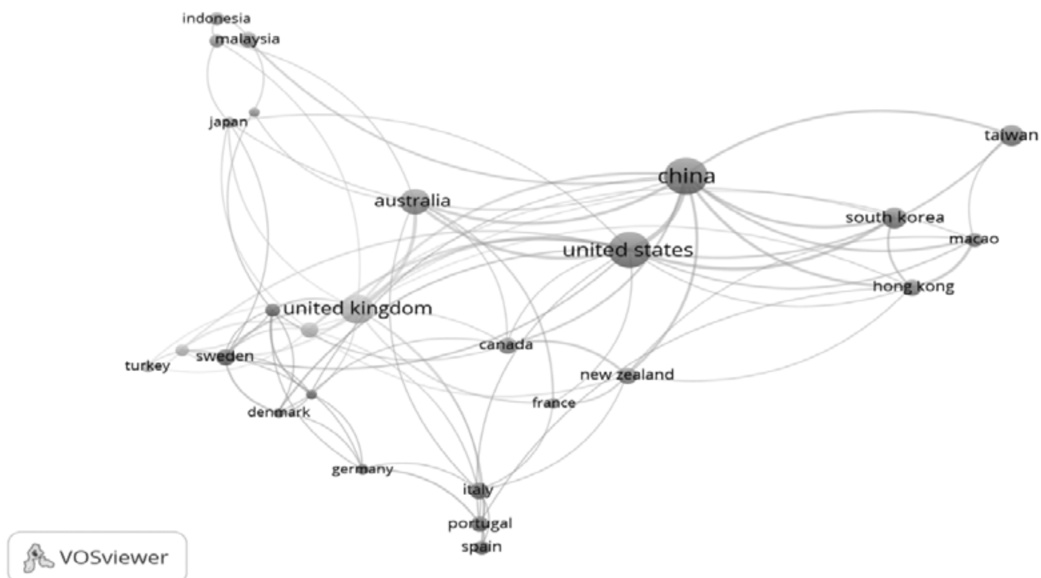

Figure 4 Co-authorship Analysis *B*ased on Countries (VOSviewer Network Visualization)

and was published in *Tourism Management*. Eizenberg and Jabareen's (2017) conceptual framework on social sustainability, published in *Sustainability* (Switzerland), has 443 citations. Hwang et al. (2005), and Gu and Ryan (2008) have 360 and 351 citations, respectively, both published in *Tourism Management*. Ramkissoon et al. (2012) have 336 citations in the *Journal of Sustainable Tourism*. Gross and Brown (2008) received 321 citations, and J. Lee et al. (2012) have 310 citations, both in *Tourism Management* and *Journal of Travel Research*, respectively. T. H. Lee (2011) and Ram et al. (2016) have 291 and 277 citations in the *Journal of Sustainable Tourism* and *Tourism Management*, respectively. This data reflects the high impact and influence of these articles in their respective journals.

Co-authorship Network by Country

Co-authorship analysis investigates the relationships among authors, organisations, or nations while working together to advance knowledge in a particular field of science (Rocio et al., 2023). As a result, co-authorship analysis identifies significant contributors and effectively evaluates collaboration trends (Hanaa & Abdul, 2024). The research objective is to examine co-authorship analysis according to nationality, comprehending cooperative trends and contributions within some geographical regions. Out of 90 nations, 27 participate in international co-authorship collaborations.

Figure 4 shows nations with named circles, with each circle size indicating the total number of documents authored by individuals from that nation. Connection of the distance between nations shows collaboration strength, assessed by the number of co-authored documents – five clusters emerge from these connections. Cluster 1 comprises eight items, while Clusters 2 and 3 comprise six. Cluster 4 includes four items, and Cluster 5 has three items. There are 3 top international co-authorship relations: China – United States (6.38%), Australia – United Kingdom (3.72%), and United Kingdom – United States (3.72%). European nations had the highest number of co-authorship links (44.14%), followed by European countries with the United States (16.94%). The USA has the maximum number of links with a link strength of 52, working with 15 nations. The USA has substantial social connections with China, South Korea and Australia, demonstrating robust linkages, followed by

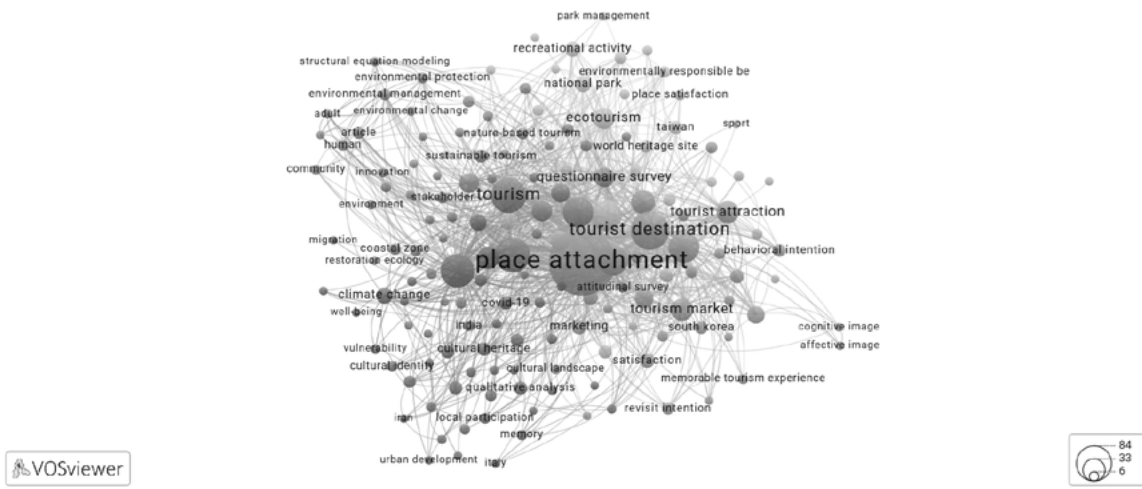

Figure 5 Keywords Co-occurrence Analysis (VOSviewer Network Visualization)

China, ranked second with the highest linkages. In contrast, the United Kingdom is ranked third with 52 and 40 links, respectively.

Co-occurrence Analysis

Co-occurrence analysis is a technique that visualises a study field and generates a knowledge map using words and their connections.

The researchers describe the rationale for performing a keyword co-occurrence analysis (Zupic & Čarter, 2015). Figure 5 shows the size of the nodes and the primary keywords: the more times a term appears in a document, the larger the weight attached to the term. Thicker lines indicate a higher frequency of co-occurrence, representing how often a term appears together with another keyword in papers. The closer the nodes, the stronger the relationship they represent based on the number of articles where these two keywords appear together and their co-occurrence with other keywords. The nodes and keywords of the same colour are considered part of the same cluster of related keywords. The objective is to gain insight into the present topics and provide potential opportunities for future study of scientific orientations (Toker & Emir, 2023). Among the 2,379 keywords identified in the 448 chosen papers on place attachment and sustainability in tourism research, 156 meet the thresholds, having occurred at least 5 times. The top 5 most frequently occurring keywords in place attachment and sustainability research are Place attachment (302), Tourism destination (101), Tourism (84), Sense of place (83), and Sustainability (76), while the link strength of the keywords is highest for Place attachment (153), Sustainability (128), Perception (126), Tourism (124), and Tourist destination (123), respectively. Particular keywords, like 'model' and 'analysis', were unnecessary and eliminated. There are six clusters that have been identified on the map, elaborated as follows. Forty-two keywords form Cluster 1, thirty-one keywords form Cluster 2, twenty-nine keywords form Cluster 3, twenty-four keywords form Cluster 4, twenty-two keywords form Cluster 5, and eight keywords form Cluster 6, respectively. These clusters create a network of linked clusters because they are strongly related, as shown by the network map shown in Figure 5. Keyword analysis revealed that 'sense of place' is the strongest connection between 'place attachment' and 'sustainability', supporting the main idea of the study.

Cluster 1 (red), comprises studies with a common theme named 'sustainability in social place' as indicated by specific keywords, including sustainable development, Australia, urban area climate change, cultural heritage, covid-19, and quality of life.

Cluster 2 (green), named as 'place attachment in tourism development', is preoccupied with tourist behaviour, tourist destinations and tourism management and tourist attraction.

Cluster 3 (blue), named as 'sense of place in tourism', includes keywords such as public attitude, conservation, coastal zone, and Eurasia.

Cluster 4 (yellow), named as 'environmental values at national park' includes the keywords China, eco-tourism, recreational activity, environmentally responsible, and Taiwan.

Cluster 5 (purple), named as 'human perception regarding environmental change' includes the keywords psychology, questionnaire survey, United States, and protected area.

Cluster 6 (sky blue), named as 'tourist's emotions at place' includes keywords such as place identity, place dependence, tourist satisfaction, and tourist experience.

The summarisation of the above clusters depicts an in-depth interest in the research topic while deep diving into the number of closely knit research topics. The most common keywords presenting research are tourist behaviour, destination, perception, sustainable development and eco-tourism, indicating that the majority of studies are centred around these topics. In contrast, keywords such as revisit intention, memorable tourism experience, social sustainability, park management, tourist satisfaction and community, that appeared less, suggest growing topics.

Conclusion

The study aims to understand place attachment and sustainability by identifying the most prolific authors, journals, keywords and future direction research. Using the Scopus database, this study pioneered a bibliometric approach in examining research patterns related to place attachment and sustainability. It highlights crucial theoretical and practical consequences for the academic community as well as for the tourism industry, with new terms and ideas of sustainable tourism being addressed in recent studies, like green tourism (Fahmawee et al., 2023), green HRM (Tandon et al., 2023), green innovation (Razzaq et al., 2021), green pilgrimage (Senbeto, 2023), green place (Wahyuningtiyas & Novianto, 2023), etc., all converged in an idea towards sustainability. The present study conducted over 35 years, the period from 1988 to 2023, to comprehend the effect of place attachment towards sustainability in tourism industry. On scanning the Scopus database, the first article was published in 1988, titled 'Place Imagery in a Small Town'. From 1988 to 2001, there were fewer articles, and very little going on until 2002. From 2011 on, the number of studies started increasing, with substantial increases in 2013 (15), 2015 (19), 2017 (24), and 2018 (41). Subsequently, there was steady growth, with articles reaching 54 in 2021, 68 in 2022, and a highest peak at 88 in 2023. A total of 448 papers fulfilled the criteria for inclusion in the research. C. Ryan is the most cited author in the field, with a total of 1,653 citations. H. Ramkissoon, and G. Brown are two additional authors who have also garnered significant attention, with 1,505 and 619 citations, respectively. *Tourism Management* is one of the top journals, with 25 published articles with 3,189 citations on the subject. Although other countries have also published articles on the subject, China is a leading country with 94 publications and 3,098 citations, followed by Australia and the United Kingdom. 'Antecedents of Tourists' Loyalty to Mauritius: The Role and Influence of Destination Image, Place Attachment, Personal Involvement, and Satisfaction' is the most cited article, published in *Journal of Travel Research*, by Prayag and Ryan in 2012, with 874 citations. According to co-authorship of the countries based on link strength, there are 3 top international co-authorship relations: China – United States (6.38%), Australia – United Kingdom (3.72%), and United Kingdom – United States (3.72%). In the context of keywords, the top 5 most frequently occurring keywords in place attachment and sustainability research are Place attachment (302), Tourism destination (101), Tourism (84), Sense of place (83), and Sustainability (76). We believe that our research contributes to illuminating the way for future researchers to further the study of place attachment and sustainability in tourism. To the best of the researcher's knowledge, there have been few studies conducted in the domain of place attachment and sustainability. In previous bibliometrics of place attachment, researchers used the tripartite paradigm of place attachment, comprising three components: person, place, and process (Lewicka, 2011) and a systematic literature review (Feng et al., 2022) related to place attachment using the Google Scholar and Web of Science database, respectively. Therefore, the research contributed to the identification of various concepts regarding the meaning of place attachment, the revealing of ideas that develop and deepen over time, and the identification of new, related research fields. Psychology, climate change, urban planning, heritage tourism, tourism market, quality of life, protected area, decision making and landscape are examples of concepts that have garnered attention in the context of the place attachment-sustainability relationship. The study indicates that more research needs to be done on how place attachment contributes to sustainability at tourist destinations. The study can also help policymakers and tourism stakeholders understand the significance of using sustainable tourism practices to create place attachment.

Implications

Theoretical Implication: From the academic perspective, the study indicates that more study is needed on place attachment and sustainability. The bibliometric survey provides a comprehensive survey of academic literature focusing on place attachment towards sustainability, identifying significant organisations and regions relevant to the topic, bridging the knowledge gap as it reveals most cited authors, best performing journals, and most relevant documents of the domain using various analysis techniques like co-authorship by country and co-occurrence analysis by all keywords. It helps future researchers to find experts for collaboration, providing a base for strong and pertinent research in the field, empowering future researchers in understanding the area more effectively and further helping to identify emerging trends.

Practical Implication: Goal 11 of the Sustainable Development Goals (SDGs) seeks to promote the development of 'sustainable cities and communities' by 2030. This goal aims to achieve overall development plans, minimise future economic, environmental, and social expenses, enhance economic competitiveness, and alleviate poverty. Looking into the better ideas for a bright future, the contribution of academic research helps to portray sustainable behaviour where sustainability actions are monitored and measured. Future sustainability research in place attachment gives a tunnel vision approach with ideas like green mobility solutions at destinations (Zamparini et al., 2022), artificial intelligence and place attachment (Harst, 2023) and the importance of place attachment in modern city planning and how to protect such identities to form a better urban environment (Shao & Liu, 2017). It is beneficial for policymakers and destination executives to comprehend how tourists interact with a destination and develop an emotional bond. Additionally, the study provides a foundation for the creation of cooperative strategies among various interested parties, such as academicians, professionals, and policymakers, to encourage a more coordinated and successful strategy for sustainability through place attachment.

Limitations and Future Research

The primary limitation of the study is that it relies on the author's subjective judgement to include "Place attachment" AND "Sustainability" OR "Tourism" in one of the three categories of research, namely, title, abstract, and keyword. It is possible to miss an item in any search area that does not fit any of them. Secondly, researchers restricted the study only to English-language articles in the highly reputed Scopus database, which reflect moderate and high-quality publications published in the area, while this study can further be extended to other databases such as Web of Sciences and Dimensions AI in the future. Thirdly, the researchers chose a time period that runs from 1988 to December 31, 2023. The study's possible scope may be expanded for future researchers due to the growth in citations and publications, which might potentially alter the findings. The last limitation is that the study was only analysed using VOSviewer and Biblioshiny; however, other tools like Tableau, Gephi, Citespace-II, and Bibexicel may still be employed in future research. Future research should focus on how to enhance tourists' perception of a place's overall intention, improve its ecological attributes, integrate its core values, and foster an emotional connection between people and place, in order to increase people's attachment to the place. This finding may help future researchers choose research topics that place attachment and sustainability researchers hope to see more interest in the upcoming year. Therefore, professionals and academics interested in doing place attachment and sustainability research might start with this bibliometric study.

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Original Scientific Article

Hospitality Hurdles: An Expedition into the Challenges Facing the Hotel Industry

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The study aims to empower hotel operators in prospective tourist spots, aiding informed decision-making in navigating the dynamic hospitality landscape. The study investigates challenges in the hotel industry to aid practitioners and researchers.
It combines secondary data from expert blogs and research articles with primary data from 230 Indian hotel managers surveyed via a Likert scale questionnaire from January to March 2024. Validity and reliability are ensured through first-order constructs. Data analysis utilizes SPSS-22 for exploratory factor analysis and Amos-17 for confirmatory factor analysis. Theoretical frameworks from prior literature were examined to inform the selection of variables. A two-part questionnaire was devised to gather demographic information, years of experience, etc., followed by a section employing a 5-point Likert scale to explore our proposed hypothesis.
Initially identifying twenty-seven global challenges, the study highlights three key factors – marketing, operational, and human resources – relevant to the Indian context, encompassing 25 specific challenges. Notably, challenges in the Economic/Financial Factor show low manifestation in India.
The study emphasizes the burgeoning tourism potential in Eastern India and the proactive measures taken by hotel industries to meet global guest demands. While Eastern India is the primary focus, insights extend to emerging tourist destinations worldwide.

Keywords: hotel industry, challenges, EFA, CFA

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Introduction

The vibrant and dynamic hotel industry stands at the crossroads of hospitality and commerce, catering to the diverse needs of travellers around the globe (Morrison, 2022). Despite its inherent allure and undeniable economic significance, challenges exist within the industry (Ari, 2022). The Travel World (2021) notes that the popularity of vacation and weekend travel is on the rise. In January–March 2022, international tourism witnessed a significant 182% increase compared to the same quarter of the previous year (United Nations World Tourism Organization, 2022). The global leisure travel market, which was valued at $1,006.5 billion in 2019, is expected to reach $1,737.3 billion by 2027, with a CAGR of 22.6% from 2021 to 2027 (Allied Market Research, 2024). The Indian travel market is predicted to reach US$ 125 billion by FY27, up from 75 billion in FY20. By 2028, international tourism is expected to generate over US$ 59 billion (India Brand Equity Foundation, 2025). The hotel industry must prepare for sustained growth, recognizing tourism's growing importance as a significant economic driver and employment generator (Government of India, 2021).

One of the primary challenges confronting hotels is the ever-changing nature of consumer preferences (Mahmoud et al., 2023). Travellers today seek a place to stay and an immersive experience that aligns with their lifestyles and values (Baek et al., 2020). As the industry strives to keep pace with these evolving demands, the quest for personalization and uniqueness in service delivery becomes increasingly pronounced (Tang & Chan, 2023). The ability to seamlessly blend modern conveniences with a touch of personalization has become a pivotal factor in guest satisfaction and, consequently, in the success of hotels (Shin & Jeong, 2022).

Moreover, economic fluctuations profoundly influence the hotel industry (Ozdemir et al., 2022). The cyclicality of the global economy directly impacts travel patterns, corporate budgets, and, consequently, hotel occupancy rates. Economic upswings often correlate with increased business and leisure travel, prompting hotels to expand and invest (Deng et al., 2021). Conversely, economic downturns can reduce travel, affecting occupancy rates and revenue streams. As we explore the hurdles the hotel sector faces, it becomes evident that its landscape exhibits complexities, ranging from economic uncertainties to evolving customer expectations and global crises (Mehta et al., 2023). The industry's resilience in economic uncertainties requires adaptive strategies, including flexible pricing models and cost-effective operations (Ahmadi & Ghasemi, 2023).

While economic challenges are formidable, the contemporary hotel industry also grapples with the omnipresent impact of technological advancements (Gaur et al., 2021). The rise of online booking platforms, review sites, and the ubiquity of social media has transformed how customers engage with hotels. Navigating this digital landscape demands a strategic approach to online marketing, reputation management, and technology integration into day-to-day operations. Hotels that successfully harness technology streamline their processes and enhance the overall guest experience (Garrido-Moreno et al., 2020).

In addition to the persistent challenges it faces, the hotel industry has been compelled to grapple with unforeseen global crises. The COVID-19 pandemic, for example, halted travel altogether, leading to widespread closures, cancellations, and financial strain for numerous establishments. Such crises underscore the industry's susceptibility to external shocks and emphasize the critical significance of crisis management, flexibility, and adaptability in hotel operations (Sucheran, 2022). Furthermore, hoteliers face a consistent challenge posed by the rising cost of daily consumables. Fluctuations in the prices of essential items, from toiletries to linens, can impact the expense of maintaining quality services. Striking a delicate balance between providing excellent service and managing operational costs becomes crucial for sustained profitability (Pereira et al., 2021).

As we delve into the multifaceted challenges of the hotel industry, it becomes increasingly clear that sustained success hinges on a nuanced understanding of the complex interplay between economic forces, technological advancements, and evolving consumer expectations. This study aims to explore these challenges within the context of a rapidly changing industry, with a particular focus on the innovative strategies and adaptive practices that hotels are employing to remain competitive. By identifying and categorizing the key challenges faced by the industry, the paper highlights how innovation serves not only as a response mechanism but also as a catalyst for transformation and resilience. Each challenge is examined alongside potential or existing innovations that can address it effectively, providing a structured framework for both practitioners and researchers. Ultimately, this research lays the groundwork for future studies and practical applications, encouraging a forward-thinking approach to problem-solving in the hospitality sector.

Literature Review and Theoretical Background

To conduct a comprehensive literature review and identify key variables relevant to the hotel industry, publications spanning a 22-year period (2003–2024) were systematically examined. The search was initiated using two primary keywords – *Hotel* and *Challenges* – to capture literature specifically focused on the challenges within the hotel sector. A custom date range from 2003 to 2024 was applied to ensure the inclusion of both foundational and recent studies.

An initial search using Google Scholar alone yielded approximately 30,700 articles. To refine the results, additional keywords associated with top academic publishers – such as Sage, Taylor & Francis, Elsevier, Emerald, and *Academica Turistica* – were incorporated. This filtering process significantly reduced the number of relevant articles to 440. Further screening was conducted using electronic databases and academic portals, including Taylor & Francis, Emerald, EBSCOhost, ProQuest, Elsevier, and Google Scholar.

Ultimately, 51 articles directly addressing the challenges in the hotel industry were selected for in-depth analysis and inclusion in the literature review. In addition, seven articles were specifically chosen for their relevance to theoretical frameworks applicable to the challenges faced by the hotel sector.

Theories Applicable to Challenges Faced by the Hotel Industry

The hotel industry faces various challenges, and there are several theories and perspectives that can be applied to understand and address these challenges. Here are a few theories commonly discussed in relation to challenges facing the hotel industry:

Supply and Demand: Economic principles of supply and demand play a significant role in the hotel industry. Fluctuations in demand due to economic factors such as recessions, currency fluctuations, or changes in consumer preferences can impact hotel revenues and profitability (Corgel et al., 2012).

Price Elasticity: Understanding price elasticity helps hotels in pricing strategies and revenue management. It involves analysing how changes in price affect demand for hotel rooms (Chen et al., 2022).

Technology Adoption Theory: Hotels need to adapt and adopt new technologies to enhance operational efficiency, improve guest experiences, and remain competitive. The Technology Acceptance Model (TAM) and Diffusion of Innovations theory can help in understanding how and why hotels adopt new technologies (Huang et al., 2019).

Data Analytics and Big Data: The use of data analytics and big data can help hotels in personalizing guest experiences, optimizing pricing, predicting demand, and improving operational efficiency (Bui et al., 2022).

Service Quality Theory: Ensuring high service quality is crucial for hotels to attract and retain guests. The SERVQUAL model and Total Quality Management (TQM) are relevant theories that focus on maintaining service excellence (Ahrholdt et al., 2017).

Human Resource Management Theories: Employee satisfaction and engagement are critical for delivering exceptional guest experiences. Theories such as Maslow's Hierarchy of Needs and Herzberg's Two-Factor Theory can guide hotel management in understanding and addressing employee needs and motivations (Norbu & Wetprasit, 2021).

Sustainability Theory: Environmental sustainability is becoming increasingly important in the hotel industry. The Triple Bottom Line theory (People, Planet, Profit) emphasizes the importance of balancing economic prosperity with social and environmental responsibility (Assaf et al., 2012).

By applying these theories and perspectives, stakeholders in the hotel industry can gain insights into the challenges they face and develop strategies to address them effectively.

Review of Literature

The study conducts a narrative review of literature to ease the identification of challenges within the hotel industry. Fifty articles from experts' blogs and reputed research papers identified these challenges. After identifying the challenges, the study regulated nomenclatures for meaningful representation and sequenced them alphabetically. Twenty-five challenges of the hotel industry were identified.

Cyber Security & Data Privacy: Morosan and DeFranco (2015) explore cybersecurity and data privacy in hotel apps, emphasizing the crucial role of trust and perceived value. Their study sheds light on factors influencing consumers' decisions to share personal data, providing insights for both theoretical frameworks and practical applications in data security and privacy management. Suter (2016) cautions that a breach can trigger severe consequences, including financial loss and erosion of trust. Implementing robust cybersecurity measures is an investment in maintaining guest confidence, preserving the integrity of the business, and upholding the highest standards of professionalism in the hospitality sector.

Decision Making: Glaveli et al. (2023) tackle strategic decision-making challenges in hospitality, employing the MUSA (MUlticriteria Satisfaction Analysis) method to assess location, cleanliness, service, and value contributions to guest satisfaction. The study identifies weak points, prioritizing strategic improvements for an enhanced overall guest experience. Pappas (2018) explored strategic decision-making among Greek accommodation providers during crises, using fuzzy-set qualitative comparative analysis and identifying five configurations related to competitiveness, operations, marketing, productivity, and finances. Effective decision-making in hotels is paramount for smooth operations and guest satisfaction. Decisions impact service quality, staff performance, and overall guest experience (Özdemir et al., 2019).

Employee Burnout: Nam and Kim (2009) reveal the Hotel Employees' Burnout Phenomenon (HEBP), indicating stress-induced emotional exhaustion, reduced accomplishment, and diminished work motivation in hotel staff. A proposed healing programme involves psychotherapy and company support, emphasizing positive reinforcement and personal resilience. Baquero's (2023) study links employee burnout in male hotel workers to continuous changes and high workloads, predicting both intentions to quit and psychological distress. Financial well-being regulates burnout's impact on distress but not the intention to quit, highlighting the necessity of addressing burnout in hotel organizations.

Energy Use: Palani and Karatas (2021) tackle the challenge of comprehending and influencing energy-related behaviours among hotel guests to curtail energy consumption. With 47,000 U.S. hotels collectively spending $2,200 per room annually, the study devises an integrated energy-use framework, analyses energy-use profiles, and recommends interventions. Dibene-Arriola et al. (2021) investigate global energy efficiency indicators for hotels, finding the 'total average annual energy use intensity index' commonly used. Tropical hotels, especially four- and five-star, exhibit higher energy consumption than those in temperate zones.

Fluctuations in Economy: Ozdemir et al. (2022) investigate the economic impact of hotels, uncovering a negative lead-lag effect on occupancy, average daily rate, and REVPAR (Revenue Per Available Room) attributed to policy-related economic uncertainty. Structural equation modelling reveals consumer sentiment mediates this relationship, offering insights into economic factors influencing hotel demand. Türkcan and Erkuş-Öztürk (2020) assess the economic impact on tourism-related firms in Antalya during crises, discovering lower survival rates. Factors like age, size, and legal form enhance survival, while specialization, high entry rates, and smaller markets reduce survival chances. Hotels and travel agencies are often more vulnerable to economic and political shocks compared to restaurants and spas.

Guest Expectations: Suryanarayanan et al. (2021) highlight successful hotel management's critical role in meeting guest expectations, emphasizing hospitality and technology. Cultural factors, including brand identity and language, influence expectations. Loizos and Lycourgos (2005) stress the importance of quality services in Cyprus hotels during economic challenges, focusing on warm and efficient service delivery. Service failures impact customer loyalty, emphasizing the necessity of managing human resources and providing personalized services for creating memorable experiences and retaining long-term customers in the hospitality industry.

Guest Experience: Luxury hotel guest experience relies on hedonism, ambience, escapism, personalization, and convenience. Positive experiences lead to favourable word of mouth (Shahid & Paul, 2022). Lee et al. (2019) use TripAdvisor data to reveal multisensory service impacts on satisfaction, emphasizing affective evaluations and cognitive effort. Praharaj et al. (2023) studied service automation in hotels post-Covid, finding positive impacts on value creation and guest experience, with value creation mediating service automation's indirect effect on guest experience.

Hiring & Retaining Staff: Ghani et al. (2022) review employee retention within the hospitality industry, emphasizing the insufficient attention given to retention strategies, which leads to subpar performance. They propose a model centred on employee satisfaction factors to achieve sustainable retention and offer targeted guidance for establishing effective strategies. The study concludes that contented employees are less inclined to depart, underlining the managerial implications of their findings. Marinakou and Giousmpasoglou (2019) delineate the concepts of talent and talent management within luxury hotels, emphasizing effective retention strategies such as fostering an open culture, promoting teamwork, implementing competitive compensation structures, devising succession plans, and investing in training initiatives. Their proposed hybrid approach integrates exclusive and inclusive elements, tailored to suit organizational culture, thereby providing valuable empirical comparative research to the field.

Housekeeping Issues: Alcalde-González et al. (2021) detail Las Kellys' fight for dignity, deploying subversion tactics in Spanish hotel housekeeping. Nimri et al. (2020) focus on Gold Coast hotel room attendants, revealing dignifying factors despite exploitation. Hsieh et al. (2023) study immigrant hotel housekeepers in Florida, highlighting time pressures, excessive workloads, inadequate breaks, and racial discrimination, urging improved occupational health strategies in the hospitality industry.

Infrastructural Bottlenecks: Hotelogix (2019) urges hotel professionals to confidently address operational bottlenecks for sustained success, emphasizing the importance of technology adoption, data-driven insights, discarding outdated practices, prioritizing guest experience, simplifying operations, and fostering teamwork. McCartney (2014) explores Macao's gaming revenue growth compared to meetings, incentives, conventions, and exhibitions (MICE) development. Despite casino expansion, MICE has not progressed, prompting strategic actions for improvement during the second wave of integrated resort construction on Macao's Cotai Strip.

Irregular Cash Inflows: The study by Dogru et al. (2020) uncovers that restaurant firms with high free cash flows experience lower returns from acquisitions, which serves to mitigate underinvestment but exacerbate overinvestment issues. Franchising firms also experience lower returns, exacerbating overinvestment problems with available free cash flows. Brown (2025) highlights the high priority of cash flow for hotels and restaurants, emphasizing the impact of competitiveness and flexibility on cash flow. The guide explores tips for improving financial management in a dynamic industry.

License Issues: Gikera and Vadgama's (2022) article underscores the critical importance of statutory compliance in the hospitality sector, focusing on Kenya's tourism and hospitality industry regulated by the Tourism Regulatory Authority (TRA). Emphasizing the legal ramifications of non-compliance, the article highlights the necessity for businesses to acquire mandatory licenses and permits to avoid legal conflicts, as outlined in the Tourism Act 2011. It specifically addresses the licensing requirements for short-term rentals, including those facilitated through online platforms like Airbnb, underlining the penalties for non-compliance. Mensah (2014) examines the influence of primary and secondary stakeholders on hotel environmental performance in Accra, revealing the substantial impact of customers and the board of directors, with moderation by hotel size. Melissen et al. (2016) assess the Dutch hotel industry's readiness for sustainable development through literature review and interviews, suggesting the industry has potential but requires assistance in addressing guest needs and institutionalizing sustainability.

Losing Loyal Customers: From a theoretical standpoint, customer loyalty is crucial for hotels, leading to increased revenue, positive word-of-mouth, and cost-effectiveness. The 20/80 rule highlights that a significant portion of business comes from a small customer base. While customer satisfaction is widely believed to drive loyalty, there are cases where satisfied customers may still switch to competitors. Transaction-specific investments and switching barriers are crucial in understanding the hotel industry's complex nature of customer loyalty (Qiu et al., 2015). Jasinskas et al. (2016) evaluate the influence of hotel service quality on customer loyalty by introducing the SERVQUALOYL (Service Quality and Loyalty) methodology. Combining SERVQUAL (Service Quality) and loyalty research methodologies, the study finds that aligning expected and experienced quality significantly influences customer loyalty. For hotels to enhance competitiveness and foster customer loyalty, aligning customer expectations with delivered service quality is crucial.

Loyalty Programmes: Han et al. (2019) investigate the intricate connections among ambient atmospherics, emotional experiences, overall image, and guest satisfaction, testing their impact on loyalty intentions in upscale hotels. The results indicate significant relationships, predicting guests' loyalty intentions, with satisfaction playing a prominent role. Continuance commitment moderates these associations, and emotional experiences, overall hotel image, and guest satisfaction mediate in generating loyalty intentions. Koo et al. (2020) explore the relationships in hotel loyalty programmes, emphasizing the importance of perceived value in forming customer brand loyalty. Results indicate that the perceived value is crucial, and affective commitment and switching barriers mediate its relationship with customer brand loyalty. This research highlights the significance of loyalty programmes as a crucial strategy for customer loyalty in the hotel industry.

Maintenance of Hygiene: Alcalde-González et al. (2021) explore the hygienic challenges faced by room attendants in Spain's hotel housekeeping sector, particularly focusing on the efforts of Las Kellys, a collective advocating for the dignity of room attendants. Using qualitative methods, the study reveals three subversion tactics employed by Las Kellys, addressing occupational, organizational, and socio-political levels. Pillai et al. (2021) examine the repercussions of previous disasters on the global hospitality industry, with a specific focus on hygiene measures amidst the COVID-19 pandemic. It explores the industry's response to pandemics, integrating Industry 5.0 into hospitality for efficiency, emphasizing technology's role in ensuring hygiene across customer touchpoints.

Maintenance of Safety: Chan and Lam (2013) investigate the disparity between hotel safety managers' perceptions and guests' perceptions of safety and security. Surveys reveal guest priorities include fire prevention, emergency plans, lighting, 24-hour security, and testing. Managers prioritize CCTV (Closed-Circuit Television), lighting, and key-activated lifts, showing potential areas for improved understanding. Anichiti et al. (2021) gauge the importance of safety for Romanian tourists, considering service classification and generation. The questionnaire encompasses various aspects including detectors, emergency and medical preparedness, staff and guestroom security, pool/beach security, access control, and cyber security. Safety perceptions differ based on accommodation and generation.

Regulations: Adhering to regulations ensures guest safety, security, and satisfaction. Regulations cover areas like hygiene, fire safety, and accessibility. Strict adherence fosters a positive guest experience and safeguards the hotel's reputation and business continuity (Yeon et al., 2020).

Reputation of Management: Perez-Aranda et al. (2019) developed a reputation management model for hotels using online reviews, finding its impact on perceived benefits by surveying Spanish hotel managers. In his study, Lai (2019) delves into the connection between hotel image, reputation, and customer loyalty, establishing hotel image as a precursor to reputation. Factors like service quality, perceived value, customer satisfaction, and commitment significantly contribute to building loyalty, offering insights for effective hotel marketing strategies.

Restoring Business Post-crisis: Triantafillidou and Yannas (2020) experimentally investigate the effects of social media platforms (Facebook, Twitter, Instagram) and image restoration strategies on the post-crisis reputation, social media engagement, and offline behaviour of a fictitious hotel during a racially charged crisis. Twitter/X is more effective, with corrective action being the most engaging strategy. The study addresses the interplay of social media usage frequency, offering vital implications for crisis managers. Promnil and Polnyotee (2023) concentrate on the post-COVID recovery strategies employed by SME (Small and Medium-sized Enterprise) hotels in northern Thailand. Their findings illuminate the substantial impact of customer relations and service provision strategies on recovery, wherein cost-saving measures and revenue management indirectly contribute to the process. Valuable insights are provided for SME hotel owners and managers navigating post-pandemic challenges.

Rising Competition: Sánchez-Pérez et al. (2020) explore hotel competition through vertical and horizontal differentiation, incorporating online reputation. It suggests that local competition and agglomeration moderate the relationship between differentiation and pricing, with online reputation having more pronounced effects on lower-priced hotels. Hotel clustering reinforces category impact on price but diminishes service-related benefits in competitive environments.

Rising Cost of Daily Consumables: Kothari et al. (2005) conducted a study on hotel supply chain management in Philadelphia, focusing on the challenge of increasing consumable costs. Their research underscores the critical significance of implementing efficient procurement systems and leveraging information technology (IT) strategically to effectively manage these costs. The research investigates hotel purchasing managers' perspectives on e-Procurement, identifying perceived costs and benefits amid the evolving landscape of hospitality supply chains.

Seasonality: Zhang and Xie (2023) explore the influence of tourism seasonality on the risk of hotel closures within the Norwegian industry. Their research reveals that the varied seasonal patterns observed in leisure, business, and conference tourism segments affect hotels' risk of closure in distinct ways, thereby mitigating the overall impact of seasonality on operational and financial performance, as well as survival probabilities. Lozano et al.'s (2021) study examines tourism seasonality in Spanish hotels (2008–2017), filling a gap by correlating night stays and prices. The framework introduces a supply-demand perspective, illustrating how factors such as cost, price flexibility, and other determinants contribute to comprehending tourism seasonality in both quantities and prices.

Service Standards: The study by Chan et al. (2021) investigates the effects of the COVID-19 pandemic on the hospitality industry, focusing particularly on Asia. The study examines shifts in service standards among hotels in mainland China and Hong Kong, analysing variations based on operational types, classifications, and locations. The research sheds light on the evolving service standards in physical and social servicescapes, offering insights into how hotels have adapted during the crisis. The study by Liat et al. (2017) explores the challenges encountered by the expanding global hospitality industry, emphasizing the heightened competition driven by technological advancements. It underscores the importance of service quality and effective service recovery programmes in maintaining customer satisfaction and hotel image. The findings underscore the substantial influence of service quality and recovery on satisfaction and subsequent customer loyalty, wherein corporate image partially mediates this relationship.

Stagnant Innovation: Campo et al. (2014) explore how an innovation-based orientation influences hotel performance, considering management's perception of market turbulence and a crisis atmosphere. Conducting surveys among four-star hotel managers across 52 Spanish cities, the study uncovers that while a hotel's inclination towards innovation may not immediately boost short-term performance, it becomes indispensable for achieving medium- and long-term success. This importance is shaped by perceptions of technological turbulence and crisis-related management perspectives. The study conducted by Hassi (2019) examines the correlation between empowering leadership and management innovation across 127 hotels in Morocco. Using structural equation modelling with Bayesian estimation, it identifies the climate for creativity as a mediating factor. Facilitating the empowerment of leaders in embracing new management practices, processes, or structures are dimensions such as employee creativity recognition, flexibility to change, and provision of adequate resources for innovation.

Technological Demand: Brochado et al. (2016) delve into the influence of contemporary technologies on customer experiences within upscale hotels. Employing a two-step approach encompassing qualitative and quantitative methods, the study reveals that hotel guests place significant emphasis on digital engagement during their stay. Moreover, business travellers and younger generations exhibit a heightened preference for incorporating cutting-edge technologies into their hotel experiences. Lee et al.'s (2003) study explores the adoption of technology in the hospitality industry, focusing on the perceptions of international hotel managers. It reveals a growing demand for technology-supported services from hotel customers. Technology is identified as influencing employee support, service quality, efficiency, competitive advantage, customer relationships, and profitability in the hotel sector.

Gap in Literature

The findings from the literature review were juxtaposed with insights gleaned from expert blogs and reports accessible online. Notably, two challenges highlighted by these experts – namely, the *Cost of Living of Customers* and *Marketing Trends & Dynamics* – were conspicuously absent in the existing literature. Acknowledging these omissions as gaps in the current body of knowledge, the research has integrated these two challenges and subsequently subjected them to empirical scrutiny in the Indian context to determine their existence, if any.

Methods

This research aims to conduct a comprehensive factor analysis to uncover the underlying challenges faced by the hotel industry. By utilizing factor analysis, a robust statistical method developed by Spearman (1904), the study will identify latent factors and their interrelationships within the data. This approach serves as the primary analytical tool to distil meaningful patterns and dimensions, offering valuable insights into the complexities and obstacles that shape the industry's landscape.

Sampling

The study employs a purposive sampling technique, strategically selecting participants with specific, relevant characteristics to ensure the investigation's focus and depth. A carefully determined sample size of 230 is chosen, based on statistical considerations, to maintain the validity and reliability of the factor analysis results (Sapnas & Zeller, 2002). This deliberate approach strengthens the robustness of the study, ensuring that the findings are both precise and reflective of the key factors under examination.

Data Collection

Primary data for the study were meticulously collected through structured survey methods, tailored to the specific needs of the investigation. The data collection process involved both direct interactions and electronic communication via email, ensuring comprehensive reach and engagement. Utilizing the five-point Likert scale, introduced by Likert (1932), the research gathered detailed insights from participants. The geographic scope of the study spanned four Indian states – Odisha, West Bengal, Jharkhand, and Chhattisgarh – covering a vast area of 459,367 square kilometres, larger than the combined size of 180 countries and dependencies worldwide (Statistics Times, 2020). The sample included fourteen hotels, ranging from 3-star to 7-star establishments, providing a diverse and representative cross-section of the hospitality sector for analysis.

Instrumentation

The instruments were meticulously crafted to capture observed variables that are hypothesized to be influenced by latent factors. To assess the reliability and validity of these measures, several statistical techniques were employed. Cronbach's Alpha, a key indicator of internal consistency reliability, evaluates the correlation among items within a factor or scale (Cronbach, 1951). Average variance extracted (AVE) is used to measure convergent validity, determining how much of the variance in items within a factor is attributable to the factor itself, rather than measurement error (Fornell & Larcker, 1981). Composite reliability (CR) further gauges internal consistency by examining the

Table 1 Rotated Component Matrixa (Challenges assigned to principal factors)

Factor	Challenges	Var.	Component 1	Component 2	Component 3	Remarks
Economic/ Financial Factor (EF)	Rising Cost of Daily Consumables	EF1	0.290	-0.441	-0.273	Insignificant
	Cost of Living of Customers	EF2	0.405	-0.457	-0.353	
	Irregular Cash Inflows	EF3	0.407	-0.469	-0.430	
	Fluctuations in Economy	EF4	0.505	-0.430	-0.343	
Marketing Factor (MF)	Rising Competition	MF1			0.725	Significant
	Seasonality	MF2			0.758	
	Marketing Trends & Dynamics	MF3			0.758	
	Loyalty Programmes	MF4			0.716	
	Guest Experience	MF5			0.664	
	Guest Expectations	MF6			0.727	
	Losing Loyal Customers	MF7			0.673	
Operational Factor (OF)	Service Standards	OF1		0.706		Significant
	Restoring Business Post-crisis	OF2		0.730		
	Maintenance of Hygiene	OF3		0.655		
	Maintenance of Safety	OF4		0.665		
	Cyber security & Data Privacy	OF5		0.704		
	Energy Use	OF6		0.765		
	Housekeeping Issues	OF7		0.763		
HR Factor (HRF)	Hiring & Retaining Staff	HRF1	0.628			Significant
	Employee Burnout	HRF2	0.690			
	Decision Making	HRF3	0.732			
	Technological Demand	HRF4	0.776			
	Stagnant Innovation	HRF5	0.729			
	Reputation of Management	HRF6	0.690			
	Infrastructural Bottleneck	HRF7	0.538			
	License Issues	HRF8	0.666			
	Regulations	HRF9	0.758			

Extraction method: principal component analysis.
Rotation method: Varimax with Kaiser normalization.
a. Rotation converged in 5 iterations.

correlation among items within a factor (Kalkbrenner, 2023). Finally, goodness-of-fit indices assess how well the hypothesized model aligns with the observed data, providing insight into the overall adequacy of the model (Bandalos & Finney, 2018).

Variables

The study has meticulously identified and defined twenty-seven observed variables that form the foundation for the factor analysis. These variables encompass a range of relevant data, including expert blogs, research outcomes derived from survey responses, behavioural indicators, and other measurable aspects directly aligned with the research objectives. This comprehensive selection ensures that the analysis captures a broad spectrum of factors critical to understanding the complexities under investigation.

Data Analysis

Factor analysis was conducted using advanced statistical software, with SPSS-22 employed for Exploratory factor analysis (EFA) and Amos-17 for confirmatory factor analysis (CFA). The study rigorously examined the correlation matrix, extracted underlying factors, and interpreted the factor loadings to identify key patterns. To enhance the interpretability and clarity of the factors, the Varimax rotation method was applied, ensuring a more distinct and meaningful structure in the data. This robust analytical approach strengthens the study's ability to uncover the complex relationships within the dataset.

Interpretation and Reporting

The interpretation of the identified factors is carefully aligned with the research objectives, ensuring a clear connection between the findings and the study's core focus. The results are presented in a clear and concise manner, supported by detailed tables and descriptive statistics to enhance comprehension. Additionally, the study explores the implications of these factors, examining their relevance to both the theoretical framework and practical applications, thereby offering valuable insights for future research and real-world implementation.

Results

The factor analysis employed the principal component extraction method coupled with Varimax rotation to identify underlying factors. All extracted factors demonstrated Eigenvalues exceeding the critical threshold of 1, ensuring their significance and relevance. The resulting rotated component matrix, which highlights the refined factor structure, is presented in detail in Table 1, providing a clear and comprehensive view of the underlying dimensions.

In this methodology, the 27 observed variables were classified into four distinct factors, each associated with its corresponding factor loadings. The factor loadings were carefully sorted, with values exceeding a minimum threshold of 0.5 being considered significant. Notably, the Economic/Financial Factor exhibited marginalization, as all its factor loading values fell below the 0.5 threshold, indicating its weaker influence in the context of the study. Factor loadings reflect the extent to which a factor explains a variable, with higher values signifying a stronger relationship. Specifically, factor loading scores exceeding 0.70 highlighted variables with substantial impacts, underscoring their dominant role in the factor structure (Hair et al., 2014).

Factor analysis was employed to uncover the key challenges, or drivers, impacting the hotel industry within the Indian context. To assess the reliability of the identified factors, Cronbach's Alpha was used to evaluate internal consistency by examining the correlation among items within each factor or scale. The results of this reliability test revealed that the Marketing Factor scored 0.893, the Operational Factor scored 0.890, and the HR Factor scored 0.900, all indicating high levels of internal consistency. These findings demonstrate that the items within each factor contribute reliably to the measurement of the underlying constructs, ensuring the robustness of the study's results. Researchers utilize this measure to confirm that the factors consistently reflect the true nature of the challenges being investigated.

Convergent validity was assessed using average variance extracted (AVE), which measures the proportion of variance captured by the items within a factor relative to the variance attributable to measurement error. High AVE values indicate that a substantial portion of the variance in the items is due to the underlying construct, rather than measurement errors. In this study, the Marketing Factor recorded an AVE of 0.561, an Operational Factor of 0.540, and an HR Factor of 0.504, all demonstrating strong convergent validity. These results confirm that the factors are accurately measuring the intended constructs and that there is a robust convergent relationship among the items within each factor, ensuring the reliability of the measurement process.

Composite reliability (CR) was utilized as an alternative measure of internal consistency reliability, eval-

Table 1 Reliability, Validity and Model Goodness of Fit Indices

Part A: Reliability and Validity Test Result

Constructs	Cronbach Alpha	AVE	CR
Marketing Factor (MF)	0.893	0.561	0.899
Operation Factor (OF)	0.890	0.540	0.891
HR Factor (HRF)	0.900	0.504	0.901

Part B: Model Goodness of Fit Indices

Construct	CMIN/df	GFI	AGFI	CFI	NFI	TLI	RMSEA
MF	0.765	0.987	0.974	1.000	0.987	1.000	0.000
OF	1.048	0.982	0.964	0.999	0.981	0.999	0.014
HRF	1.663	0.959	0.931	0.981	0.954	0.974	0.054

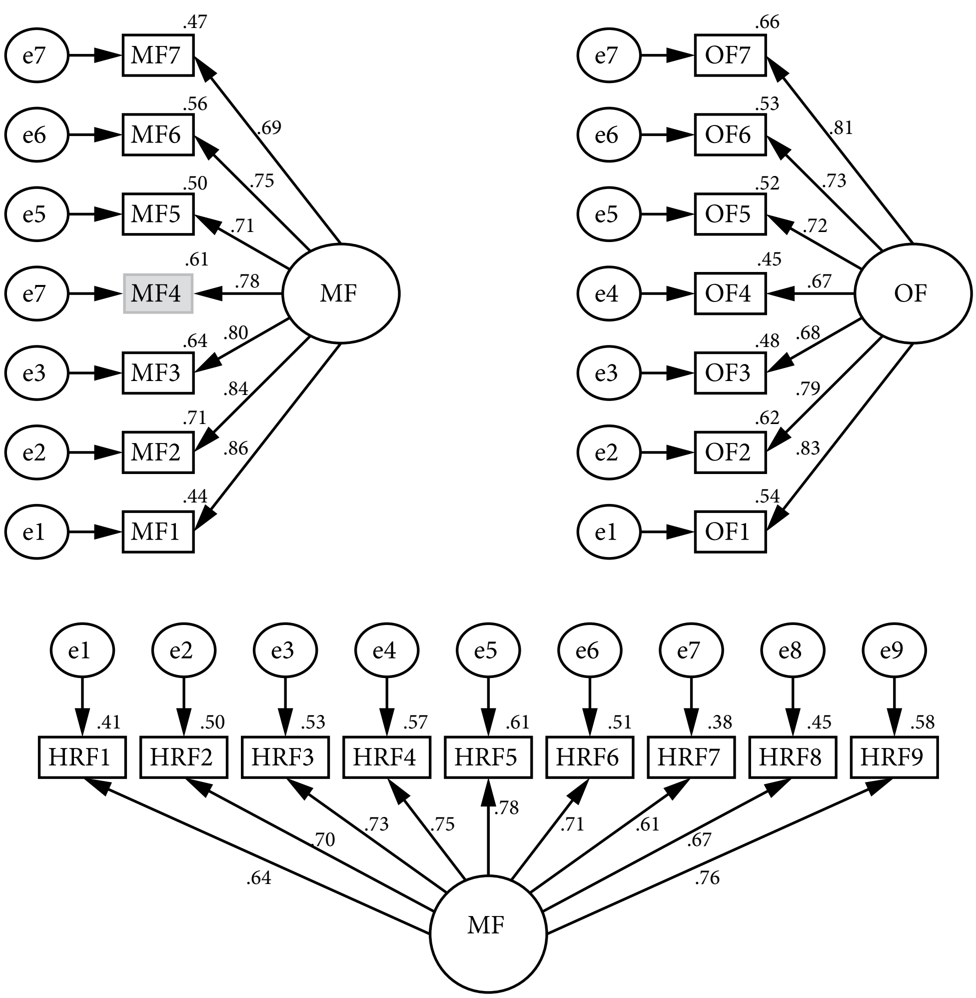

Figure 1 Relationships Between Marketing, Operational and HR Factors and Their Respective Challenges

uating the correlation among items within each factor. With CR values of 0.899 for the Marketing Factor, 0.891 for the Operational Factor, and 0.901 for the HR Factor, the study indicates high internal consistency, surpassing even the reliability indicated by Cronbach's Alpha. CR is considered a more accurate estimate of reliability, particularly in cases where factors consist of only a few items. Unlike Cronbach's Alpha, CR accounts for differences in factor loadings among items and is less susceptible to the number of items in a factor, providing a more precise measure of consistency.

Discussion

A key contention of this study lies in the exclusion of the Economic Factor as a major challenge – an approach informed by the unique geographical and socio-economic context of the research setting. Specifically, the cost of living for customers, while often a significant variable in broader hospitality studies, was deemed less relevant in this particular locale. Of the two initially identified gaps, the cost of living was not recognized as a critical concern. In contrast, Marketing Trends and Dynamics were acknowledged as highly relevant and were thus consolidated under the broader category of the Marketing Factor, reflecting their greater impact on the local hotel industry. This reallocation underscores the study's focus on elements most relevant to local hotel industry dynamics, highlighting the importance of strategic and innovative marketing approaches while deemphasizing economic pressures less pertinent to the local context.

The success of hotels is shaped by a range of influential factors, among which marketing factors remain particularly critical. In an increasingly competitive hospitality landscape, effective marketing strategies are essential for attracting new guests and fostering customer retention. A well-crafted marketing approach not only enhances brand visibility but also enables targeted outreach to key customer segments and the cultivation of long-term loyalty (Kandampully & Hu, 2007). Core elements such as a robust online presence, strategic pricing, and well-executed promotional campaigns play a pivotal role in strengthening a hotel's market position. In the current digital era, social media engagement and online customer reviews have become especially powerful, significantly shaping consumer perceptions and decision-making processes (Ampountolas et al., 2019). The findings from this study reveal specific marketing challenges and opportunities, offering valuable insights that hotel practitioners can leverage to drive innovation in their marketing strategies and maintain a competitive edge.

Operational efficiency is a cornerstone of effective hotel management, playing a vital role in ensuring smooth daily functioning, enhancing guest satisfaction, and driving overall business success. Elements such as service quality, the condition of hotel facilities, and the adoption of modern technologies are fundamental to delivering a consistently positive guest experience. Efficiently managing core operations – such as check-in and check-out processes, cleanliness standards, and seamless service delivery – is crucial for fostering guest loyalty (Praharaj et al., 2023). This study highlights several pressing operational challenges faced by hotels, including maintaining consistent service standards, recovering business in the aftermath of crises, upholding hygiene and safety protocols, securing cybersecurity and data privacy, and addressing concerns related to energy consumption and housekeeping. These insights highlight the need for hotels to drive innovation in their operational practices, ensuring consistently high service standards and enhanced efficiency in an increasingly competitive environment.

Human Resource Factors are equally vital in delivering exceptional service within the hotel industry. The presence of highly skilled and motivated staff is central to achieving guest satisfaction and building customer loyalty. Key drivers of service quality include strong employee engagement, comprehensive training programmes, and effective communication channels among staff members (Buil et al., 2016). This study identifies several HR-related challenges, such as difficulties in recruiting and retaining skilled personnel, employee burnout, inefficiencies in decision-making, evolving technological demands, stagnation in innovation, management reputation concerns, infrastructure constraints, and regulatory obstacles. These findings emphasize the critical need for robust human resource management strategies to overcome these challenges, ensuring that hotels maintain a capable, motivated, and efficient workforce dedicated to delivering outstanding service. Top hotel managers are committed to finding innovative solutions to every HR challenge.

While economic factors – such as rising consumable costs, customer living expenses, irregular cash flows, and overall economic volatility – are widely acknowledged as critical drivers in the hotel industry, this study reveals a notable lack of emphasis on these economic challenges within the specific geographic region examined. Although economic fluctuations remain significant influencers of hotel performance, impacting both revenue streams and operational strategies, their perceived relevance appears diminished in this local context. Expert consultations in the study highlight that hotels in the area are counteracting economic volatility through innovative pricing strategies. These adaptive approaches underscore the importance of embracing flexible business models and practicing sound financial management to navigate an ever-changing economic landscape.

The Eastern region of India is gaining increasing global prominence in the hospitality sector, driven by its rich cultural heritage, rapidly emerging tourist destinations, and rising levels of investment. This positions the region as a growing hub for both international travellers and sustainable hotel development. Hotel industries in this region are becoming increasingly attentive to the dual demand from global tourists and domestic travellers, recognizing the pressing need to address industry-specific challenges. Identifying these challenges is a critical first step toward developing effective, forward-looking solutions – solutions that must align with the dynamic and evolving nature of the global hospitality landscape.

Conclusion

In the dynamic and ever-evolving hospitality industry, hotels are continuously shaped by a complex interplay of internal and external factors that directly impact their success and operational efficiency. Marketing emerges as a critical pillar, establishing a hotel's visibility, reputation, and ability to attract and retain guests – forming the foundation of its competitive advantage. Equally vital is operational efficiency, which ensures seamless service delivery, enhances guest experiences, and drives cost optimization. Additionally, the performance of hotel staff – characterized by skilled service, effective communication, and strong engagement – plays a pivotal role in elevating guest satisfaction and overall operational outcomes.

The intricate relationship between marketing strategies, operational effectiveness, and human resource management fundamentally defines success in the hospitality sector. By strategically addressing these interconnected dimensions, hotels can significantly strengthen their competitiveness, profitability, and responsiveness to the evolving demands of the market. This study's comprehensive examination of Marketing, Operational, and Human Resource Factors offers valuable insights into the challenges and opportunities facing the industry, providing practical guidance for professionals aiming to refine their strategies, enhance performance, and sustain a robust market presence amid intense competition.

Practical Implications

The practical implications of this study hold substantial value for hotel operators, especially in emerging tourist destinations such as Eastern India. By pinpointing critical challenges across marketing, operations, and human resources, the study offers actionable insights that enable practitioners to effectively navigate the evolving hospitality landscape. These findings equip hotel managers with the knowledge to make informed decisions, refine strategic approaches, and enhance operational efficiency – ultimately leading to improved guest satisfaction and stronger competitive positioning. Furthermore, the study underscores the importance of adopting a strategic mindset to meet the shifting demands of global tourism, providing valuable guidance for hotel operators not only in India but also across other emerging markets worldwide.

Limitations

This study acknowledges several inherent methodological limitations, including potential sample bias, measurement errors, and constraints associated with the chosen factor analysis approach. While these limitations do not diminish the study's core contributions, they highlight important areas for refinement in future research. To overcome these challenges, future studies could expand sample sizes, explore alternative analytical methods, and enhance the precision of measurement instruments. By addressing these aspects, subsequent research can build on the current findings, improving both the robustness and generalizability of results, and offering deeper insights into the complex dynamics of the hotel industry.

Scope for future studies

Although this study has examined marketing, operational efficiency, and human resource management as distinct factors, it is essential to acknowledge their intrinsic interdependence. Strategic marketing drives bookings and enhances visibility, while operational efficiency ensures a seamless and memorable guest experience. At the same time, human resource management is central to both areas, directly shaping staff performance, service quality, and overall customer satisfaction. Future research should adopt a holistic perspective that explores the dynamic interactions among these factors, recognizing how they collectively reinforce one another to build a cohesive and high-performing hotel operation. Such an integrated approach is vital for advancing sustained success in the evolving hospitality industry.

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Original Scientific Article

Assessing the Impact of Lake Attributes on Rental Prices: A Hedonic Pricing Study of Lake Ohrid, Albania

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This study aims to quantify the economic value of environmental, structural and locational characteristics that influence rental prices of holiday flats in the Lake Ohrid region of Albania. A hedonic pricing model is applied to a dataset of 164 holiday flats listed on Booking.com, covering weekend stays across the peak tourist season. A partially log–log regression specification is used, with both rental price and flat area log-transformed to account for skewness and diminishing returns. The results highlight the strong effect of natural amenities: lake views and proximity to greenery increase rental prices by approximately 12% and 15%, respectively. Structural features such as larger flat size, greater bed capacity, newer construction, and the inclusion of breakfast services also significantly raise rental prices. In contrast, features like floor level, lift access, parking availability and balconies did not show a significant price effect. The model also reveals that greater distance from the municipal hospital reduces rental price, underscoring the importance of accessibility. These findings offer practical guidance for real estate investors, hospitality providers, and local authorities working to support sustainable tourism and regional development.
Keywords: non-market valuation, lake attributes, hedonic pricing, Lake Ohrid, Albania

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Introduction

Revealed preference methods are a cornerstone of non-market environmental valuation[1], as they are grounded in the actual choices and trade-offs made by individuals (Champ et al., 2003). Among these, the hedonic pricing model (HPM), originally conceptualized by Lancaster (1966) and later refined by Rosen (1974), is particularly influential. Rather than viewing real estate as a uniform good, the HPM decomposes property prices into the implicit values of individual

1 In environmental economics, non-market valuation methods estimate the value of goods not traded separately in markets (e.g. scenic views, clean air). Since such amenities are capitalized in housing or rental prices but not sold directly, their value is inferred indirectly through methods like hedonic pricing. Throughout this paper, we refer to them as non-market attributes or amenities not separately priced.

attributes, structural, locational, neighbourhood and environmental, that together shape market value.

In the context of Lake Ohrid, the HPM enables researchers to quantify how ecosystem-related features, such as lake views and proximity to the shoreline, are capitalized into flat rental prices. This approach not only reveals the implicit values driving consumer decisions but also provides policymakers and conservation planners with concrete economic measures of environmental benefits (Barbier et al., 1997; Pearce et al., 2006).

The central research problem addressed in this study is to assess how lake-related environmental characteristics affect the rental prices of holiday flats in the Lake Ohrid region, using the hedonic pricing model as a non-market valuation approach. While previous studies have established the importance of environmental amenities on property values such as lake views and proximity to the water (Baranzini & Schaerer, 2011; Bin et al., 2008), explicit evidence from holiday rental markets remains limited. The unique environmental and spatial context of Lake Ohrid provides an excellent opportunity to investigate how such non-market values are reflected in rental pricing.

This study seeks to answer three main questions: (1) How do environmental factors like lake views, proximity to Lake Ohrid, and park views affect flat rental prices? (2) What is the impact of structural attributes such as flat size, age, floor level and the presence of a lift? (3) How do locational characteristics affect rental prices?

To explore these questions, the study applies the hedonic pricing method to a comprehensive dataset of 164 rental properties sourced from Booking.com, covering nearly all holiday flats and bed-and-breakfast accommodations available during the high season and weekends on the Albanian side of Lake Ohrid. Following an approach similar to Nelson (2010), the model regresses rental prices on a range of explanatory variables, quantifying the marginal contribution of each feature to overall price. This enables a nuanced assessment of consumer preferences and willingness to pay, while accounting for both direct effects and spatial dimensions that shape rental prices in this lakeside market (Taylor, 2017).

The remainder of the paper is structured as follows: Section 2 reviews relevant literature on hedonic pricing and environmental valuation. Section 3 details the data, variables, and econometric model. Section 4 presents the results, followed by a discussion in Section 5. The paper concludes in Section 6 with policy implications, study limitations, and directions for future research.

Literature Review and Study Hypothesis

Theoretical Grounds

The hedonic pricing model (HPM), grounded in the Lancaster framework, posits that real estate is best understood as a bundle of characteristics rather than a homogeneous good. Hence, each housing attribute, whether structural, locational, or environmental, contributes implicitly to the overall price (Barbier et al., 1997; Pearce et al., 2006). This approach aligns with Household Revealed Preference methods, which rely on actual market behaviour to infer individuals' willingness to pay (WTP) for environmental or non-market goods (Brown et al., 2007).

In the context of wetlands and lake ecosystems, HPM is classified under Direct Use Values, capturing how properties near these natural resources command price premiums for views, recreation, and other amenities (Barbier, 1989; Barbier et al., 1997). Lake Ohrid, for instance, presents a valuable case study where proximity and scenic vistas are hypothesized to have an appreciable impact on property prices, an observation that holds practical significance for both policy and conservation planning.

Research consistently illustrates that environmental attributes such as lake views, proximity to water bodies, air quality and open green space, are capitalized into property prices (Baranzini & Schaerer, 2011; Bin et al., 2008; Brander & Koetse, 2011; Loomis & Feldman, 2003). For example, lake distance significantly affects housing values (Van Dijk et al., 2016; Wen et al., 2014), while higher water clarity can boost property desirability (Gibbs et al., 2002; Yoo et al., 2014). Coastal and lakeshore studies similarly show that views of water command rent or price premiums (Benjamin et al., 2001).

Moreover, the spatial dimension is crucial: hedonic pricing often incorporates spatial econometric methods to capture the nuanced relationships between property values and proximity to amenities or disamenities (Schläpfer et al., 2015; Wen et al., 2014; Yoo et al., 2014). Empirical evidence reveals that disamenities, such as railroad or road noise and industrial facilities, negatively affect housing prices, whereas amenities, including parks, forest cover and cultural landscapes, lead to measurable premiums (Boes & Nüesch, 2011; Gayer et al., 2000; Netusil et al., 2010; Schläpfer et al., 2015).

Study Hypotheses

This section outlines the main hypotheses on factors shaping holiday apartment rents in the Lake Ohrid region, drawing on hedonic pricing and tourism accommodation literature.

Environmental Hypothesis

Scenic quality, often described as 'a sight for sore eyes', is a key environmental attribute influencing rental prices in hedonic pricing models, with unobstructed views consistently linked to higher willingness to pay (Baranzini & Schaerer, 2011). Water views, in particular, are capitalized into higher prices or rents (Bin et al., 2008), and can be valued as a direct use component in lake ecosystems (Barbier et al., 1997). Numerous empirical studies report significant price premiums for oceanfront, lakeside, or unobstructed water views (Benjamin et al., 2001). For example, Gibbs et al. (2002) found that improved water clarity and visibility further boost real estate values in lake regions. Lake views increased hotel room rates (Bayramoğlu et al., 2025). Despite strong international evidence, limited research exists for Lake Ohrid rentals. This study aims to fill that gap by testing the following hypothesis:

H1 *Flats with unobstructed views of Lake Ohrid are expected to have higher rental prices than those without such views, all else being equal.*

Proximity to environmental amenities, especially lakes, is a key driver of property value (Loomis & Feldman, 2003; Wen et al., 2014). Closer access to lakes brings recreational and aesthetic benefits, often resulting in housing price premiums (Van Dijk et al., 2016). Wen et al. (2014) and Schläpfer et al. (2015) show that each additional metre or kilometre away from a lake can significantly lower property prices, confirming a negative distance gradient. Airbnb prices decline with distance from the shore, especially for budget listings (Dudás et al., 2020). This study examines whether similar patterns hold for Lake Ohrid rentals.

H2 *The closer the holiday flat is situated to the shoreline of Lake Ohrid, the greater its anticipated rental price, reflecting the desirability of immediate access to waterfront amenities.*

Green and open spaces positively affect property prices (Brander & Koetse, 2011; Kong et al., 2007). Studies consistently find that proximity to urban green spaces such as parks and forests raises nearby property values, with premiums around 4–5% reported in places like Finland (Tyrväinen & Miettinen, 2000). Trojanek et al. (2018) found that in Warsaw, proximity to green areas within 100 metres increased holiday flat prices by 2.8–3.1% on average, with premiums reaching up to 8% for newly built flats. Some studies in Poland and South Korea found that large parks (>200 ha) may lower nearby property values due to noise, crowding, or privacy concerns (Łaszkiewicz et al., 2022). Park views had no significant impact on housing prices in Castellón, Spain, suggesting limited value if green spaces are not appealing (Morancho, 2003). Based on evidence that green space proximity typically raises property values, this study hypothesizes that nearby greenery positively affects holiday flat rents near Lake Ohrid.

H3 *The presence of greenery and open spaces near holiday flats in the Lake Ohrid region positively influences rental prices, reflecting tourists' valuation of natural amenities.*

Views of or proximity to parks enhance not only a property's aesthetic appeal but also its recreational value (Del Saz Salazar & García Menéndez, 2007; Troy & Grove, 2008; Tyrväinen, 1997). Schläpfer et al. (2015) further indicate that rental prices rise with nearby recreational infrastructure and cultural landscapes, underscoring the tangible market value of urban green space. Crompton and Nicholls's (2022) review found that residences with park views typically enjoy an additional price premium of around 5–6%, beyond the value added by proximity alone. Some studies found no significant price premium for park views, especially when parks were not a major attraction or views were minor or low-quality (Morancho, 2003). To determine whether the presence of parks similarly enhances rental prices in the study area, the following hypothesis is proposed:

H4 Flats overlooking public parks are hypothesized to attract higher rental prices, attributable to enhanced recreational and aesthetic benefits for residents.

Structural Hypothesis

Space in housing, as per Rosen (1974), has a nonlinear relationship with price, where the marginal price decreases as size increases, reflecting diminishing marginal returns. Size of accommodation positively influences its price (Magno et al., 2018). It is positively correlated to the property price (Bowen et al., 2001; Gibbs et al., 2002; Nelson, 2010). A meta-analysis by Sirmans et al. (2006) confirms that larger square footage consistently leads to higher house prices across various studies. Tourism accommodation studies show that larger room or unit size generally allows higher rates (Bilici & Karaahmetoğlu, 2022; Dudás et al., 2020). Extending these findings to the context of short-term rentals in Lake Ohrid, the following hypothesis is tested.

H5 Greater internal living space (flat area) is associated with higher rental prices, but with diminishing marginal returns as size increases.

Bed count is recognized as a key driver of rental price in the short-term rental market, primarily by increasing guest capacity and utility, though its impact may differ by accommodation type and market segment (Chen & Xie, 2017; Dudás et al., 2020). To evaluate whether this relationship holds for holiday flats in the Lake Ohrid region, the following hypothesis is proposed:

H6 A higher number of beds in holiday flats is expected to be positively associated with rental price.

Flat age often signals building quality and modernization (Freeman, 1993). Unless renovated or historically significant, older flats typically have lower rents due to wear and tear (Taylor, 2017). Research consistently shows a negative correlation between building age and property value in both lake and park areas (Loomis et al., 2024; Wen et al., 2014). Sirmans et al. (2006) confirm this trend across many studies, except where renovations or heritage features add value. Recent findings also show that newer or renovated lakeside flats attract higher Airbnb rates, aligning with renter preferences (Dudás et al., 2020). This study examines whether these patterns apply to rental prices for flats in the Lake Ohrid region.

H7 Holding other features constant, flat rental prices are expected to decrease with building age, as newer constructions typically offer superior amenities and perceived quality.

Floor level constitutes a notable structural attribute in hedonic pricing (Freeman, 1993). Higher floors can provide superior views and reduced noise, both environmental and urban, potentially leading to rent premiums (Baranzini & Ramirez, 2005; Gibbs et al., 2002). Empirical evidence often finds a positive link between floor level and housing value, especially in multi-story buildings (Schläpfer et al., 2015). The magnitude of this effect may vary depending on context, influenced by building design and noise levels. Building on prior research, this study examines whether the relationship between floor level and rental prices holds for holiday flats near Lake Ohrid.

H 8 Higher floor levels in holiday flats near Lake Ohrid are associated with increased rental prices, reflecting the added value of improved views and reduced noise exposure.

Accessibility attributes, such as having a lift, can significantly enhance a property's appeal, particularly in taller buildings (Freeman, 1993; Greene, 1997). Schläpfer et al. (2015) note that basic infrastructural conveniences correlate positively with higher rents. While environmental amenities draw considerable attention in hedonic studies, features like lifts can yield direct utility gains to residents, translating into a measurable market premium. Lifts raise prices for upper-floor units but may reduce value in low-floor, low-cost buildings due to maintenance costs (Zhang et al., 2024). To assess the relevance of accessibility features for rental pricing in this setting, the following hypothesis is proposed:

H9 *The presence of lift access in a building is hypothesized to positively influence rental prices, particularly in multi-story complexes, by enhancing accessibility and convenience.*

The presence of on-site parking facilities, such as dedicated parking spaces or garages, represents a highly valued amenity within a broad range of housing markets. Extensive hedonic pricing research in urban settings has consistently demonstrated that the availability of a garage or dedicated parking facility significantly enhances property values (Sirmans et al., 2006). Empirical studies show that free parking increases prices for short-term rentals, especially in budget markets (Dudás et al., 2020; Wang & Nicolau, 2017), though the effect may be limited in historic areas with scarce parking (Portolan, 2013). Building on this evidence, this study examines whether on-site parking similarly affects holiday flat rental prices in the Lake Ohrid region.

H10 *On-site parking in Lake Ohrid holiday flats is expected to increase rental prices by offering greater guest convenience.*

The presence of outdoor spaces such as balconies and courtyards enhances property desirability and value (Sander & Polasky, 2009; Sirmans et al., 2005; Van Dijk et al., 2016). Balconies, regardless of view, have been shown to increase the value of high-rise residences (Wing Chau et al., 2004), mitigate road traffic noise (Li et al., 2003) and offer rent premiums in short-term rentals (Probulski & Nehrebecka, 2025). While some hotel studies report mixed effects (Santos et al., 2020), balconies remain generally desirable. Gardens and courtyards provide aesthetic, recreational, and well-being benefits (Gibbons et al., 2014; Portolan, 2013), with lake-facing courtyards especially valued (Luttik, 2000). Building on this literature, the following hypotheses are proposed for the Lake Ohrid rental market:

H11 *Access to a private balcony is expected to boost flat rental prices due to added outdoor leisure opportunities.*

H12 *Flats featuring a private courtyard are hypothesized to achieve premium rental pricing, as such spaces offer unique environmental and lifestyle benefits.*

Offering bed and breakfast services ('Bed_break') can enhance property value by providing added convenience for guests. Studies across Europe show that breakfast inclusion is an important factor for higher pricing in tourist accommodations (Buiga et al., 2017; Gordan et al., 2024; Kefela, 2014). While the positive effect is strong in most regions, some spatial variation exists (Gordan et al., 2024). To assess whether this pattern holds in Lake Ohrid, the following hypothesis is proposed:

H13 *Offering breakfast services in Lake Ohrid holiday rentals is expected to increase rental prices by enhancing guest convenience.*

Proximity to hospitals is widely recognized as a locational attribute that can affect rental prices. While access to healthcare typically enhances the attractiveness of a property, resulting in higher rents at convenient distances (Gibbons et al., 2013; Gu et al., 2024), immediate adjacency can sometimes decrease rental prices due to negative externalities like noise and traffic congestion (Huh & Kwak, 1997; Waddell & Hoch, 1993). Given the dual role of hospitals as both an amenity and a potential source of disamenities, the net impact of healthcare accessibility on rents requires empirical assessment in specific regional contexts.

H14 *Increased driving time to the nearest hospital is negatively associated with rental prices of holiday flats.*

The interaction between floor level and lift access is crucial for understanding flat values, as higher floors tend to command a premium only when lifts

Table 1 Measure Development

Variable	Measurement (references)	Place in model	Symbol
Ln_Rent	Natural log of flat rate, in euros. (Benjamin et al., 2001; Bowen et al., 2001; Deboosere et al., 2019; Nelson, 2010; Soler & Gemar, 2018)	Dependent variable	*Ln_Rent*
Environmental attributes			
Lake_View	Dummy variable: 1=lake view, 0=no lake view. (Baranzini & Schaerer, 2011; Bayramoğlu et al., 2025; Benjamin et al., 2001; Bin et al., 2008; Gibbs et al., 2002; Nelson, 2010; Rouwendal et al., 2014)	Independent H1	
Lake_Distance	Walking time in minutes to the lake. (Bowen et al., 2001; Dudás et al., 2020; Schläpfer et al., 2015)	Independent H2	
Greenery	Dummy variable: 1=greenery presence, 0=no greenery presence. (Brander & Koetse, 2011; Trojanek et al., 2018; Tyrväinen & Miettinen, 2000)	Independent H3	
Park_View	Dummy variable: (1=park view, 0=no park view). (Crompton & Nicholls, 2022; Del Saz Salazar & García Menéndez, 2007; Troy & Grove, 2008)	Independent H4	
Structural attributes			
Ln_Flat_Area	Natural log of flat areas, in m^2. (Bateman et al., 2001; Geoghegan, 2002; S. Sirmans et al., 2005; Tyrväinen & Miettinen, 2000; Wing Chau et al., 2004)	Independent H5	
No._beds	Number of beds available in the flat. (Boto-García & Leoni, 2023; Dudás et al., 2020; Nelson, 2010)	Independent H6	
Flat_Age	Dummy variable (1=new, 0=old). (Loomis et al., 2024; Pandit et al., 2013; Wen et al., 2014)	Independent H7	
Floor_c	Floor level of the flat. The variable has been mean-centred to deal with potential multicollinearity. (Chin et al., 2004; Conroy et al., 2013; Wong et al., 2006)	Independent H8	
Lift	Lift as dummy variable (1=yes 0=no). (Keskin, 2010; Ma et al., 2022; Zhang et al., 2024)	Independent H9	
Park_free_Flat	Has parking in facility. Dummy variable (1=yes, 0=no). (Ma et al., 2022; Portolan, 2013; Wang & Nicolau, 2017)	Independent H10	
Courtyard	Courtyard as dummy variable (1=yes, 0=no). (Gibbons et al., 2014; Luttik, 2000; Portolan, 2013)	Independent H11	
Balcony	Balcony as dummy variable (1=yes, 0=no). (Liebelt et al., 2019; Malia et al., 2024; Probulski & Nehrebecka, 2025)	Independent H12	
Bed_break	Dummy variable. (1=yes, 0=no). (Boto-García & Leoni, 2023; Gordan et al., 2024; Kefela, 2014)	Independent H13	
Locational attributes			
Hosp_distance	Driving time in minutes to the hospital. (Gibbons et al., 2013; Gu et al., 2024)	Independent H14	
Floor_c*_Lift	Interaction between floor level and lift access.	Independent H15	$Floor\_c_i{:}Lift_i$

are available (Chen et al., 2022; Ma et al., 2022; Zhang et al., 2024). Recent studies in Beijing show that lift installations significantly boost the value of upper-floor units, with little effect on lower levels (Zhang et al., 2024). Drawing on this evidence, this study tests whether a similar floor-lift interaction affects holiday flat rental prices in the Lake Ohrid region.

H15 The positive impact of higher floor levels on rental prices is expected to be stronger when a lift is present, reflecting an interaction between floor and lift availability.

Methods and Procedures

The study area

The study focuses on the 31.8 km Albanian shore of Lake Ohrid, which is shared between North Macedonia (64%) and Albania (36%). In the Pogradec region, a diverse range of accommodations, including guest houses, holiday flats and bed-and-breakfasts, operate throughout the year, with heightened activity during the summer season. This study includes almost the totality of lodging options listed in Booking.com, excluding hotels.

Data

The dataset was sourced directly from Booking.com, covering virtually the entire hospitality supply in the Pogradec area near Lake Ohrid. Data were collected in two rounds: September 2024 and May 2025, yielding a total of 164 listings (116 from 2024 and 48 from 2025). Each record includes environmental, structural and locational attributes. Distances were measured using Google Maps to ensure precise location data. Given potential rental rate shifts between 2024 and 2025, a two-sample ttest was conducted to evaluate whether the mean rental price in 2025 was significantly higher than in 2024. The results indicate no statistically significant difference ($t = -0.76$, $p = 0.451$).

All data were systematically retrieved and compiled in an Excel spreadsheet, where each listing was manually checked for duplicates and verified for consistency across the two collection rounds. Variables were coded following standard hedonic pricing practices to allow for econometric analysis. These variables form the basis for the regression models estimating the determinants of rental prices.

A wide array of attributes was collected, covering environmental, structural, and locational variables. These include views (e.g. lake, park), proximity measures (lake, municipal hospital), greenery, building features (e.g. balconies, floors, lift), apartment-specific characteristics (area, age), parking options, bedroom configuration, and more.

Measure Development

Table 1 *summarizes the variables: apartment rent per night as the dependent variable, and environmental, structural, and locational attributes as independents. Prices are drawn from Booking.com listings, which, while not direct measures of willingness to pay, allow hedonic models to infer implicit price premiums. Variable selection follows prior literature and is tailored to the Lake Ohrid context.*

Model

The empirical framework of this study is a hedonic regression model that quantifies how a range of environmental, structural and locational characteristics contribute to flat rental prices. The dependent variable is the natural logarithm of Rent (ln Rent). The logarithmic (ln) transformation reduces skewness, stabilizes variance and allows coefficients to be interpreted as approximate percentage changes.

The specification below details the variables included, the functional form and the rationale for the chosen transformations.

$$Ln(Rent_i) = \beta_0 + \sum_{j=1}^{4} \beta_j^{(\varepsilon)} X_{ij}^{(\varepsilon)} + \sum_{k=1}^{9} \beta_k^{(S)} X_{ik}^{(S)} + X_{i1}^{(L)} + X_{i4}^{(S)} \cdot X_{i5}^{(S)} + \varepsilon_i$$

where:

$\sum_{j=1}^{4} X_{ij}^{(\varepsilon)}$ = *environmental variables (Lake_View, Lak, Greenery, Park_View)*

$\sum_{K=1}^{9} X_{ik}^{(S)}$ = *structural variables (Flat_Area, No. _beds, Flat_Age, Floor, Lift, Free_Park_Flat, Courtyard, Balcony, Bed_break)*

$X_{i1}^{(L)}$ = *Location variable (Hosp_distance)*

$\beta_j^{(\varepsilon)}, \beta_k^{(S)}, \beta_m^{(L)}$ = *estimated coefficients for each group*

ε_i = *error term*

Table 2 Frequencies for Dummy Variables

Variable	Yes		No	
	Count	%	Count	%
Lake_view	61	37.2	103	62.8
Park_view	76	46.3	88	53.7
Greenery	109	66.5	55	33.5
Flat_Age: Old/new	56	34.1	108	65.9
Lift	28	17.1	136	82.9
Park_free_flat	62	37.8	102	62.2
Courtyard	58	35.4	106	64.6
Balcony	128	78.0	36	22.0
Bed_break	20	12.2	144	87.8

Note N=164

We apply a partially log–log hedonic pricing model, in which the dependent variable (Rent) and selected continuous predictors, such as flat area, are expressed in natural logarithms, while other structural, environmental and locational attributes are included in their original scale. Coefficients on logged variables can be interpreted as elasticities, indicating the percentage change in rental price associated with a 1% change in the predictor, whereas coefficients on non-logged variables reflect the percentage change in price per unit change. Across alternative specifications, the relationship between Rent and Apartment Area consistently exhibited diminishing returns. We evaluated log–log, quadratic, and spline forms, all of which confirmed the flattening of rents at larger sizes. The spline offered the best fit (Adj. $R^2 = 0.245$, AIC = 118.4), while the quadratic specification also captured concavity in absolute terms. For parsimony, interpretability, and comparability with the hedonic pricing literature, we retain the log–log form (Adj. $R^2 = 0.157$, AIC = 131.7) as the main specification. Cropper et al. (1988) emphasize that semi-log and log–log specifications in hedonic models improve model fit, mitigate heteroscedasticity, and enhance interpretability by allowing results to be expressed as percentage changes or elasticities. In practice, a variety of forms have been adopted: Chaudhry et al. (2013) and Geoghegan et al. (2002) employ log–log models, while Sander and Polasky (2009), Schläpfer et al. (2015), and Benjamin et al. (2001) apply semi-log specifications. Loomis and Feldman (2003) incorporate both linear and semi-log forms. Earlier studies, including Palmquist (1984), Bockstael et al. (1987), Crompton (2001), and Leggett and Bockstael (2000), demonstrate that these functional forms effectively capture nonlinear relationships and improve the interpretability of hedonic pricing analyses.

Table 3 Descriptive Statistics for Quantitative Variables

	Unit	Minimum	Maximum	Mean	St.Dev
Rent	Euro	22	250	52.59	27.92
Lake_dist	Minutes	1	25	4.73	4.60
Flat_Area	m^2	10	200	58.16	36.95
Floor	Number	1	12	2.98	1.82
No._beds	Number	1	8	2.75	1.23
Hosp_dist	Minutes	1	24	7.04	5.92

The hedonic regression identifies implicit price premiums associated with flat attributes in observed listing data. These premiums should not be interpreted as direct measures of consumer willingness to pay, which typically requires stated preference or experimental data.

Study Results

Descriptive Results

The dataset comprises several qualitative, binary variables reflecting key features of the flats surveyed (Table 2). Notably, 37.2% of the flats offer a lake view, while 46.3% provide a park view. A considerable proportion, 66.5%, are surrounded by greenery. When it comes to flat age, 34.1% are classified as old and 65.9% as new. Only 17.1% of the flats are equipped with a lift, highlighting limited accessibility, and 37.8% provide free parking for residents. Additionally, 35.4% of flats have access to a courtyard, and balconies are a common feature, available in 78.0% of flats. Finally, breakfast is included in only 12.2% of the listings. These distributions offer a clear overview of the key amenities and characteristics represented in the sample.

Table 3 summarizes the key descriptive statistics for the main quantitative variables in the sample. The overnight rent is 52.59 euros, with a minimum of 22

Table 4 Robust standard errors regression results

Variable	Estimate	Std. Error	Significance
(Intercept)	2.232	0.223	***
Lake_view	0.119	0.056	*
Lake_dist	-0.007	0.007	
Greenery	0.149	0.067	*
Park_view	0.035	0.057	
Ln_Flat_Area	0.222	0.053	***
No._beds	0.096	0.032	**
Flat_Age	0.133	0.055	*
Floor_c	-0.023	0.026	
Lift	0.006	0.105	
Park_free_Flat	0.053	0.061	
Courtyard	-0.037	0.068	
Balcony	0.035	0.061	
Bed_break	0.297	0.084	***
Hosp_dist	-0.009	0.003	***
Floor_c:Lift	0.018	0.039	

Notes Dependent variable: Ln_rent
Significance codes: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$
Model fit: Residual standard error = 0.314, Multiple R-squared = 0.415, Adjusted R-squared = 0.356, F-statistic = 7.01

euros and a maximum of 250 euros. The mean distance to the lake is 4.73 minutes, ranging from one to 25 minutes. The average flat area is 58.16 m^2, with flats ranging from 10 to 200 m^2. The average level is approximately the third floor, while the number of beds per flat ranges from one to eight, with a mean of 2.75. The mean driving time to the municipal hospital is 7.04 minutes, with driving time ranging between 1 and 24 minutes. Overall, the sample demonstrates considerable variation in both housing characteristics and locational attributes.

Regression Results

Table 4 presents the regression results, showing the relationship between flat rent and various environmental, structural and neighbourhood characteristics.

Diagnostic checks were conducted to ensure that our regression results are statistically valid. First, since diagnostic tests detected heteroscedasticity in the residuals (Breusch–Pagan $\chi^2(15) = 27.25$, $p = 0.027$; White $\chi^2(2) = 15.06$, $p < 0.001$), we report heteroscedasticity-consistent robust standard errors (White, 1980) to preserve coefficient estimates and ensure valid inference. Next, histograms of residuals and the normal Q–Q plot indicated no violations of the residual normality assumption. Finally, multicollinearity was assessed using Variance Inflation Factors (VIF) on an initial set of 24 predictors. Several variables were sequentially excluded due to excessively high VIFs, and the final model retained only variables with VIFs well below common thresholds (e.g. < 5), ensuring no multicollinearity and reliable OLS estimates

The regression model explains about 42% of the variation in rental prices ($R^2 = 0.42$), with the adjusted R^2 dropping to 0.36 after accounting for model complexity. This indicates that some factors affecting rental prices remain unaccounted for. Despite this, the model is statistically significant ($F = 7.01$, $p < 0.001$), confirming that at least one included variable meaningfully predicts rental prices in the Lake Ohrid region.

The regression results are organized by variable group: environmental variables, structural characteristics and locational attributes. Each section discusses the significance and impact of predictors on flat rental prices in the study area.

Environmental Variables

Among the environmental variables included in the regression model, two factors demonstrated a statistically significant effect on flat rental prices, thereby supporting the corresponding hypotheses.

The presence of a lake view (*Lake_view: H1*) has a significant positive effect on rental price, with an estimated coefficient of 0.119 ($p = 0.034$). This result supports Hypothesis 1, indicating that flats with a view of Lake Ohrid are associated with higher rental prices compared to those without such a view. The positive association aligns with expectations from hedonic pricing theory, as scenic amenities typically enhance perceived property value. Specifically, holding other factors constant, flats offering a lake view are associated with a 12% higher rental price (since the dependent variable is log-transformed), confirming the economic relevance of visual environmental amenities in the local market.

Greenery in the vicinity (*Greenery: H3*) of the flat also showed a positive and statistically significant effect, with a coefficient of 0.149 ($p = 0.027$). This finding confirms Hypothesis 3 and highlights the added value of natural surroundings. All else equal, flats situated near green spaces or abundant vegetation tend to achieve approximately 15% higher rents, underscoring the importance of environmental quality in shaping rental prices.

Two environmental variables were not significant, offering no support for the related hypotheses. Lake_dist (H2) showed a negative but insignificant effect ($\beta = -0.007$, $p = 0.336$), suggesting that, once other factors are controlled, marginal distance from the lake does not drive prices – possibly because the Lake_view variable captures most of the amenity value. Likewise, Park_view (H4) was insignificant ($\beta = 0.035$, $p = 0.533$), indicating that proximity to parks does not affect rents in the Pogradec market.

Structural Characteristics

Several structural characteristics exhibited statistically significant associations with flat rental prices, thereby confirming their respective hypotheses:

The log-transformed flat area *(Ln_Flat_Area: H5)* had a strong, positive effect on rental price, with a coefficient of 0.222 ($p < 0.001$). This finding supports Hypothesis 5, demonstrating that larger flats have higher rents, consistent with the law of diminishing returns in property economics. The elasticity interpretation indicates that a 1% increase in flat area is associated with an approximate 0.22% increase in rental price, holding all other variables constant. This underlines the central role of usable space in determining market value.

The number of beds (*No._beds*: H6) was also found to be a significant predictor, with an estimated coefficient of 0.096 ($p = 0.003$). This supports Hypothesis 6, confirming that flats offering more beds are able to capture higher rents. Specifically, each additional bed is associated with an estimated 9.6% increase in rental price, further reinforcing the economic value of space and capacity for potential tenants.

Flat age (H7) demonstrated a positive effect on rental price, with a coefficient of 0.133 ($p = 0.017$). This supports Hypothesis 7 and may reflect a local preference for newly constructed or recently renovated properties or those with character and a proven record. In this context, switching from old to new flat is associated with a 13.3% increase in rental price, though this pattern may differ in markets where age is negatively perceived.

The inclusion of breakfast (*Bed_break: H13*) had a significant impact, with a coefficient of 0.297 ($p < 0.001$), supporting Hypothesis 13. Flats that offer breakfast as part of the rental package achieve substantially higher rents, about 30% more, demonstrating the attractiveness of added hospitality services for potential tenants.

The remaining structural variables were not statistically significant, leading to rejection of the related hypotheses. Floor level (H8), lift (H9), their interaction (H15), free parking (H10), courtyard access (H11), and balcony presence (H12) all showed non-significant effects, indicating no measurable impact on rental prices in this market.

Locational Characteristics

Distance to the municipal hospital (Hosp_dist: H14) was a significant predictor of rental price ($\beta = -0.009$, $p < 0.001$), supporting H14. The negative coefficient indicates that apartments farther from the hospital rent for less, with each additional unit of distance reducing price by about 0.9%. This result highlights the role of accessibility to essential services in shaping demand and reinforces the hospital's importance as a key locational amenity in the Pogradec rental market.

Discussion

The regression analysis confirms established findings in the literature, showing that environmental, structural, and locational attributes significantly shape holiday flat rental prices in the Lake Ohrid region. Environmental amenities, particularly lake views and proximity to greenery, consistently emerge as strong positive determinants, underscoring the premium tourists assign to scenic and natural surroundings (Baranzini & Schaerer, 2011; Bond et al., 2002; Brander & Koetse, 2011; Loomis et al., 2024; Loomis & Feldman, 2003; Luttik, 2000; Nelson, 2010; Schläpfer et al., 2015; Tyrväinen & Miettinen, 2000; Wen et al., 2014; Yoo et al., 2014). Structural features such as flat size and number of beds further exhibit strong explanatory power, while additional amenities like breakfast services and newer flat age enhance market appeal (Bowen et al., 2001; Buiga et al., 2017; Chen et al., 2022; Dudás et al., 2020; Gibbs et al., 2002; Gordan et al., 2024; Kefela, 2014; Nelson, 2010; Sirmans et al., 2006; Taylor, 2017).

Locational attributes, especially proximity to the municipal hospital, also align with prior research (Gibbons et al., 2013; Gu et al., 2024; Wen et al., 2014). By contrast, features such as floor level, lift, free parking, balcony, or park view did not show significant effects, suggesting context-specific or limited influence in this market.

These findings suggest that urban planners should prioritize the protection and enhancement of lake views and green spaces, as these amenities substantially increase rental prices and regional appeal for visitors. Integrating parks and maintaining scenic corridors should be central in development and zoning decisions. For building owners and hospitality businesses, investing in properties with natural amenities, such as lake views or proximity to greenery, can yield higher rental returns; while increasing or highlighting guest capacity can further boost competitiveness in the short-term rental market. Additionally, offering value-added services like breakfast has a proven positive impact on rental income, making it a worthwhile strategy for hospitality providers.

This study is not without limitations. The reliance on Booking.com listings may introduce selection bias, as informal or offline rentals are not represented. The hedonic model, while robust, cannot fully account for unobserved heterogeneity or complex interactions among structural, environmental, and locational attributes. The cross-sectional dataset also limits the ability to capture dynamic changes over time. Furthermore, additional variables, such as guest reviews, luxury indicators, accessibility features, or measures of service quality, were not available but could further enrich the analysis. Despite these constraints, the core results remain valid and reliable, aligning with international evidence and reflecting the realities of the local market. Future research could improve upon this work by collecting broader datasets, including offline and informal rentals, and by incorporating panel data or applying fixed/random effects models to better control for unobserved heterogeneity. Moreover, employing flexible modelling techniques such as splines or generalized additive models (GAMs) could better capture nonlinear or non-additive effects between property characteristics. Additional variables, such as guest reviews, luxury indicators, accessibility features, or measures of service quality, should also be considered to further refine understanding of the determinants of rental prices in the holiday accommodation market.

Conclusion

This study makes both theoretical and empirical contributions to the literature on non-market valuation by applying a hedonic pricing model to the underexplored tourism market of Lake Ohrid, Albania. It shows that environmental amenities, most notably lake views and greenery, together with structural features such as flat size and capacity, are key drivers of rental prices. Empirically, the paper contributes one of the first systematic applications of hedonic pricing to Albania's hospitality sector, demonstrating that environmental and structural characteristics are consistently internalized into rental values, while average prices remained stable across 2024 and 2025. By filling a major research gap in the Western Balkans, the study contributes new evidence on how transitional tourism economies internalize natural and property amenities into market outcomes. Looking ahead, further research could extend these contributions by integrating seasonal variation and demand-side data, while policy makers and planners can build on the findings to safeguard scenic amenities and guide tourism development strategies that align with market signals.

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Original Scientific Article

Phenomenography of Sustainable Tourism in Luxury Hotels

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Contemporarily, tourism stakeholders (especially luxury hotels) are translating the sustainable tourism concept into various understandings. Hence, it is difficult to see the best ways to actualize the concept and achieve significant outcomes. Therefore, it is necessary to capture the current understanding empirically. To capture these understandings, this paper employs a phenomenographic approach, involving 17 luxury hoteliers in Indonesia. As a result, two contributions are presented in this paper. First, this study distinguishes three distinct understandings for the actualization of sustainable tourism, namely the (1) complying, (2) engaging, and (3) advocating stage. Second, a stage-gate model is proposed for the practical application of the gradual actualization of sustainable tourism in luxury hotels.

Keywords: sustainable tourism, luxury hotel, phenomenography, hotelier, sustainability.

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Introduction

The concept of sustainable tourism has gained significant attention in recent years as the hospitality industry grapples with the need to balance the demands of high-end clientele with the imperative of environmental responsibility. The rise in interest is fuelled in part by customer awareness of sustainability issues, driving luxury hotels to implement a variety of sustainability initiatives to improve their brand image and attract environmentally conscious guests (Moscardo, 2017). Existing research suggests that the actualization of sustainable tourism can bring beneficial impacts to the hotel industry, such as reducing operational costs, maintaining the attractiveness of natural landscapes, meeting eco-conscious tourists' demands, and enhancing social performance (Ayuso, 2006; Moscardo, 2017; Park et al., 2021; Tölkes, 2018). Additionally, the rising trend reflects a broader shift in the luxury sector, with companies now recognizing that sustainability and luxury can coexist, albeit with unique challenges in terms of maintaining the opulence and exclusivity expected by customers while implementing environmentally friendly practices (Athwal et al., 2019).

Conducting a phenomenographic study of luxury hoteliers' perspectives on sustainable tourism can provide useful insights into how the idea is interpreted and implemented in the luxury hospitality sector. Understanding the various perspectives of luxury hoteliers on sustainability not only sheds light on the innovative strategies they employ but also highlights the inherent tensions between luxury and sustainability that can complicate these efforts, as evidenced by ongoing debates about the trade-offs between opulence and environmental performance (Moscardo, 2017). This study also introduces phenomenographic study in the context of Indonesia as a developing country that may perceive sustainability differently, and bring a fresh understanding to the literature. For the practical impacts, the phenomenographic research can uncover variations in individuals' understandings, inform instructional design, and improve stakeholders' learning and comprehension of the sustainable tourism concept.

The extant literature on sustainable luxury tourism provides a solid foundation for this phenomenographic study. Recent research has identified key themes such as consumer concerns, organizational practices, and cross-cultural issues that contribute to a better understanding of how luxury hotels can align sustainability with their operational ethos, implying that addressing these themes is critical for future advancements in sustainable luxury tourism (Kunz et al., 2020; Moscardo, 2017). In the process, researchers gained a better understanding of the environmental impacts, management responses, and overall state of sustainability within the luxury hotel sector, identifying critical areas for improvement and innovation in this domain (Kunz et al., 2020). It is critical to realize that, while luxury firms may implement sustainable practices, customer scepticism and the halo effect associated with luxury marketing can confound perceptions of these efforts, often overshadowing genuine sustainability measures. As a result, a thorough examination of luxury hoteliers' perceptions and the implication for sustainable tourism is required to bridge the gap between luxury and sustainability, ultimately fostering a more responsible approach to high-end hospitality that aligns with both business objectives and societal needs (Moscardo, 2017). When investigating the viewpoints of luxury hoteliers, it becomes critical to analyse the trade-offs involved in implementing sustainable policies, since these can frequently lead to tensions between preserving luxury standards and generating true environmental advantages that resonate.

Literature Review

Sustainability

Sustainable tourism is rooted in the sustainability concept. Hence, understanding this origin concept is essential. The concept of sustainability was coined by Hans Carl von Carlowitz in his book *Sylvicultura Oeconomica* in 1713. It was popularized by The United Nations – World Commission on Environment and Development (WCED) with the publication of *Our Common Future* in 1987 (World Commission on Environment and Development, 1987). The United Nations' Brundtland Commission, a pioneering effort to address these pressing issues, defined sustainability as development that meets the needs of the present without compromising the environment and the ability of future generations to meet their own needs (Basiago, 1995). Afterwards, this concept progressed substantially and gained immense prominence in the latter half of the twentieth century, as society faced a myriad of interconnected challenges that threatened the delicate balance of the environment (Du Pisani, 2006). This foundational understanding has since evolved to encompass a more holistic and integrated perspective, one that recognizes the intricate web of relationships between economic, social, and ecological factors

(Cabezas et al., 2003; Wang et al., 2011). The notion of sustainability transcends the narrow confines of environmental stewardship, as it requires a profound shift in collective mindsets and strategic frameworks. Furthermore, the three-pillar idea of sustainability evolved gradually in response to challenges of the economic status quo from social and ecological viewpoints, as well as the United Nations' efforts to balance economic growth with social and environmental issues (Purvis et al., 2019).

Furthermore, sustainability is not merely a concept to be studied in isolation; rather, it is a dynamic and multifaceted challenge that demands a comprehensive approach. Sustainability and tourism, for instance, exhibit a complex and nuanced relationship where the industry's growth and development can simultaneously advance and undermine sustainable practices (Alonso-Muñoz et al., 2023; Cohen, 2002). The discourse surrounding sustainability in tourism highlights the inherent tension between preserving the unique cultural identities and heritage of local communities and pursuing development strategies that aim to meet the needs of a diverse range of stakeholders, including visitors, businesses, and the environment (Gezici & Salihoğlu, 2016). This delicate balancing act is further complicated by the diverse forms of tourism, each with its own set of implications for sustainability.

Sustainable Tourism

As the world grapples with the challenges of environmental degradation and the imperative to foster economic development, the concept of sustainable tourism has emerged as a critical framework that seeks to harmonize these seemingly divergent objectives. Sustainable tourism, as defined by the World Tourism Organisation, involves tourism that fulfils tourists' needs, and generates economic and social return while preserving the environment (Neto, 2003). This holistic approach recognizes the interdependence of economic, social, and environmental factors in the tourism industry. It also underscores the need for a balanced and responsible approach to tourism development.

One of the key aspects of sustainable tourism is its emphasis on economic viability and local prosperity. Rather than prioritizing short-term profits or the interests of external stakeholders, sustainable tourism models aim to create long-term economic benefits that are equitably distributed within the local community (Briassoulis, 2002; Padin, 2012). This involves ensuring that tourism-related businesses and activities are structured in a way that maximizes the quality of employment and economic opportunities for the local population, while also fostering strong linkages between the tourism industry and other sectors of the local economy, allowing for a more diversified and resilient economic base. Sustainable tourism also places a strong emphasis on the preservation and respectful integration of cultural heritage and local traditions (Loulanski & Loulanski, 2011). The preservation and integration of these cultural assets not only maintain the authenticity and appeal of a destination but also empower local communities by fostering a sense of pride and ownership in their rich cultural heritage, which can serve as a powerful source of economic and social development.

The environmental dimension of sustainable tourism is perhaps the most widely recognized aspect, as it emphasizes the need to minimize the negative impacts of tourism on the natural environment. This can involve initiatives such as promoting environmentally friendly transportation options, implementing waste management and energy efficiency measures, and protecting sensitive natural habitats and ecosystems. Sustainable tourism recognizes that the natural environment is a foundational resource for the tourism industry and that its preservation is essential for the long-term viability and appeal of a destination (Butler, 1991). The essential actors in sustainable tourism are diverse, ranging from government policymakers and tourism industry leaders to local communities and individual tourists. Effective sustainable tourism planning and implementation requires a collaborative and coordinated effort among these stakeholders, each of whom must contribute their unique perspectives, resources, and expertise to ensure that the principles of sustainability are fully integrated into the tourism ecosystem (Hardy & Pearson, 2018; Roxas et al., 2020).

Emerging themes in sustainable tourism include the role of technology, particularly social media, in amplifying the visibility and appeal of sustainable tourism offerings to increasingly environmentally conscious travellers (Socratous et al., 2025). Additionally, the COVID-19 pandemic has highlighted the vulnerability of tourism-dependent economies and the need for more resilient, sustainable models that can withstand external shocks (Baloch et al., 2023; Gezici & Salihoğlu, 2016). Meanwhile, the persistent issues in the actualization of sustainable tourism are the difficulty of balancing competing priorities, the need for strong governance and stakeholder collaboration, and the challenge of measuring and monitoring progress towards sustainability goals (Pan et al., 2018). In conclusion, sustainable tourism represents a critical framework for reconciling the economic, social, and environmental imperatives of tourism development, offering a pathway towards a more equitable, resilient, and environmentally conscious tourism industry.

Sustainable Tourism Practices in Hotels

Extant research has discussed the implementation of the sustainable tourism concept in hotels from the perspective of corporations and guests. The implementation efforts in the hotel as a corporation are diverse, considering the cost and complexity of adopting the concept. These efforts entail practices such as energy efficiency, waste and water management, eco-certification, eco-friendly building materials usage, incorporating green spaces and community engagement (Beccali et al., 2009; Han et al., 2018; Kang et al., 2012). The practices are proven to improve environmental performance, social responsibility, and economic viability while also meeting tourist expectations. Many hotels are focusing on energy efficiency and resource conservation, which can significantly impact both environmental and financial performance (Beccali et al., 2009; Zhang et al., 2012).

On the other side, hotels generate significant amounts of waste, including plastic, paper, organic, and water waste. Effective waste management practices are essential to reduce the environmental footprint of hotels. Strategies such as waste segregation, recycling, and composting are being implemented to manage waste sustainably (Phu et al., 2018; Pirani & Arafat, 2014). Water conservation is another critical aspect of sustainability in hotels. Hotels are adopting various water conservation techniques, such as installing low-flow fixtures and promoting water-saving behaviours among guests (Han et al., 2018; Park et al., 2021).

Another common practice is the implementation of green certification or eco-labelling. In their operations, green-certified hotels contribute to achieving sustainable development goals (SDGs), including clean water and sanitation, affordable and clean energy, responsible consumption and production, and climate action goals. They are also involved in actualizing green procurement, eco-labelling, and responsible tourism development (Kang et al., 2012; Line & Hanks, 2016; Peng & Chen, 2019). Researchers argue that luxury hotels are more engaged in sustainability practices than regular hotels (Line & Hanks, 2016; Peng & Chen, 2019). Hence, the practices are often more extensive and integrated compared to those typically found in regular hotels. They can be considered as the best practice examples of sustainable tourism actualization. Yet, there is a lack of literature that focuses on luxury hotels.

Meanwhile, from the hotel guests' perspectives, some of the sustainable tourism initiatives from the corporation can shift behaviour towards environmental sustainability. Wong and Lai (2024) showed that the hotel green certificate can influence the environmental awareness of hotel guests and actualize green practices, for example in saving water and reducing waste. Implementing water-saving measures not only helps in reducing water consumption but also enhances guest loyalty and participation in green practices (Han et al., 2018). Guests with higher environmental concerns are more willing to pay a premium for hotels' green practices (Kang et al., 2012). This willingness is more pronounced among guests of luxury and mid-priced hotels compared to those staying in economy hotels. Effective communication of sustainable initiatives is crucial for enhancing guest perceptions (de Oliviera Menezes & Cavagnaro, 2021). Guests prefer learning about these initiatives through digital channels, in-room signage, and informal conversations with hotel staff. This approach helps guests understand and appreciate the hotel's efforts, potentially increasing their engagement with sustainable practices. This description highlights the importance of hoteliers as a bridge between corporate missions and the actualization of the sustainable tourism concept among guests. However, there is a lack of research investigating the understanding of such concepts in hoteliers.

Literature Review Findings and Gaps

Over the three centuries since the publication of *Sylvicultura Oeconomica* in 1713, the concept of sustainability has undergone significant evolution across various sectors, including tourism. Sustainable tourism has been acknowledged as an essential framework for balancing the economic, social, and environmental aspects of tourism development, offering a more environmentally conscious tourism industry (Butler, 1991; Hardy & Pearson, 2018; Roxas et al., 2020; Socratous et al., 2025). Existing literature has described various actualizations of sustainable tourism in hotels, including energy efficiency and resource conservation (Beccali et al., 2009; Sakshi et al., 2020), waste management (Phu et al., 2018; Pirani & Arafat, 2014), water management (Han et al., 2018; Park et al., 2021), and green certification (Kang et al., 2012; Line & Hanks, 2016; Peng & Chen, 2019). However, the actualizations are yet to be rigorously theorized by scholars. In addition, some challenges persist in terms of competing priorities, governance, stakeholder collaboration, and measuring and monitoring progress of the actualization, which need to be addressed (Pan et al., 2018).

Overall, there is a gap in the literature that rarely theorizes the actualization of sustainable tourism in hotels, where most literature only discusses the variety of actions. Furthermore, only a small number of scholars have investigated the actualization of sustainable tourism in luxury hotels. Meanwhile, those luxury hotels are important parts of the tourism industry, and they provide best-practice examples of sustainable tourism. Therefore, this paper tries to contribute to filling the gaps and to generate new knowledge by investigating sustainable tourism practices in luxury hotels and providing solutions to the current challenges.

Methodology

This paper employs a phenomenographic study from the perspective of luxury-class hoteliers in Indonesia. Phenomenographic study is a content-based method that investigates the various qualitative ways in which people make sense of their experiences, with an emphasis on disparities in how they experience and conceptualize their world (Sjöström & Dahlgren, 2002). This method is useful for exploring people's experiences and perceptions within a certain context or phenomenon. In achieving such results, researchers do not separate a phenomenon from the people who experience it (Hajar, 2021). In the context of sustainable tourism, the experiences of hoteliers can be considered important in depicting how hotels actualize the sustainability concept. Hence, this study will unpack the reality of sustainable tourism practices in hotels in Indonesia.

Further, the phenomenographic study comprises three key steps, including: (1) sampling and collecting data, (2) analysing phenomenographic data, and (3) communicating the phenomenographic results (Han & Ellis, 2019). First, the samples of this study were selected by using a purposive sampling approach. There were 17 informants from luxury hotels in six main tourist destinations in Indonesia that participated in this study: Bali, Lombok – Mandalika, Labuan Bajo, Borobudur, Toba Lake, and Likupang (see Table 1). The informants were selected based on the hotel class (four-star and above) where they worked and the position of the informants. Most of them are hotel managers who have comprehensive knowledge of the hotel operation. For confidentiality purposes, the names of the hotels are given pseudonyms. After that, data were collected through face-to-face in-depth interviews with semi-structured questions. The main questions of the in-depth interview are:

1. What are the activities conducted in the hotel regarding sustainable tourism?
2. What are the facilities and resources provided by the hotel for sustainable tourism actualization?
3. Who are the stakeholders involved in sustainable tourism actualization?

Table 1 Informant List

Pseudonym	Hotel Class	Area
Hotel 1	5 stars	Bali
Hotel 2	5 stars	
Hotel 3	5 stars	
Hotel 4	5 stars	
Hotel 5	4 stars	Lombok – Mandalika
Hotel 6	4 stars	
Hotel 7	4 stars	
Hotel 8	4 stars	
Hotel 9	5 stars	
Hotel 10	4 stars	Labuan Bajo
Hotel 11	4 stars	
Hotel 12	5 stars	
Hotel 13	4 stars	Borobudur
Hotel 14	5 stars	
Hotel 15	4 stars	Toba Lake
Hotel 16	4 stars	
Hotel 17	4 stars	Likupang

Incidental follow-up questions are employed to deep dive into the three main questions. Based on the main and follow-up questions, researchers can grapple with a comprehensive understanding of hoteliers' experiences in actualizing the sustainable tourism concept. However, getting access to hotelier informants is very challenging, as not every hotel is willing to be open about their sustainability practices. The support from The Ministry of Tourism and Creative Economy was helpful for gaining access. This research acquired 17 informants as follows (Table 1).

Second, the in-depth interviews with the 17 hotel managers were recorded by using a smartphone, recording with an external microphone. Interview records were transcribed manually to produce a verbatim transcription document. Then, the transcriptions were coded based on the main questions and analysed to find saturated insights by using NVIVO software. Saturated insights were clustered to generate emerging themes that can depict the particular actualization of sustainable tourism in luxury hotels.

Lastly, the phenomenographic results are discussed internally with the research team and externally with the informants. The discussions were conducted three times to validate and strengthen the results. This study discovers three important findings. The findings of this phenomenographic study are listed in the following section. The contribution of this study to the literature is highlighted in the discussion section.

Findings

Sustainable Tourism Activities in Luxury Hotels

Based on the analysis, this study discovered three major emerging themes (categories) of sustainable tourism activities in luxury hotels, namely complying, engaging, and advocating (see Table 2). First, several hotels (Hotels 5, 8, 9, 10, 13, 15, 16, and 17) indicated that they only conducted compliance-related activities. These hotels are not motivated to conduct further sustainability activities and focus on fulfilling the requirements to comply with regulations and policies. The activities include: (1) conserving energy in accordance with the company or principal policy, (2) implementing waste management in accordance with government regulations, (3) mitigation planning and reporting of their environmental impact to comply with the government's regulations, and (4) implementing hotel certifications in accordance with the principal's and government's policies.

Second, there are hotels (Hotels 3, 6, 7, 11, 12, and 14) that have more extensive activities for reducing their negative impacts on the environment and society. These hotels showed a better sustainability performance compared to the first one. The activities include: (1) implementing rigorous water management that improves the hotel's efficiency and sustainability performance, (2) implementing a rigorous waste upcycle process in collaboration with the surrounding stakeholders and significantly reducing the solid waste to the landfill, and (3) obtaining reputable certifications and awards in sustainability.

Third, among all hotel samples, only three can be considered as demonstrating the best practice in actualizing the sustainable tourism concept (Hotels 1, 2, and 4). These hotels considered sustainability as an in-

Table 2 Data Analysis for Sustainable Tourism Activities Inquiry

Quotes	Interpretation	Emerging Themes
'We use LED lights, more open space, and less AC for energy efficiency.' (Hotel 5) 'Each room utilizes an automatic key tap for conserving electricity.' (Hotel 8) 'In some public spaces we use ventilation and high ceilings; thus, we minimize the AC usage, which can conserve energy.' (Hotel 10) '… solar powered lamps in the garden and parking lot can significantly reduce electricity usage.' (Hotel 16)	Conserving energy in accordance with the company policy.	Complying
'The local government collects our solid waste, and we pay the monthly retribution.' (Hotel 5) 'Yes, we are sorting the solid waste into three categories, organic, recyclable, and hazardous (B3) waste. Then, we pay a retribution for the local government to collect the waste.' (Hotel 8) 'We manage our solid and liquid waste as mandated by the government.' (Hotel 9) 'Some of our CSR budget is allocated to support the government's events for beach cleaning.' (Hotel 10) 'We treat our wastewater and pay retributions for solid waste collection from the local government.' (Hotel 15)	Implementing waste management in accordance with government regulations.	
'…the environmental impacts planning and annual report to monitor the waste management is mandatory.' (Hotel 8) 'We comply with the regulations from the Ministry of Forestry and Environment for implementing mitigations of environmental impacts such as treating our wastewater.' (Hotel 13) 'Yes, we use vendors to plan and monitor the environmental impact of our business operations.' (Hotel 16)	Mitigation planning and reporting of the environmental impact for complying with the government's regulations.	
'Our certification includes Star Hotel, CHSE (cleanliness, health, safety, and environment sustainability), and Green Globe Certification.' (Hotel 9) 'We have an HACCP (Hazard Analysis Critical Control Point) certification for our food processing.' (Hotel 13) 'CHSE certification was useful to convince the guests to come during the Covid-19 pandemic; however, right now it is less important. But we will comply with the regulation if it is mandatory.' (Hotel 16)	Implementing hotel certifications in accordance with principal and government policies.	
'Our water management includes WWTP, SWRO, and a rainwater harvesting system.' (Hotel 3) 'We recycled our wastewater by using a sewage water treatment plant (SWTP) and producing 20 thousand litres for flushing toilets, watering the plants, cleaning the road, etc.' (Hotel 6) 'For the wastewater, we utilize a biofilter system that does not require chemical substances in the process. We use the filtered water for watering the gardens.' (Hotel 7) 'The water from WWTP is utilized to water our gardens. It significantly reduces the water bills.' (Hotel 11)	Implementing rigorous water management that improves the hotel's efficiency and sustainability performance.	Engaging
'We involve our surrounding communities and NGO to process organic waste into compost and plastic waste into souvenirs and building materials.' (Hotel 6) 'Our kitchen waste is recycled into an eco-enzyme that can be used for fertilizer and soap. We also made compost and handicrafts from the sorted waste.' (Hotel 7) 'The fruit and vegetable wastes have been processed into an eco-enzyme that can be used for cleaning liquid and plant pesticide since 2019, while organic waste is processed into compost.' (Hotel 11) 'We collaborated with an NGO to upcycle plastic bottles into granules and commercial products.' (Hotel 12) 'Our hotel significantly reduces the waste. Some of the organic waste is processed in a black soldier fly farm to produce maggots that can be used for animal feeds.' (Hotel 14)	Implementing a rigorous waste upcycle process in collaboration with the surrounding stakeholders and significantly reducing the solid waste going to the landfill.	

Continued on the next page

Table 2 Continued from the previous page

Quotes	Interpretation	Emerging Themes
'We are committed to achieving best practice of environmental and social sustainability with the international certification from Earth Check.' (Hotel 3) 'We have international certifications, including ISO-140001 and ISO-45001.' (Hotel 6) 'We have obtained the green label from Booking.com.' (Hotel 7) '… have been awarded by the government with the Lingko Award.' (Hotel 11) 'Yes, international certification from Earth Check and CHSE from the Ministry of Tourism and Creative Economy.' (Hotel 12) 'Recently, this hotel has been awarded with a certificate for Tourism Ecosystem Fellowship by Indonesia's Ministry of Tourism and Creative Economy.' (Hotel 14)	Obtaining reputable certifications and awards in sustainability.	
'Starting in 2017, this hotel began with small steps to sort the solid waste until now we can process our own waste to 97.5%. So, based on the external audit only 2.5% of waste goes to the landfill. We also educate our guests to be involved in our mission to achieve the zero-waste goal, and we give them a zero-waste kit.' (Hotel 1) '…achieving carbon neutrality by investing in several emission reduction projects that are certified by UNFCCC Asia.' (Hotel 1) 'In collaboration with the surrounding communities, we processed our own waste in the waste lab and processing facilities.' (Hotel1) '… installed 111 solar panels for 15% energy efficiency and reducing emission.' (Hotel 2) 'This resort has a 5.5 hectares green area that consists of coffee plantation and tropical forest. We have a programme that involves guests and communities to plant around 1,000 trees in this area annually.' (Hotel 2) 'We have dedicated staff and facilities to sort and process our own waste. We call them the green team. The team has upcycled plastic waste into furniture and craft products. Then, we sell them to our guests. We also process the organic waste for compost and maggots.' (Hotel 2) 'The resort has around 5 hectares of green spaces that consist of gardens, paddy fields, and growing grounds. We maintain those spaces as a public space and involve local farmers in continuously cultivating the paddy fields. These green spaces are the jewels of the resort that attract many foreign guests.' (Hotel 3) 'Yes, we have a dedicated team and facilities for sustainability planning and management. This team managed the waste processing/upcycling, WWTP, rain harvesting system, energy conservation, and compliance for environmental impact mitigation activities.' (Hotel 3) 'We built a centralized boiler for fulfilling the water heater needs of the resort. This is very efficient compared to the singular room water heater.' (Hotel 3)	Possessing an extensive commitment and effort in processing waste to greatly reduce the impact on the environment.	Advocating
'Our reputation in sustainability can attract foreign guests.' (Hotel 1) 'We also provide some sustainability tour packages for our guests including a waste tour, morning beach cleaning, crafting class using green or waste materials… Many foreign guests were interested in these packages.' (Hotel 1) 'Our waste lab upcycled our waste into valuable products, and we sell the products to our guests.' (Hotel 1) 'We have a programme that involves guests and communities to plant around 1,000 trees in this area annually.' (Hotel 2) 'The team has upcycled plastic waste into furniture and craft products. Then, we sell them to our guests.' (Hotel 2) 'There are some tour packages for the guests such as tracking in the coffee plantation, horse riding, and a crafting class.' (Hotel 2) 'We also provide sustainability activity packages for our guests, such as cycling, tracking, planting at the growing ground, picnicking at the paddy field, harvesting and cooking the fresh ingredients from the garden. The foreign guests love those activities.' (Hotel 3) 'These green spaces are the jewels of the resort that attract many foreign guests.' (Hotel 3)	Leveraging the sustainability activities to acquire economic returns for sustaining the activities.	

separable part of the hotel's operation. They make an extensive commitment and effort to process waste to circulate it back into the economy and greatly reduce the impact on the environment.

Facilities and Resources

Within the complying category, the hotels only provide minimum facilities and resources to comply with the policies and regulations. The facilities are mostly limited to energy and waste management-related facilities. In short, their motive is to provide necessary facilities that are mandatory according to government regulations and principal policies. They are reluctant to spend more capital to invest in facilities for actualizing sustainable tourism extensively.

Meanwhile, in the engaging category, the hotels have sufficient resources and capital. They are eager to provide extensive facilities and resources for engaging further in sustainable tourism activities. With these facilities, they can deliver better sustainability performance and cost-efficiency, such as recycling wastewater that can reduce water bills, producing eco-enzymes from organic waste that reduces chemical use, and conserving the surrounding environment.

In the advocating category, the hotels have greater resources and capital. They also have visionary leaders who consider actualizing the sustainable tourism concept in their business operations to be essential. Hence, they are committed to providing dedicated facilities and resources that can continuously conduct sustainable tourism activities. Moreover, the dedicated hotel staff in this category are more actively interacting with guests and other stakeholders, compared to the previous two categories. As a result, the hotels can leverage the facilities and resources to attract guests and stakeholders to come and be involved in sustainable tourism activities.

Table 3 Data Analysis for Hotels' Facilities and Resources Inquiry

Quotes	Interpretation	Emerging Themes
'We use LED lights, more open space, and less AC for energy efficiency… Yes, we provide temporary storage for the solid waste… There are no dedicated staff for these facilities, they are maintained by the engineering and housekeeping division.' (Hotel 5)	Providing only minimum facilities and resources to comply with the policies and regulations.	Complying
'We provide large containers and temporary storage for sorting and storing the solid waste until the local government collects them… Our waste mostly comes from the rooms, the restaurant, and the garden. Each staff from these sections will sort and deliver the waste to the main garbage bins.' (Hotel 8)		
'Our waste processing facilities include WWTP, solid waste sorting and temporary storage.' (Hotel 9)		
'We don't have dedicated staff, but we used a vendor to maintain the WWTP.' (Hotel 11)		
'For drinking water, we are using glass bottles to reduce the plastic waste… We use LED lights to save energy… and we are sorting the solid waste into four categories, organic, inorganic, plastic, and paper or cardboard. There is a sorting facility with temporary storage.' (Hotel 13)		
'We treat our wastewater and pay retributions for solid waste collection from the local government… we also use an electric golf cart for reducing emissions.' (Hotel 15)		
'… solar powered lamps in the garden and parking lot can significantly reduce electricity usage.' (Hotel 16)		
'The rooms utilize tapping card and LED lights… We also have a waste sorting facility and WWTP.' (Hotel 17)		

Continued on the next page

Table 3 Continued from the previous page

Quotes	Interpretation	Emerging Themes
'Our water management includes WWTP, SWRO, and a rainwater harvesting system.' (Hotel 3)	Providing extensive facilities and resources for engaging further in sustainable tourism activities.	Engaging
'We recycled our wastewater by using a sewage water treatment plant (SWTP) and producing 20 thousand litres for flushing toilets, watering the plants, cleaning the road, etc.' (Hotel 6)		
'Our kitchen waste is recycled into an eco-enzyme that can be used for fertilizer and soap. We also made compost and handicrafts from the sorted waste.' (Hotel 7)		
'The water from WWTP is utilized to water our gardens. It significantly reduces the water bills… The fruit and vegetable wastes are processed into an eco-enzyme that can be used for cleaning liquid and plant pesticides since 2019, while organic waste is processed into compost.' (Hotel 11)		
'There is a dedicated division for marine biology for conducting beach and coral conservation.' (Hotel 12)		
'We have a paddy field as our green space in front of our hotel that involves local farmers to plant the rice regularly. They can use the space and harvest it freely.' (Hotel 14)		
'Starting in 2017, this hotel began with small steps to sort the solid waste until now we can process our own waste to 97.5%. So, based on the external audit only 2.5% of waste goes to the landfill. We also educate our guests to be involved in our mission to achieve the zero-waste goal, and we give them a zero-waste kit… In collaboration with the surrounding communities, we processed our own waste in the waste lab and processing facilities. Yeah, we have our leader's vision, dedicated team, facilities and opex to continuously support the sustainability activities.' (Hotel 1)	Providing dedicated facilities and resources that continuously conduct sustainable tourism activities that attract guests and stakeholders to be involved with the activities.	Advocating
'Our owner is from Germany, and she has the vision and commitment to provide the funding and facilities for conducting the sustainability activities… installed 111 solar panels for 15% energy efficiency and reducing emission… This resort has a 5.5 hectares green area that consists of coffee plantations and tropical forests. We have a programme that involves guests and communities to plant around 1,000 trees in this area annually… We have dedicated staff and facilities to sort and process our own waste. We call them the green team. The team has upcycled plastic waste into furniture and craft products. Then, we sell them to our guests. We also process the organic waste for compost and maggots… and eventually, we can attract international guests that are concerned about sustainability.' (Hotel 2)		
'The resort has around 5 hectares of green spaces that consist of gardens, paddy fields, and growing grounds. We maintain those spaces as a public space and involve local farmers in continuously cultivating the paddy fields. These green spaces are the jewels of the resort that attract many foreign guests… Yes, we have a dedicated team and facilities for sustainability planning and management. This team managed the waste processing/ upcycling, WWTP, rain harvesting system, energy conservation, and compliance for environmental impact mitigation activities. Overall, by providing these facilities, we can attract European guests to come here and experience the unique sustainable tourism activities.' (Hotel 3)		

Involved Stakeholders

This study has identified various stakeholders involved in the actualization of sustainable tourism within luxury hotels (see Table 4). Hotels in the complying category have involved necessary stakeholders for compliance-related activities. The stakeholders include waste collectors (local government and private collectors), local food suppliers, employees, and surrounding communities. As for hotels in the engaging category, they have involved secondary stakeholders that can help them to actualize sustainable tourism activities extensively. The secondary stakeholders include NGOs or social enterprises, waste off-takers (traders), and hired professionals. The waste off-taker

Table 4 Data Analysis for Hotel Stakeholders' Inquiry

Quotes	Interpretation	Emerging Themes
'The local government collected our solid waste, and we pay the monthly retribution.' (Hotel 5)	Waste Collector (local government and private collector).	Complying - Necessary stakeholders for compliance.
'…we pay a retribution for local government to collect the waste.' (Hotel 8)		
'The solid and food wastes are collected by the Agency for Environment and Kuta Local Government Business Unit.' (Hotel 9)		
'The plastic wastes are sorted and collected by a private collector (trader).' (Hotel 13)		
'The agricultural fresh produce and ingredients are procured from local and regional vendors. I guess that can minimize our carbon footprint from the food logistic side.' (Hotel 5)	Local food suppliers.	
'Our food suppliers mostly are local people from Mataram.' (Hotel 8)		
'This hotel prioritizes local sources for the food supplies. So, mostly are locals.' (Hotel 9)		
'The edible food surplus is reallocated to the employees' canteen for take-aways.' (Hotel 13)	Employees.	
'The food excess from the restaurant will be offered to the 200 employees.' (Hotel 15)		
'The edible surplus from breakfast will be reprocessed as brunch or lunch menus, after that it will go to our employees.' (Hotel 16)		
'Any leftovers from the canteen will go to the pig farmers nearby.' (Hotel 13)	Surrounding communities.	
'Kitchen and food waste will be given to surrounding communities for pig feeds.' (Hotel 16)		
'We are collaborating with Sungai Watch, an NGO, to clean the mangrove forest and river.' (Hotel 3)	NGO or Social Enterprises.	Engaging - Secondary stakeholders for engaging further.
'We give our food surplus to the community via the Scholar of Sustenance.' (Hotel 3)		
'We collaborated with Gili Ecotrust organization to make souvenirs and building materials from the recyclable wastes.' (Hotel 6)		
'Previously, we had a collaboration with an NGO, the Agency for Health, and the Agency for Environment for maintaining and monitoring the SWTP.' (Hotel 6)		
'For processing the organic waste into maggots, we engage with a black soldier fly farm nearby.' (Hotel 14)		
'We are sorting and managing the waste into paper, glass, metal, oil, and plastic involving several waste off-takers.' (Hotel 3)	Waste off-taker (trader).	
'So, we give the recyclable plastic waste to the off-taker, and they make eco-bricks from the waste. Meanwhile, the organic waste is processed into compost.' (Hotel 6)		
'The fruit and vegetable waste has been processed into an eco-enzyme that can be used for cleaning liquid and plant pesticides since 2019, while organic waste is processed into compost. For doing that we hired a consultant to help and train us.' (Hotel 11)	Hired professionals.	
'There is a dedicated division for marine biology for conducting beach and coral conservation.' (Hotel 12)		
'We also educate our guests to be involved in our mission to achieve the zero-waste goal, and we give them a zero-waste kit… We also provide some sustainability tour packages for our guests including a waste tour, morning beach cleaning, crafting class using green or waste materials… Many foreign guests were interested in these packages.' (Hotel 1)	Customers (guests) and potential customers.	Advocating - Primary stakeholders for advocating sustainable tourism.
'We have a programme that involves guests and communities to plant around 1,000 trees in this area annually… The team has upcycled plastic waste into furniture and craft products. Then, we sell them to our guests… eventually, we can attract international guests that are concerned about sustainability.' (Hotel 2)		
'These green spaces are the jewels of the resort that attract many foreign guests… We also provide sustainability activity packages for our guests, such as cycling, tracking, planting at the growing ground, picnicking at the paddy field, harvesting and cooking the fresh ingredients from the garden. The foreign guests love those activities… Overall, by providing these facilities, we can attract European guests to come here and experience the unique sustainable tourism activities.' (Hotel 3)		

Table 5. The Phenomenographic Study Results for Luxury Hoteliers' Understanding of Sustainable Tourism

Components	Level of Comprehensiveness (Low → High)		
	Complying	Engaging	Advocating
Activities	Limited to compliance-related activities and certifications.	More rigorous activities to improve efficiency, sustainability performance, and gaining reputable certifications.	Possessing an extensive commitment and efforts in conducting sustainable activities and leveraging the activities to acquire economic returns.
Facilities and resources	Providing only necessary facilities and resources for compliance.	Providing extensive facilities and resources for engaging further in sustainable tourism activities.	Providing dedicated facilities and resources that continuously conduct sustainable tourism activities.
Involved stakeholders	Necessary stakeholders for compliance.	Secondary stakeholders for engaging further.	Primary stakeholders for advocating sustainable tourism.

is different from the collector: the off-taker is willing to purchase sorted waste such as plastic and metal, while the collector is paid to pick up waste from the hotels. Furthermore, in the last category, the hotels are promoting their practices and involving their guests to experience or participate in sustainable tourism activities. This involvement can be considered the pinnacle of the actualization of sustainable tourism, where guests (tourists) come to destinations to actively engage in sustainability activities while on vacation. From this involvement, the hotels can gain substantial economic returns to sustain the activities. Meanwhile, the other two hotel categories overlooked involving the guests.

Overall, this phenomenographic study has unravelled three distinctive understandings for actualizing sustainable tourism from the perspective of luxury hoteliers. First, the complying category grouped hotels which limit their activities, facilities – resources, and involved stakeholders to complying with regulations and policies. Second, the engaging category is eager to conduct more rigorous sustainable tourism activities, providing extensive facilities and resources, also collaborating with secondary stakeholders to bring greater environmental and social returns. Lastly, the advocating category which possesses an extensive commitment and effort in conducting sustainable activities, can leverage the sustainability activities to acquire economic returns. This category also provides dedicated facilities and resources that continuously conduct sustainable tourism activities. In addition, the advocating hotels can attract and involve tourists in their sustainable tourism activities.

Based on these findings, the three understandings can be arranged into hierarchical order according to the comprehensiveness of the actualization of the sustainable tourism concept (see Table 5), starting with the complying category, which has the lowest level of comprehensiveness, an engaging category in the middle, and an advocating category in the highest level. This phenomenographic result has been discussed internally and externally to validate the findings. The result will be further theorized into a model in the discussion section.

Discussion

The findings of this study are aligned with the existing literature that describes sustainable tourism actualization in hotels. Many of them focused on energy efficiency and resource conservation (Beccali et al., 2009; Sakshi et al., 2020), waste management (Phu et al., 2018; Pirani & Arafat, 2014), water management (Han et al., 2018; Park et al., 2021), and green certification (Kang et al., 2012; Line & Hanks, 2016; Peng & Chen, 2019). However, by focusing on the luxury hotels, this study can add to the literature by unravelling three different understandings in sustainable tourism actualization with different levels of comprehensive-

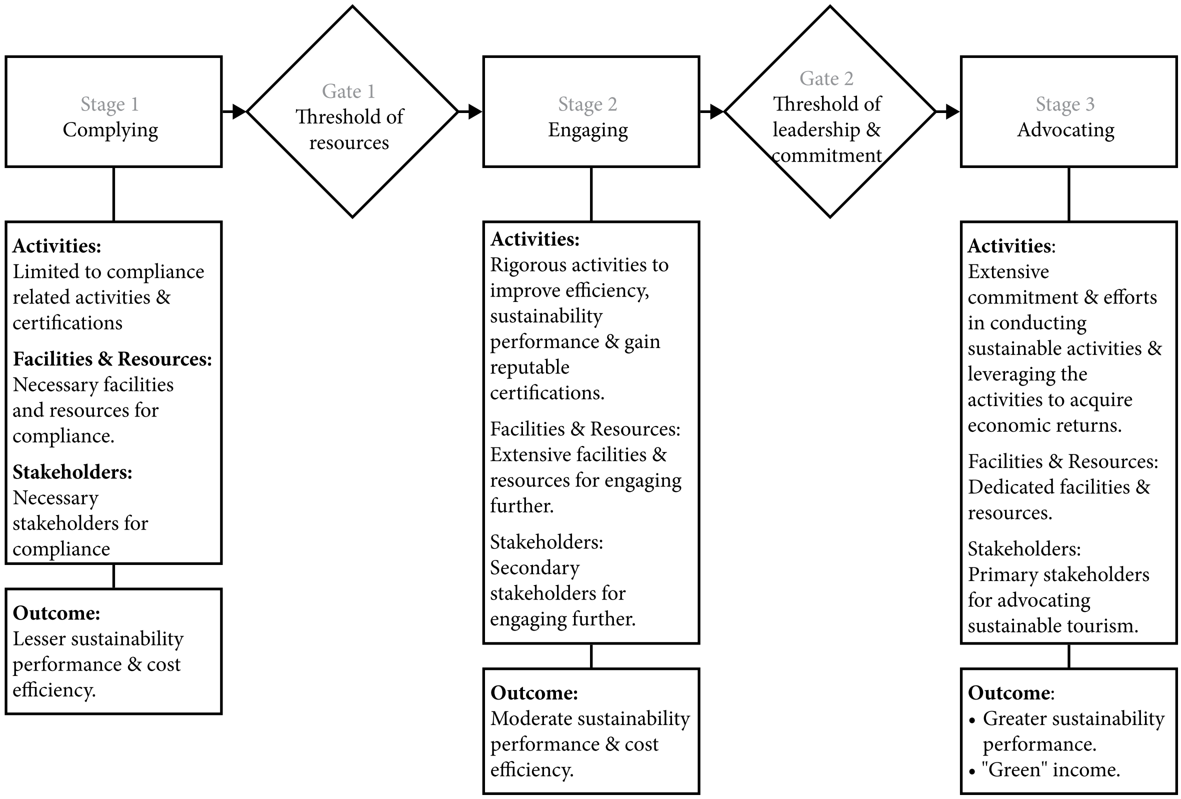

Figure 1 Stage-gate Model for Sustainable Tourism Concept Actualization in Luxury Hotels.

ness, not only describing the variety of the actualization. The three understandings are (1) complying, (2) engaging, and (3) advocating.

To provide a more substantial contribution to the literature, this study synthesizes the three categories into a stage-gate model for sustainable tourism concept actualization in luxury hotels (see Figure 1). The model consists of three stages and two gates. The three stages are translated from the three categories in these phenomenographic results (complying, engaging, and advocating). Furthermore, for transitioning into the next stage, hotels need to pass through two gates: (1) the threshold of resources and (2) the threshold of leadership and commitment. The model will be described in the following proposition below.

Proposition: In nature, luxury hotels are gradually understanding and adopting the sustainable tourism concept, starting from the complying, through the engaging, to the advocating stage. Each stage has different levels of comprehensiveness and outcomes, starting from the complying stage through to the advocating stage which has the highest comprehensiveness and outcomes. For transitioning into the next stages, the hotels need to pass through the thresholds of the (1) resources, and also (2) leadership and commitment gates. The threshold of resources means that the hotels are required to possess sufficient resources to develop more facilities and to support more rigorous sustainable tourism activities. Meanwhile, the threshold of leadership and commitment means that the hotels need to have visionary leaders who consider sustainable tourism as an inseparable concept from their business practices and are committed to providing dedicated facilities and resources to sustain the activities.

This model can be useful for hotel management, policymakers, and academics to explain that the actualization of sustainable tourism in luxury hotels is not only about the variety of activities but also more complex and hierarchical. With this model, luxury hotels within the category of complying and engaging can understand how to improve and transition to the higher stage. The hotels may experience difficulties in transitioning into the next stage due to the inability to fulfil the threshold of necessary resources, leadership and commitment. In addition, the hotels need to have sufficient motivation to achieve higher stages with greater expected outcomes. The 'green income' that can be acquired in the highest stage may not be visible and sufficient to provide motivation to the earlier stage hotels. Hence, policymakers can provide support or endorsement to encourage luxury hotels to achieve higher stages.

Conclusion

Tourism stakeholders (especially luxury hotels) have varying comprehension of sustainable tourism concepts. Hence, they cannot determine the best ways to actualize the concept. Therefore, it is necessary to capture the current understanding through an empirical study and see the best practice as a golden standard for actualization. By employing a phenomenographic approach, this study provides two major contributions.

First, it unravels three distinct understandings for the actualizing of sustainable tourism from the hoteliers' perspective, namely the (1) complying, (2) engaging, and (3) advocating stages. These three understandings have different levels of comprehensiveness. At the complying stage, the hotels are limiting the activities, facilities, resources, and stakeholders to compliance with regulations and policies. At the engaging stage, they are conducting rigorous sustainable tourism activities with more extensive facilities and resources, and also involving secondary stakeholders. At the advocating stage, they make a strong commitment and effort in conducting sustainable activities with their dedicated facilities and resources. Eventually, they can leverage the activities to gain economic returns or 'green income'.

Second, by synthesizing the three stages, this study proposes a stage-gate model for the practical application of gradual actualization of sustainable tourism in luxury hotels. They need to pass through (1) the threshold of resources, and (2) the threshold of leadership and commitment to achieve a higher level of actualization and gain substantial outcomes. This model can be used for explaining the actualization stages of sustainable tourism in the luxury hotels, and the features in each stage, to hotels' management, policymakers, and academics. However, this model may be limited to the context of luxury hotels, especially in a developing country such as Indonesia. Therefore, future research is required to test the usability of the model in various contexts of tourism studies.

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Original Scientific Article

An Innovative Lens on Green Tourism: A Narrative Review of Cognitive Dissonance in Sustainable Tourism Development

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Despite growing concern over sustainability, value–behaviour inconsistencies remain widespread in tourism, highlighting a need for conceptual clarity. Therefore, an inductive thematic synthesis was utilized to analyse how cognitive dissonance is conceptualized, triggered, and resolved across various green tourism contexts. Three thematic main strands emerged: (1) value–behaviour inconsistency, (2) green identity and group influence, and (3) situational constraints and greenwashing. Tourists often maintain a green self-image despite contradictory behaviour, influenced by group norms, destination cues, and infrastructural limitations. The findings highlight that destination managers and marketers must reduce behavioural friction and ensure that sustainability claims are authentic and actionable. Theoretically, the revew contributes a conceptual map of cognitive dissonance in green tourism, highlighting how dissonance emerges and is managed.

Keywords cognitive dissonance, green tourism, sustainable tourist behaviour, value–behaviour gap, pro-environmental travel

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Introduction

The Relevance of Cognitive Dissonance

As global tourism continues to contribute significantly to carbon emissions, biodiversity loss, and resource depletion, the role of individual tourist behaviour has gained increasing attention (Han, 2021). Consequently, the imperative to align tourism development with sustainability principles has become a central concern for scholars, practitioners, and policymakers alike (Khater et al., 2024). Numerous recent studies suggest that a growing segment of tourists express pro-environmental values and attitudes, ranging from climate concern to biodiversity preservation and cultural sensitivity (Davari et al., 2024; Forleo & Bredice, 2025; Demirović Bajrami et al., 2025). Despite this attitudinal shift, a persistent gap remains between what tourists say they value and how they actually behave while traveling—a phenomenon that poses both theoretical and practical challenges for advancing sustainability in tourism (Nieto-García et al., 2024; Seyfi et al., 2025).

This gap between intention and behaviour is often conceptualized through the lens of cognitive dissonance, a psychological theory introduced by Festinger (1957, p. 1082), which describes 'the discomfort individuals experience when their beliefs and actions are misaligned'. In the context of green tourism, this dissonance may arise when tourists who value sustainability choose high-carbon transport, patronize unsustainable accommodations, or engage in environmentally damaging activities (Juvan & Dolnicar, 2017; see also Table 1). Instead of modifying behaviour, individuals often resort to rationalizations or psychological coping mechanisms, such as denial, moral licensing, or displacement of responsibility, to restore internal consistency (Jorgensen & Reichenberger, 2023). These patterns are of particular interest in tourism, where temporary disinhibition, hedonistic motives, and the framing of travel as a reward or escape may further reinforce value–behaviour contradictions (Crompton, 2025).

Conceptual Fragmentation and Research Gaps

Despite its growing relevance, the application of cognitive dissonance theory in tourism remains conceptually diffuse. In this review, cognitive dissonance is conceptualized as a multidimensional psychological construct that combines cognitive inconsistency (between beliefs and actions) with the emotional discomfort that such inconsistency produces. While behavioural manifestations are considered as outcomes of this process, the emphasis lies on the cognitive and affective mechanisms through which tourists experience and resolve dissonance in sustainability-related contexts. This framing allows the review to capture both the mental negotiation of inconsistency and the resulting shifts in perception or justification. Although scholars have increasingly acknowledged the importance of psychological mechanisms in sustainable tourism, the concept of cognitive dissonance remains under-theorized and inconsistently applied within tourism literature (Schrems & Upham, 2020; Bhartiya et al., 2025; So et al., 2025).

For instance, while some studies conceptualize dissonance primarily as a cognitive conflict between beliefs and actions (Juvan & Dolnicar, 2014), others emphasize its emotional component, framing it as an affective discomfort that motivates justification or denial (Becken, 2007; Higham et al., 2013). Still others approach dissonance behaviourally, using it to explain observable inconsistencies between tourists' stated values and actions (De Vos & Singleton, 2020). This conceptual diversity has led to fragmented interpretations and methodological inconsistency, making it difficult to compare findings or build cumulative theoretical knowledge. Clarifying these distinctions is therefore essential for developing actionable insights and coherent frameworks for sustainable tourism behaviour. Fragmented across disciplines, existing studies employ varied conceptualizations and methodologies, limiting the potential for cumulative knowledge building (So et al., 2025).

Furthermore, few studies have systematically examined how tourists navigate this dissonance, what strategies they adopt to reduce it, or how destination marketing and policy environments may exacerbate or mitigate it (Han, 2021). This lack of synthesis hinders the development of robust theoretical frameworks and evidence-based interventions capable of closing the gap between green intentions and tourism practices. The fragmented application of cognitive dissonance theory in tourism not only limits theoretical advancement but also constrains practical strategies for promoting sustainable behaviour. Without a clearer understanding of how dissonance operates across contexts, efforts to design effective interventions risk remaining superficial—focused on awareness rather than behavioural alignment. Addressing these gaps is therefore crucial to advancing both theoretical rigor and actionable sustainability practices in tourism.

Table 1 A Summary of Key Definitions of Cognitive Dissonance from Literature

Author(s)	Definition
Juvan and Dolnicar (2014)	'A psychological discomfort tourists feel when their travel behaviors conflict with their environmental values.' (p. 81)
Higham et al. (2013)	'The mental tension arising when tourists recognize that their actions contradict their pro-environmental self-image.' (pp. 952–953)
Becken (2007)	'Dissonant state tourists attempt to reduce by justifying or rationalizing their unsustainable travel behaviors.' (pp. 358–359)
De Vos and Singleton (2020)	'A mismatch between travel-related beliefs and actual journeys […] creates dissonance that may be resolved through attitude adjustment or behavior change.' (p. 528)

To address these issues, this article presents a narrative review of the literature on cognitive dissonance in green tourism. Narrative reviews offer a flexible yet rigorous approach to synthesizing diverse bodies of knowledge, particularly in fields characterized by conceptual ambiguity and disciplinary fragmentation (Ferrari, 2015). Drawing on sources from tourism studies, environmental psychology and consumer behaviour, this review identifies key themes, theoretical tensions, and dissonance-reduction mechanisms evident in the current literature. This review advances the field in several ways. Theoretically, it offers an integrative framework that maps how cognitive dissonance is experienced and managed by eco-conscious tourists across different decision-making stages. It also highlights the interplay between individual agency and structural influences, such as marketing narratives, social norms, and infrastructural constraints, in shaping dissonant behaviour. Practically, the review provides insights for destination managers, policymakers, and sustainability educators on how to design more effective behavioural interventions, communication strategies, and policy tools that move beyond awareness-raising toward meaningful behaviour change.

Purpose and Theoretical Positioning of the Review

Unlike earlier reviews that have primarily examined sustainable tourism through behavioural models or attitude–intention frameworks (e.g. Han, 2021; Juvan & Dolnicar, 2014), this study focuses explicitly on cognitive dissonance as a unifying theoretical lens. Previous conceptual works have tended to address pro-environmental behaviour in general terms, without systematically mapping how psychological tension, identity processes, and contextual constraints interact to shape tourist decision-making. By synthesizing insights across tourism, psychology, and consumer behaviour, this review provides a more integrative perspective that explains not only the presence of value–behaviour gaps but also the mechanisms through which tourists manage them.

Cognitive dissonance theory also intersects with other key frameworks used to explain sustainable tourist behaviour. For instance, while the theory of planned behaviour emphasizes rational intention formation, cognitive dissonance highlights the post-decisional tension that arises when actions diverge from intentions. Similarly, the moral disengagement framework (Jorgensen & Reichenberger, 2023) explains the psychological mechanisms individuals use to justify unethical or unsustainable actions; these mechanisms can be understood as strategies to alleviate dissonance. Therefore, rather than competing explanations, these theories are complementary, collectively offering a more comprehensive understanding of the cognitive and moral processes shaping (un)sustainable behaviour in tourism.

In sum, the overarching aim of this review is to explore how cognitive dissonance has been conceptualized and addressed within the context of sustainable tourism behaviour. Specifically, the objectives are threefold: (1) to map and synthesize how the concept of cognitive dissonance has been applied in tourism and sustainability literature; (2) to identify common themes, theoretical perspectives, and dissonance-reduction mechanisms related to eco-conscious tourists; and (3) to highlight key gaps and offer directions for future research and policy development. Therefore, this review builds a critical foundation for rethinking the role of cognitive dissonance in sustainable tourism and proposes a future research agenda that bridges psychological theory and policy innovation. By doing so, it supports the broader ambition of aligning tourism practice with the values it increasingly professes.

Methodology

This study adopts a narrative review methodology to synthesize and critically analyse the existing literature on cognitive dissonance in green tourism. A narrative review was deemed suitable due to the interdisciplinary and evolving nature of the topic (Ferrari, 2015), which intersects tourism studies, insights from environmental science, and consumer behaviour. Unlike systematic reviews that focus on quantifying findings through meta-analytical approaches, narrative reviews allow for conceptual exploration, theoretical integration, and interpretive flexibility (Mura & Sharif, 2017; Greenhalgh et al., 2018). This approach is particularly useful for uncovering inconsistencies, emergent themes, and underexplored connections in fragmented bodies of literature (Mainil & Platenkamp, 2010). Compared with integrative or scoping reviews, this approach was deemed most appropriate as it enables critical interpretation and theoretical synthesis rather than mapping or descriptive aggregation, aligning with the study's aim to conceptualize how cognitive dissonance operates in green tourism.

To identify relevant literature, a structured search was conducted across four academic databases: Web of Science Core Collection, Scopus, ScienceDirect, and Google Scholar. The search was carried out in July 2025 and included literature published up to that point. A combination of Boolean operators and wildcards was used to retrieve articles across three conceptual domains: cognitive dissonance, tourism behaviour, and sustainability. An illustrative search string used in Scopus was: ("cognitive dissonance") AND ("touris*" OR "travel*") AND ("sustainable" OR "eco-tourism" OR "green behavior"), as summarized in Table 2.

Search results were restricted to peer-reviewed journal articles written in English. While studies published in 2015 or later were eligible for inclusion, priority was given to those published within the past five years. A total of 572 records were identified, and 482 were retained after removing duplicates (Figure 1). Titles and abstracts, and where necessary the full text, were screened and assessed to eliminate clearly irrelevant papers. Inclusion criteria required that studies engaged with the concept of cognitive dissonance (either explicitly or implicitly) and focused on tourism or travel behaviour in relation to sustainability. Articles were excluded if they lacked direct relevance to tourism, addressed sustainability without engaging dissonance-related constructs, or were limited to purely descriptive reporting. Editorials, conference abstracts, and non-peer-reviewed literature were also excluded from consideration.Themes were identified inductively and refined iteratively during the synthesis process. Recurring patterns were grouped into broader categories. This analysis informed a conceptual map that synthesizes the thematic strands of cognitive dissonance in green tourism, illustrating how dissonance arises and is addressed across diverse contexts (Figure 4). Although the narrative review approach does not follow rigid protocols such as PRISMA, several steps were taken to enhance transparency and minimize

Table 2 A Summary of the Search Strategy, Inclusion Criteria, and Review Parameters Used in this Narrative Review

Item	Description
Review type	Narrative review
Databases searched	Web of Science Core Collection, Scopus, ScienceDirect, Google Scholar
Search period	July 2025
Example strings	"cognitive dissonance", "value–behaviour gap", "green hypocrisy", "touris*", "eco-tourism", "sustainable travel", "pro-environmental behaviour"
Language restrictions	English only
Publication year range	2015–2025
Inclusion criteria	address cognitive dissonance relate to sustainability in tourism or travel provide theoretical, empirical, or conceptual insights into value–behaviour inconsistencies
Exclusion criteria	irrelevant to tourism no engagement with dissonance-related constructs purely descriptive non-peer-reviewed editorials or conference abstracts

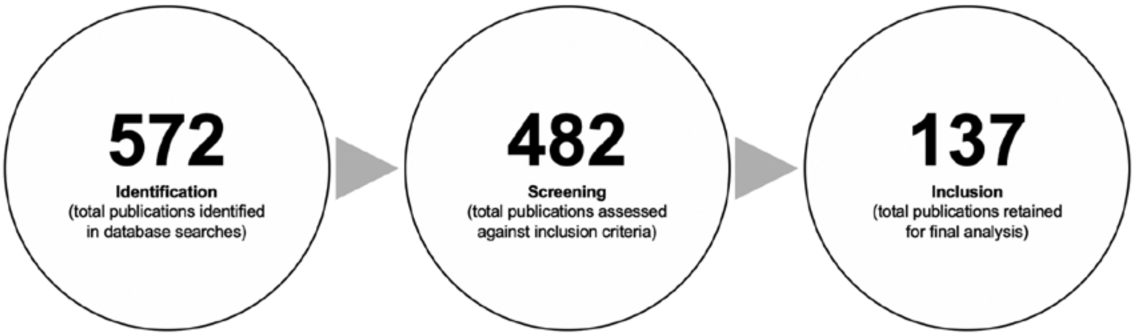

Figure 1 The Article Selection Process Across Identification, Screening, and Inclusion Stages

selection bias. These include maintaining a log of the screening and documenting the coding framework used for thematic categorization to ensure transparency and analytical consistency.

Results

A total of 137 reviewed publications on cognitive dissonance in the context of sustainable or pro-environmental tourism were included in this narrative review. All selected studies focused primarily on tourism behaviour, with theoretical and empirical contributions rooted in tourism research and complemented by adjacent insights from environmental science and consumer behaviour. A review of the publication timeline reveals a clear increase in scholarly attention to the topic. As illustrated in Figure 2, the cumulative number of relevant publications grew steadily between 2015 and 2025, with the 2025 figure representing a partial count since the database search was conducted in July 2025, yet still suggesting continued upward momentum. This trend reflects a growing recognition of the value–behaviour gap in sustainable tourism and the theoretical utility of cognitive dissonance as a lens through which to examine it.

The articles in this review span a diverse range of regional contexts. Figure 3 provides a summary of the geographical distribution of the studies, highlighting the dominance of research conducted in Europe,

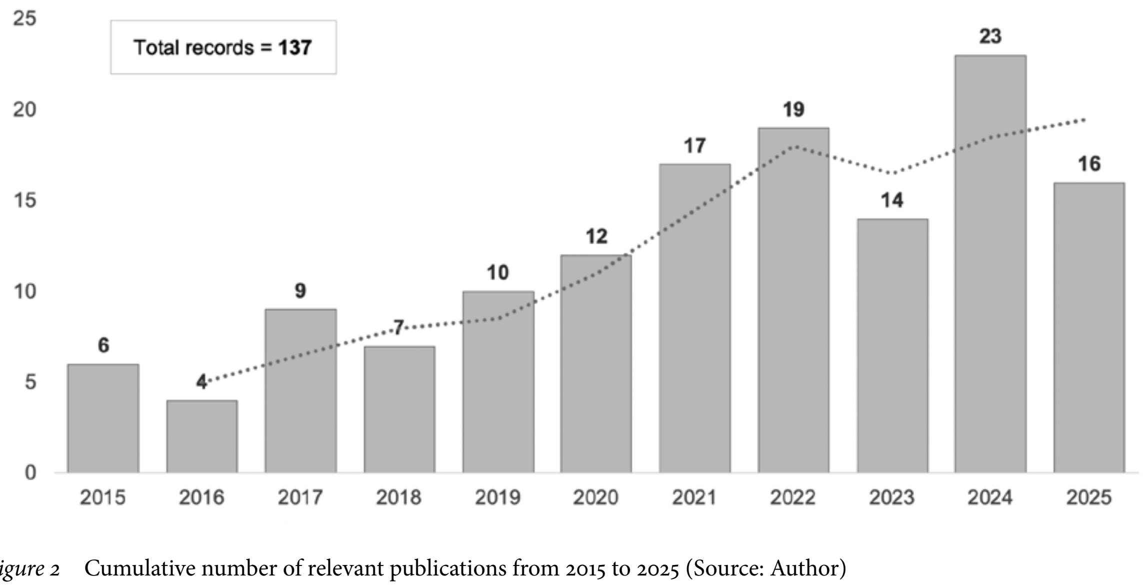

Figure 2 Cumulative number of relevant publications from 2015 to 2025 (Source: Author)

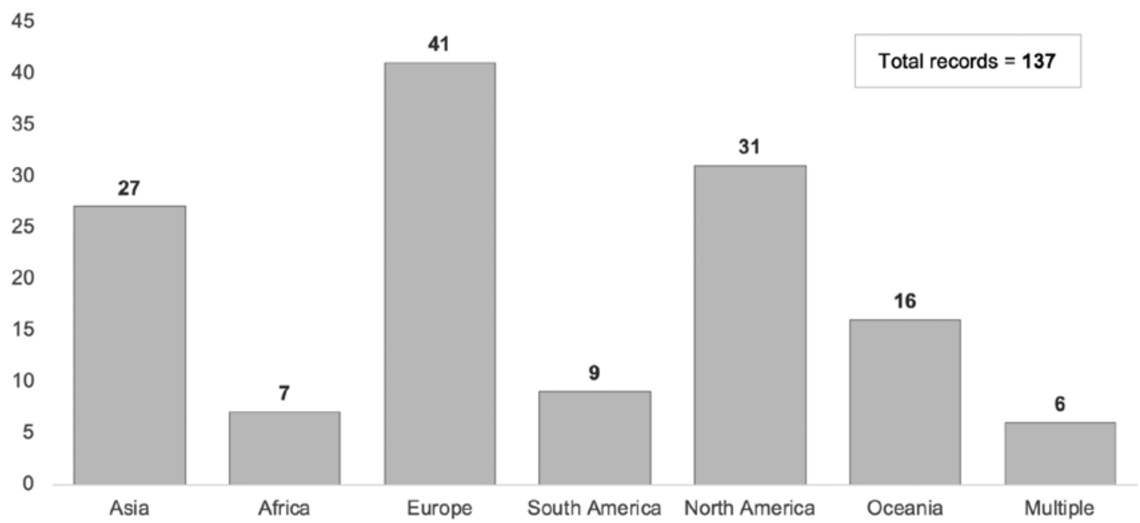

Figure 3 A Geographical Summary Outlining the Distribution of Studies by Continent

Asia, and North America, with fewer studies emerging from Africa and South America. This geographical imbalance is itself indicative of potential gaps in the global understanding of dissonance experiences across varied tourism cultures and infrastructures.

The identification of the three strands was guided by the frequency, conceptual depth and theoretical relevance of recurring themes across the reviewed studies. These strands were selected because they collectively capture the psychological (value–behaviour inconsistency), social (green identity and group influence), and structural (situational constraints and greenwashing) dimensions through which cognitive dissonance manifests in tourism contexts.

Through thematic synthesis of the literature, three overarching strands were identified, offering a structured account of how cognitive dissonance is conceptualized, triggered, and resolved in green tourism contexts (Figure 4). These three major strands are:

1. Value–behaviour inconsistency (e.g. action-attitude gap)
2. Green identity, self-perception and influence of group behaviour
3. Situational constraints and destination-level greenwashing

In the sections that follow, each of the three strands is elaborated upon to examine how tourists experience, negotiate, and resolve dissonance between their environmental values and travel-related behaviours. Each strand presents representative findings, theoretical insights, and critical reflections intended to inform future research and support the development of practical interventions.

Strand 1: Value–behaviour Inconsistency (e.g. action-attitude gap)

Value–behaviour gaps captures the core paradox at the heart of green tourism: the disjuncture between what tourists say they value and how they behave while travelling (Nieto-García et al., 2024). Often framed as the intention–behaviour gap (Viglia & Acuti, 2023) or action–attitude gap (Fuchs & Konar, 2025), this inconsistency reflects a fundamental manifestation of cognitive dissonance. Tourists may express strong environmental concerns, such as the importance of reducing emissions or protecting biodiversity, yet engage in behaviours that contradict those concerns (Juvan & Dolnicar, 2017).

Numerous studies have documented the inconsistency between tourists' environmental values and their actual travel behaviour. Peluso et al. (2021), for

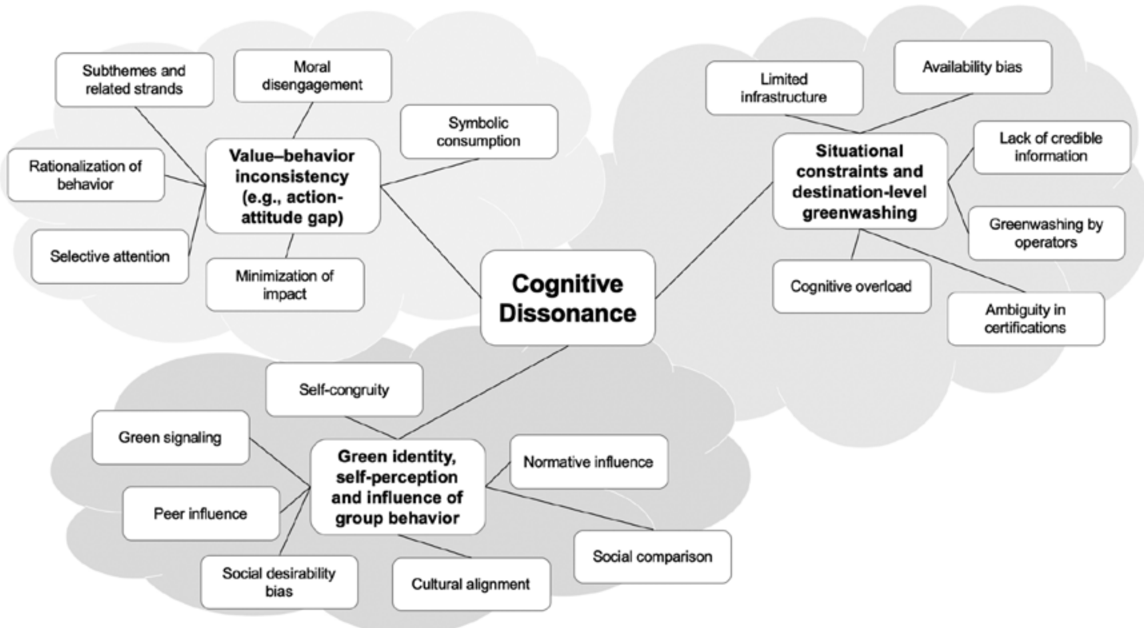

Figure 4 A Conceptual Map Synthesizing the Main Thematic Strands of Cognitive Dissonance in Green Tourism

instance, found that although European tourists who expressed strong environmental concern also reported high behavioural intentions, these intentions weakened significantly when real-world constraints such as price and time pressure were introduced. This illustrates how situational factors can create a dissonance between values and actions. Similarly, Nieto-García et al. (2024) argue that tourists often experience a conflict between their sustainability values and the desire for comfort, pleasure, or convenience during holidays—leading to behavioural inconsistency even among highly motivated individuals.

This value–behaviour gap is further exacerbated by what Viglia and Acuti (2023) call 'behavioural friction', including poorly designed booking systems and limited access to sustainability information, which obstruct tourists from aligning behaviour with intention. Fuchs and Konar (2025) highlight another form of dissonance: tourists in nature-based destinations frequently shift responsibility for sustainability to local stakeholders, distancing themselves from the implications of their own behaviour. Juvan and Dolnicar (2017) add that not all pro-environmental tourists behave the same way; among over 3,000 respondents, they found that general green attitudes had little predictive power without situational alignment or intrinsic motivation.

Collectively, these findings highlight the persistent gap between what tourists say they value and how they act, making value–behaviour inconsistency a critical point of intervention for sustainable tourism development. Moreover, several studies emphasize that tourists often employ psychological rationalizations—such as denial, moral licensing, or displacement of responsibility—to reconcile the inconsistency between their environmental values and actual behaviour (Jorgensen & Reichenberger, 2023). These coping mechanisms are frequently intertwined with hedonistic motives and the temporary sense of disinhibition that travel affords, allowing individuals to justify unsustainable choices as deserved exceptions or harmless indulgences (Crompton, 2025).

Strand 2: Green Identity, Self-perception and Influence of Group Behaviour

Green identity and self-perception emerged as key dimensions in understanding how tourists rationalize or reconcile inconsistencies between their environmental values and travel-related behaviours. Across multiple studies, individuals who self-identify as environmentally responsible consistently report stronger pro-environmental intentions (Bilynets & Cvelbar, 2022; Agyeiwaah et al., 2023; Choi & Kim, 2024). However, this identity is not always sufficient to produce congruent actions while travelling. For example, Bilynets and Cvelbar (2022) found that although tourists with pro-environmental daily habits were more likely to act sustainably while travelling, the perceived environmental image of the destination significantly influenced behavioural outcomes. Interestingly, only 26% of respondents who self-identified as environmentally conscious reported consistent pro-environmental behaviour across both daily life and travel contexts (Bilynets and Cvelbar, 2022).

Tourists were more likely to engage in eco-friendly actions when the destination was perceived as environmentally responsible, suggesting that destination image interacts with tourists' self-concept to either reinforce or suppress pro-environmental intentions (Lee et al., 2025; Song et al., 2025). Similarly, Choi and Kim (2024) investigated the role of restorative natural environments in shaping hikers' environmental behaviours. They found that perceived restorativeness (i.e. the ability of an environment to promote recovery from mental fatigue and stress, and to improve overall well-being) significantly enhanced environmental self-identity, which in turn predicted pro-environmental behaviour on nature trails. Choi and Kim (2024) also highlighted that self-perception alone is insufficient without emotional and contextual reinforcement, in line with similar studies (Linder et al., 2022; Sun, 2025).

Social identity was another moderator identified in the literature (Confente & Scarpi, 2021; Davari et al., 2024). For example, Agyeiwaah et al. (2023) recognized that tourists who identified strongly with environmentally responsible peer groups were more likely to engage in sustainable practices such as waste separation, water conservation, and ethical consumption. Their study found that social identity explained over 40% of the variance in sustainable behaviour, supporting the idea that self-perception is not only individually constructed but also socially reinforced through group affiliation and norms (Agyeiwaah et al., 2023).

Taken together, the evidence suggests that green identity and self-perception exert influence only when reinforced by situational factors and social context, indicating that fostering behavioural alignment in tourism requires more than individual motivation—it demands supportive environments and group-level engagement.

Strand 3: Situational Constraints and Destination-level Greenwashing

Situational constraints and destination-level greenwashing have been widely recognized as external barriers that undermine tourists' ability and willingness to act in accordance with their pro-environmental values. Across the reviewed literature, situational barriers such as lack of recycling infrastructure (Díaz-Meneses et al., 2020), limited availability of sustainable transport (Peeters et al., 2019), or poor access to environmentally friendly options (Dolnicar et al., 2019) often disrupted the translation of intention into action (Nieto-García et al., 2024). For instance, several studies revealed that when tourists encountered logistical or service-level barriers, such as the absence of visible waste bins or confusing signage, they were significantly less likely to engage in recycling, energy conservation, or other sustainable behaviours (Dolnicar & Demeter, 2024; Sajid et al., 2024).

These constraints are not necessarily due to tourists' unwillingness to act sustainably, but rather to the unavailability or inconvenience of sustainable alternatives in tourism settings. In parallel, destination-level greenwashing emerged as a particularly concerning structural factor that erodes trust and creates confusion among well-intentioned tourists (Papagiannakis et al., 2024; Alyahia et al., 2024). Greenwashing refers to the practice of making exaggerated or misleading claims about the environmental performance of products, services, or destinations (Papagiannakis et al., 2024). Studies have shown that tourists are increasingly aware of greenwashing and that perceived authenticity of sustainability efforts is a critical factor in determining behavioural responses (Font et al., 2025).

For example, Montgomery et al. (2024) found that tourists exposed to vague or inconsistent sustainability claims by hotels were significantly less likely to participate in in-destination green programmes, even when those programmes were offered free of charge. Similarly, Garcia and Vargas (2024) demonstrated that when sustainability claims are not substantiated by tangible evidence—such as third-party certifications or on-site practices—tourists often disengage, viewing such initiatives as marketing ploys rather than authentic efforts.

The combination of situational barriers and destination-level greenwashing contributes to a structural disconnect between tourist intentions and actual behaviour. These findings reinforce the need for more transparent, verifiable sustainability practices at the destination level and for addressing infrastructural deficits that inhibit sustainable action. Taken together, the findings indicate that identity reinforcement and situational constraints jointly shape the intensity and resolution of cognitive dissonance in tourism contexts. When tourists' environmental self-identity is supported by visible destination cues and social norms, dissonance tends to decrease, as behavioural alignment becomes easier and socially rewarded. Conversely, when external restrictions—such as limited sustainable options or misleading greenwashing practices—undermine tourists' ability to act consistently with their values, dissonance intensifies. This interaction highlights that both internal (identity-driven) and external (contextual) mechanisms operate simultaneously, suggesting that dissonance in green tourism is best understood as a dynamic process of negotiation between self-concept and situational affordances.

Discussion and Implications

The three thematic strands identified in this review—value–behaviour inconsistency, green identity and group influence, and situational constraints, including destination-level greenwashing—should not be viewed as isolated phenomena. Rather, they form an integrated and dynamic framework that illustrates how cognitive dissonance unfolds in tourism contexts (De Vos & Singleton, 2020). Value–behaviour inconsistency represents the core psychological tension, while green identity and group norms shape the social context in which this tension is interpreted and negotiated. Situational constraints and greenwashing, in turn, define the structural boundaries that can either exacerbate or alleviate this dissonance. Together, these interconnected dimensions provide a holistic understanding of how individual cognition, social influence, and environmental structure jointly shape (and sometimes perpetuate) inconsistencies in sustainable tourist behaviour.

The synthesis of the reviewed literature emphasizes that value–behaviour inconsistency is widespread and multifaceted (Juvan & Dolnicar, 2014; Fuchs & Konar, 2025). Tourists often hold genuine environmental values but face psychological, social, and structural challenges that prevent those values from consistently guiding behaviour. This inconsistency is central to understanding the limits of individual sustainability efforts in tourism and underscores the relevance of cognitive dissonance as a theoretical lens in this domain. The three strands identified (value–behaviour inconsistency, green identity and group influence, and situational constraints including destination-level greenwashing) collectively illustrate that tourist dissonance is neither purely internal nor solely context-driven. Instead, it emerges through a dynamic interplay between individual belief systems and the environments in which tourism takes place (Juvan & Dolnicar, 2017; Nieto-García et al., 2024; Crompton, 2025).

Value–behaviour inconsistency remains the most salient expression of dissonance (Nieto-García et al., 2024). Tourists frequently experience discomfort when engaging in behaviours that contradict their self-professed environmental values. However, this dissonance is not uniformly resolved. Many individuals rely on psychological mechanisms such as denial, moral licensing, or responsibility-shifting to protect their self-image (Becken, 2007; Jorgensen & Reichenberger, 2023). These coping strategies are often reinforced by broader contextual cues, such as normative group behaviour, destination branding, or the symbolic performance of sustainability (Han, 2021; Font et al., 2025), which shape how tourists perceive the legitimacy or necessity of their actions.

Furthermore, the review highlights a pronounced geographical imbalance, with most studies originating from Europe, Asia, and North America. This concentration limits the theoretical generalizability of existing models of cognitive dissonance, as they are largely grounded in sociocultural and infrastructural contexts of developed regions. From a policy standpoint, it also restricts the practical transferability of sustainability interventions to destinations in the Global South, where tourism structures, governance systems, and value frameworks differ markedly. Addressing this imbalance is essential for developing more inclusive theories and policy strategies that reflect the diversity of global tourism experiences.

The second and third strands further complicate this picture. While green identity can motivate sustainable behaviour (Bilynets & Cvelbar, 2022), it is often context-contingent, influenced by group norms and destination cues (Agyeiwaah et al., 2023; Lee et al., 2025). Similarly, situational constraints and greenwashing create external barriers that erode tourists' capacity or willingness to act consistently with their values (Papagiannakis et al. 2024; Dolnicar & Demeter, 2024). These insights highlight that dissonance in tourism is not simply a cognitive conflict to be resolved by better awareness or education. Rather, it is a socially and structurally embedded phenomenon that requires both individual and systemic responses (Dolnicar et al., 2019; Montgomery et al., 2024).

Theoretical Implications

The findings of this review carry several implications for theory development within tourism and consumer behaviour research. First, the application of cognitive dissonance theory to tourism behaviour offers a valuable psychological complement to existing intention–behaviour models (Juvan & Dolnicar, 2014; Nieto-García et al., 2024). It shifts the focus from why pro-environmental behaviour is lacking to how individuals reconcile such discrepancies internally and behaviourally (Higham et al., 2013). This shift enables more nuanced theorizing around the emotional and cognitive struggles tourists face in sustainability decision-making.

Second, the review highlights the need for theoretical integration across disciplines. Research on green tourism has often isolated psychological, social, and structural determinants of behaviour. The current synthesis suggests that such boundaries are artificial and limiting (Han, 2021). For instance, tourists' dissonance-reduction strategies are influenced not only by personal values but also by destination image, social identity, and infrastructural support (Agyeiwaah et al., 2023; Dolnicar et al., 2019). The integration of cognitive dissonance theory with social identity theory, norm activation theory, or value–belief–norm theory (Confente & Scarpi, 2021) may thus yield more holistic models capable of capturing the complexity of sustainable tourist behaviour.

Third, the analysis challenges the assumption that dissonance always results in positive behaviour change. While classic dissonance theory posits that inconsistency leads to a motivational state aimed at reducing discomfort (Festinger, 1957), the evidence suggests that many tourists resolve dissonance not by altering behaviour but by adapting their perceptions or rationalizations (Becken, 2007; Jorgensen & Reichenberger, 2023). This has profound implications for the design of interventions, suggesting that simply increasing awareness or promoting green values may not be sufficient (Dolnicar & Demeter, 2024) without altering the contextual conditions that enable sustainable behaviour.

Managerial Implications

From a managerial and policy standpoint, the findings offer several actionable insights for destination managers, tourism marketers, and sustainability educators. One key implication is the importance of minimizing behavioural friction. Even motivated tourists may abandon pro-environmental intentions when they encounter logistical or cognitive obstacles (Peluso et al., 2021; Dolnicar et al., 2019). Enhancing the visibility, accessibility, and ease-of-use of sustainable options, such as public transport, recycling infrastructure, or eco-certified services, can help close the intention–action gap (Peeters et al., 2019). For instance, destinations can provide real-time public transport apps that integrate ticketing and route planning (Tung et al., 2020), ensure that recycling bins are color-coded (Fuchs & Konar, 2025) and placed in high-traffic tourist areas, and display certification logos or energy-use indicators prominently within accommodation booking platforms (Bilynets et al., 2023). These practical measures reduce cognitive and logistical barriers, translating sustainability from abstract awareness into tangible, convenient choices for visitors. Second, the findings caution against superficial or symbolic sustainability messaging. Greenwashing not only fails to inspire genuine behavioural change but may actively foster distrust and disengagement among tourists (Papagiannakis et al., 2024; Montgomery et al., 2024). Destinations must move beyond vague environmental claims and provide transparent, verifiable indicators of sustainability (Font et al., 2025), ideally supported by third-party certifications and on-site cues. Authenticity in communication plays a vital role in shaping tourists' willingness to act sustainably.

Third, the influence of group norms and identity signalling suggests that social mechanisms can be powerful tools for change (Confente & Scarpi, 2021; Agyeiwaah et al., 2023). Destinations can harness this by embedding sustainability into the tourist experience in visible and socially rewarding ways—for example, through gamified sustainability challenges, community-based tourism initiatives, or visible participation in green programmes (Song et al., 2025). In practice, such gamified sustainability challenges can take the form of point-based systems or digital badges that reward tourists for engaging in eco-friendly actions—such as using public transport, reducing waste, or supporting local conservation projects (Negrușa et al., 2015; Pasca et al., 2021). These challenges can be integrated into destination apps or loyalty programmes, enabling visitors to track their progress and compare achievements with others, thereby reinforcing pro-environmental behaviour through enjoyment and social recognition (Kaakandikar et al., 2025). These strategies can activate social identity and reinforce environmentally responsible behaviour as the normative, desirable choice. Finally, the review underscores that sustainable behaviour in tourism cannot be isolated from its broader structural conditions. Policymakers should support regulatory frameworks that reduce barriers to sustainable consumption, incentivize industry compliance, and standardize sustainability communication (Han, 2021; Khater et al., 2024). In this regard, addressing cognitive dissonance is not merely a matter of influencing tourist psychology but transforming the tourism system itself to align with pro-environmental values (Seyfi et al., 2025).

Conclusion and Future Research

This narrative review has examined how cognitive dissonance theory can deepen our understanding of the persistent gap between tourists' pro-environmental values and their actual travel behaviour. The review identified three dominant thematic strands: value–behaviour inconsistency, green identity and group influence, and situational constraints, including destination-level greenwashing. Together, these strands highlight the multifaceted nature of dissonance in tourism, emerging from individual psychology, social identity, and structural context. Tourists may rationalize their behaviour, defer responsibility, or respond to environmental cues in ways that maintain dissonance rather than resolve it. As such, cognitive dissonance should be understood not as a temporary psychological discomfort to be corrected, but as an ongoing negotiation shaped by values, norms, and the tourism environment itself. The article contributes a conceptual map of how dissonance is experienced and managed in green tourism, offering a framework that can inform both theory development and practical intervention.

Future research should pursue several key directions to advance the field. First, greater contextual and cultural diversity is needed. Existing literature is heavily concentrated in Europe, North America, and East Asia, limiting understanding of how cultural values, social norms, and infrastructure shape dissonance in other regions—particularly the Global South. This geographical imbalance also restricts the development of managerial and policy insights that are sensitive to varying socioeconomic and cultural contexts. Expanding research in underrepresented regions would not only broaden theoretical generalizability but also inform more inclusive sustainability strategies that reflect diverse tourism realities. Second, most studies rely on cross-sectional data, which fails to capture how dissonance evolves during the tourist experience. Longitudinal designs, mobile-based data collection, or digital ethnography could offer deeper insights into real-time coping mechanisms. Moreover, experimental research remains scarce. Future work should test interventions such as nudges, identity-based messaging, or default options to examine their effectiveness in reducing dissonance.

Furthermore, future research could explore how social comparison processes—particularly within digital media environments—shape tourists' experience and resolution of cognitive dissonance. As this review highlights the significance of social identity and group influence in moderating value–behaviour inconsistencies, examining how online interactions and destination portrayals reinforce or challenge these dynamics would provide a natural extension of the current findings. Finally, integrating cognitive dissonance theory with complementary frameworks, such as moral psychology, social identity theory, or habit formation models, may yield more robust explanatory power. Ultimately, there is a need to include industry and policymaker perspectives to better understand how tourism providers perceive and respond to tourist dissonance. Addressing cognitive dissonance in this context requires not only changing minds, but also changing systems. Sustainable behaviour can be better supported through infrastructure, messaging, and social mechanisms that reduce friction and increase alignment between tourists' values and available choices.

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Original Scientific Article

A 25-Year Odyssey Through Luxury Tourism Research

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This study conducts a bibliometric and systematic literature review (SLR) of luxury tourism research, analysing 72 Scopus-indexed articles from 2000 to 2025. The findings reveal a growing interest in luxury tourism, with publication peaks in 2024 (14 articles) and notable growth between 2022 and 2023. Italy leads in research output (8 articles), followed by the UK, New Zealand, and China (7 each), while developing nations like Indonesia remain underrepresented. Thematic analysis identifies key clusters, including socio-economic impacts, luxury consumer behaviour, and sustainability in hospitality. Research predominantly employs qualitative methodology (38 studies) as the primary data collection tool. Emerging trends emphasize digitalization, sustainability, and experiential luxury tourism, with increasing use of AI, machine learning, and social media analytics. The study highlights the multidisciplinary nature of luxury tourism, intersecting with business, social sciences, and environmental studies. Mixed-method approaches are gaining traction, blending qualitative depth with quantitative generalizability. Key challenges include balancing luxury tourism's economic benefits with sustainability and addressing infrastructural gaps in emerging destinations. The VOSviewer analysis underscores global research collaborations, with Europe and Asia as dominant contributors. Practical implications suggest that stakeholders should prioritize sustainable practices, digital marketing, and personalized experiences to cater to luxury tourists. Future research should explore developing markets, cultural influences, and policy impacts to enrich the global understanding of luxury tourism dynamics.

Keywords: luxury tourism, bibliometric analysis, systematic literature review, PRISMA, digitalization, consumer behaviour

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Introduction

Conversations regarding luxury tourism are essential as this sector provides unique experiences for travellers while also exerting considerable economic, social, and environmental influence on tourist destinations. Luxury tourism is now comprehensively defined, extending beyond opulent amenities like five-star hotels and private jets to include comfort, distinctiveness, and tailored experiences that vary across market segments, including budget travellers who desire aspects of luxury in their journeys (Correia et al., 2020; Sukmawati et al., 2018). Moreover, luxury tourism influences destination image, fosters innovation, and serves as a standard in the advancement of premium tourism services (Iloranta, 2022). Conversations on luxury tourism are essential for comprehending global issues such as sustainability, digitalization, and demographic shifts that affect supply and demand in this sector (Aeberhard et al., 2020). As scrutiny about social and environmental consequences intensifies, luxury tourism is compelled to implement sustainable practices while maintaining the quality of the experience (Spence et al., 2022). Research underscores the necessity for a comprehensive framework to comprehend the motives, actions, and expectations of luxury travellers along with the industry's capacity to respond to evolving customer preferences (Japutra et al., 2022).

Luxury tourism research is crucial due to its rapid expansion, which affects economic development, regional growth, and wealth generation, as well as impacting market segmentation and consumer behaviour (Lopes et al., 2023). Comprehending luxury tourism enables policymakers and business leaders to formulate policies that reconcile substantial economic advantages with sustainability and social responsibility, particularly as the sector adjusts to global problems like digital transformation and the COVID-19 pandemic (Kataya, 2021). Academic study in this domain also examines the evolving meanings and expectations of luxury, which are increasingly influenced by individual experiences, social standing, and cultural trends (Correia et al., 2020; Japutra et al., 2022). Examining luxury tourism offers understanding of customer motives, the influence of tailored services, and the significance of innovation in sustaining market dominance (Spence et al., 2022). Additionally, it is essential to investigate luxury tourism in emerging destinations, as this may uncover innovative frameworks for resource management, destination development, and fair growth (Thirumaran et al., 2021).

Currently, numerous countries are concentrating their tourism development on the luxury tourist sector as a principal source of revenue. Thailand and the Philippines distinguish themselves in Asia by emphasizing luxury tourism attributes, including exclusivity and authentic experiences, in their promotional efforts (Salangsang et al., 2022), whereas Turkey is methodically enhancing its services and products to appeal to affluent travellers (Demir & Saribaş, 2014). Croatia distinguishes itself via personalized service, harmony with nature, opulent architecture, and culinary expertise, yet it continues to encounter infrastructural obstacles (Prevolšek & Golja, 2024). Oman is strategically establishing itself as a luxury tourism destination in the Middle East by developing unique tourism offerings, enhancing brand visibility, and investing in premium amenities (Mishra & Kukreti, 2022). Smaller nations focusing on luxury tourism have experienced swift economic growth due to their expertise in exclusive services desired by affluent travellers (Álvarez-Albelo & Hernández-Martín, 2009). Iran has commenced the development of its luxury tourist potential by emphasizing its distinctive culture and natural beauty, although this potential remains largely unexploited (Noroozi, 2021).

We investigate luxury tourism by reviewing relevant literature. This article explores luxury tourism ideas to discuss how academics' attention of luxury tourism regarding discussed topic. This study discusses developments in luxury tourism research, the nations involved in luxury tourism, and the interconnections among related fields. Researchers examined papers from worldwide publications indexed in Scopus and using the keyword "luxury tourism". The selection of luxury tourism as the focus ensures that the literature evaluation encompasses a broad range of concepts, trends, and market dynamics, thus offering a thorough theoretical and practical framework prior to engaging in more specific derivative studies. Also, researchers limited the literature sources to Scopus-indexed papers to guarantee high quality, credibility, and scientific relevance as Scopus is one of the largest and most esteemed academic databases that offers publications subjected to a stringent peer-review process. The data gathered from this study is anticipated to foster advances in luxury tourism science and serve as a paradigm for future luxury tourism development.

Materials And Methods

This study examines luxury tourism by highlighting the perspectives of scholars. This research employs a systematic literature review (SLR) methodology characterized by a rigorous and transparent process for selecting reference materials. Researchers employed a structured and domain-specific systematic literature review to discover, analyse, and thoroughly evaluate research pertinent to the themes addressed in this study. Moreover, the researchers utilized the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) methodology. Bibliometric analysis is a quantitative approach for discerning patterns, trends, and influence within the scientific literature of

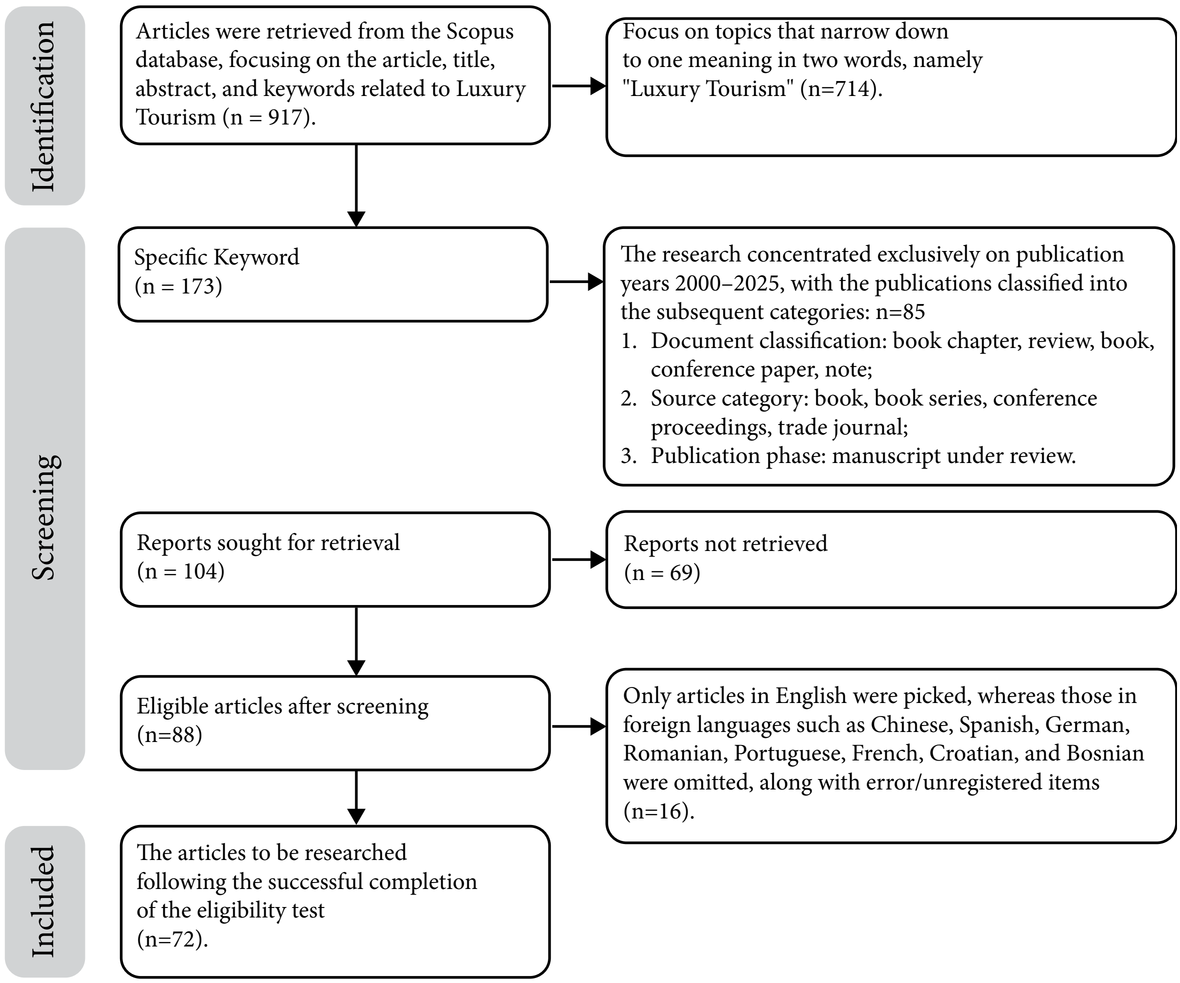

Figure 1 SLR Preferred Reporting Items for PRISMA

a discipline. The primary phases encompass data acquisition from databases, data sanitization, examination of publications, citations, author collaborations, keyword analysis, and visualization through software. The authors employed the VOSviewer program as a tool that significantly facilitated the methodical and objective mapping of research advancements, identification of prominent authors or institutions, and discovery of fresh research prospects (Hassan & Duarte, 2024; Moral-Muñoz et al., 2020).

Data Collection

This research is a mixed methods approach that integrates an SLR with bibliometric analysis. This combination aims to achieve a thorough understanding of the study issue by a systematic review of pertinent literature and quantitative analysis of scientific publishing trends. The data sources and collection methods employed in this investigation consisted of scientific papers indexed in the Scopus database. Search keywords were methodically organized based on the research subject, such as "Luxury Tourism". This work used the bibliometric analysis method in accordance with the PRISMA methodology to guarantee a systematic, transparent, and replicable approach (Fan et al., 2024). The search methodology adhered to the PRISMA guidelines, encompassing the phases of identification, screening, eligibility evaluation, and inclusion.

Data were exclusively sourced from the Scopus database, commencing with the identification of keywords and the establishment of inclusion and exclusion criteria pertinent to the research topic (Elnakeeb & Elawadly, 2025).

Data were subsequently extracted and quantitatively analysed to discern publication trends, countries, research topics, research methodologies, analytical techniques, data collection methods, citation frequency, prolific journals, research methodologies, network visualization (keywords and countries), overlay visualization, and density visualization. Network analysis was performed utilizing VOSviewer software to delineate author collaboration (co-authorship), co-citation, bibliographic coupling, and keyword co-occurrence, aiming to elucidate intellectual structures and principal topics inside the research domain (Elnakeeb & Elawadly, 2025). The analytic results were visualized through network maps and trend graphs to elucidate collaboration patterns and issue developments (Monoarfa et al., 2024). The validation and interpretation of the results involved comparing the findings with relevant literature and recognizing the limitations of the investigation due to reliance on a single database (Nyulas et al., 2025). This methodology has been extensively employed in recent bibliometric studies, which underscores the incorporation of PRISMA to enhance transparency and impartiality in bibliometric analysis.

Results and Discussion

Theory and Concept

Research on luxury tourism presented in Table 1 demonstrates a variety of approaches and methodology. Some investigations utilized secondary data, including literature, policy papers, and historical archives (Scheyvens, 2002; Krauss, 2019), whereas others employed primary data via surveys, trials, or interviews (Chen & Peng, 2014; Seo et al., 2021). The analytical techniques employed are diverse, encompassing qualitative methods like discourse analysis and ethnography, as well as quantitative ones such as Structural Equation Modelling (SEM) and regression analysis.

Certain studies employ mixed methods, integrating qualitative and quantitative approaches to achieve a comprehensive understanding, exemplified by the research conducted by Correia et al. (2020), which utilized SEM and content analysis. Current trends indicate a growing utilization of digital data, including online reviews and social media, with sophisticated analytical methods such as machine learning and artificial intelligence (Tarquini-Poli & Klaus, 2025). This illustrates the adaptation of tourist research to technology advancements and the necessity for comprehensive data analysis.

Luxury tourism research is continually advancing, integrating conventional methodologies with innovative techniques. Recent studies examine not only economic and consumer factors but also social, environmental, and cultural consequences. Interdisciplinary techniques are becoming prevalent, characterized by collaborations among social sciences, economics, technology, and environmental sciences to tackle intricate issues within the global tourism sector.

Data Source of Studies

Luxury tourism research data sources can be classified into primary and secondary categories. Secondary data, including literature, policy papers, and historical archives, are extensively utilized in retrospective or policy studies (Krauss, 2019; Thurlow, 2016). These sources offer substantial historical and political context; nevertheless, they are frequently constrained by accessible data and may not consistently reflect current information.

Conversely, primary data, including surveys, interviews, and experiments, are predominantly employed to comprehend the perspectives and behaviours of tourist stakeholders, such as customers and industry participants (Gupta & Kour, 2021; Lecchini et al., 2021). The benefit of primary data is its relevance and specificity, yet it necessitates greater time and money for collection. In recent years, digital data, including online reviews and social media, have emerged as prominent sources due to their accessibility and vast information availability (Angelini, 2023; She & Zheng, 2024).

Current trends demonstrate a growing utilization of both primary and secondary data to enhance study validity. For instance, certain studies employ secondary data for theoretical frameworks and primary data for empirical validation (Correia et al., 2020). This methodology facilitates more thorough study by integrating the advantages of both data kinds while mitigating their limitations.

Analysis Method of Studies

Tourism research employs diverse analytical methodologies, contingent upon the objectives and nature of the data utilized. Qualitative methods, including discourse and thematic analysis, are frequently employed to investigate policy narratives, stakeholder views, or cultural significances (d'Hauteserre, 2005; Eijdenberg et al., 2024). These methods enable researchers to investigate depth and context; however, the findings are challenging to generalize.

Quantitative approaches, including SEM, regression analysis, and various statistical studies, are frequently employed to investigate relationships between variables or forecast trends (Ahmad, 2014; Giannoni et al., 2020). These methodologies provide the advantage of generating generalizable conclusions; however, they frequently fail to capture social and cultural nuances. Certain studies employ a mixed methods approach to leverage the advantages of both techniques, exemplified as research utilizing SEM for statistical analysis alongside interviews for enhanced contextual depth (Correia et al., 2020).

Recent advancements in analytical methodologies encompass the application of computer tools, including machine learning and natural language processing (NLP), to examine unstructured data, such as online reviews and social media content (She & Zheng, 2024). This methodology is becoming increasingly popular because of its capacity to manage extensive data sets and discern patterns that are undetectable by conventional techniques.

Research Method of Studies

Research methodologies in tourist studies include several approaches, such as case studies, experiments, and literature reviews. Case studies are extensively employed to investigate certain phenomena within a defined context, such as the effects of tourism on a location (Bernard & Cook, 2015). This method offers comprehensive insight but is constrained in its applicability.

Experiments, especially in consumer behaviour research, are employed to examine cause-and-effect interactions in controlled settings (Seo et al., 2021). Simultaneously, SLRs are extensively employed to consolidate findings from diverse prior studies, as demonstrated in the research conducted by Japutra et al. (2022). This approach is effective for pinpointing research deficiencies and prospective developments. Current trends indicate a growing utilization of technology-driven approaches, including big data analytics and machine learning (Liu et al., 2024). This enables researchers to examine extensive and intricate data, including internet reservation trends or social media sentiments. The integration of classic and novel methodologies is becoming prevalent, indicating a methodological advancement in tourist research.

Data Type of Research

Data types in tourist research can be categorized as qualitative and quantitative. Qualitative data, including interview transcripts, textual materials, or observational notes, are extensively utilized in interpretive research (Poljak Istenič & Fakin Bajec, 2021). This material is contextually rich but necessitates comprehensive study and is frequently subjective. Quantitative data, like survey findings or economic statistics, are predominantly utilized in research focused on assessing relationships or trends (Morando & Platania, 2022). This data's advantage resides in its suitability for statistical analysis; however, it frequently fails to encapsulate social nuances. In recent years, unstructured data, including online evaluations and photos, has been widely utilized, facilitated by analytical techniques such as natural language processing and computer vision (She & Zheng, 2024).

The integration of qualitative and quantitative data (mixed methods approach) is increasingly favoured since it enables researchers to amalgamate comprehensive and extensive analysis. For instance, certain research employs quantitative surveys to assess broad trends and qualitative interviews to elucidate the underlying reasons behind those changes (Correia et al.,

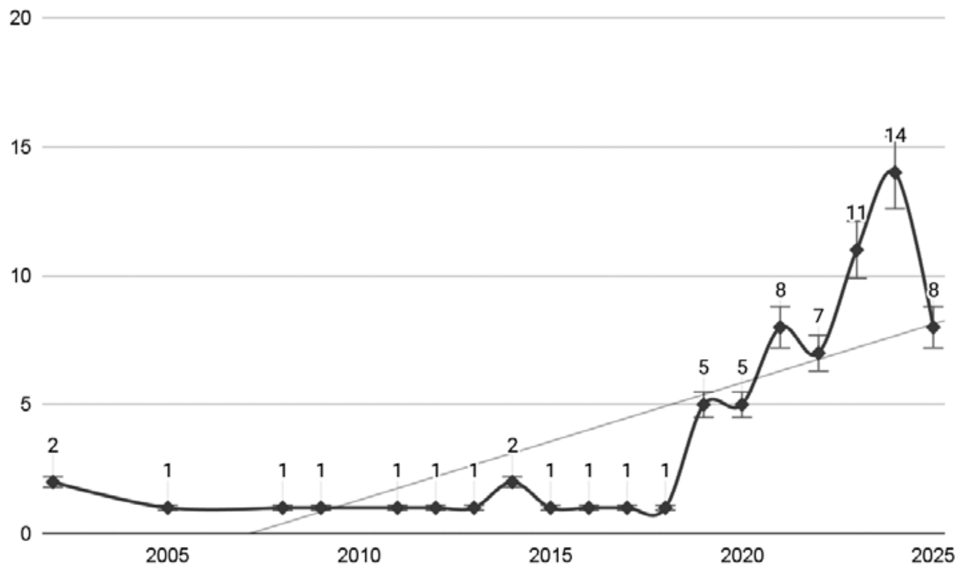

Figure 2 *Trends in Luxury Tourism Research by Year of Publication*

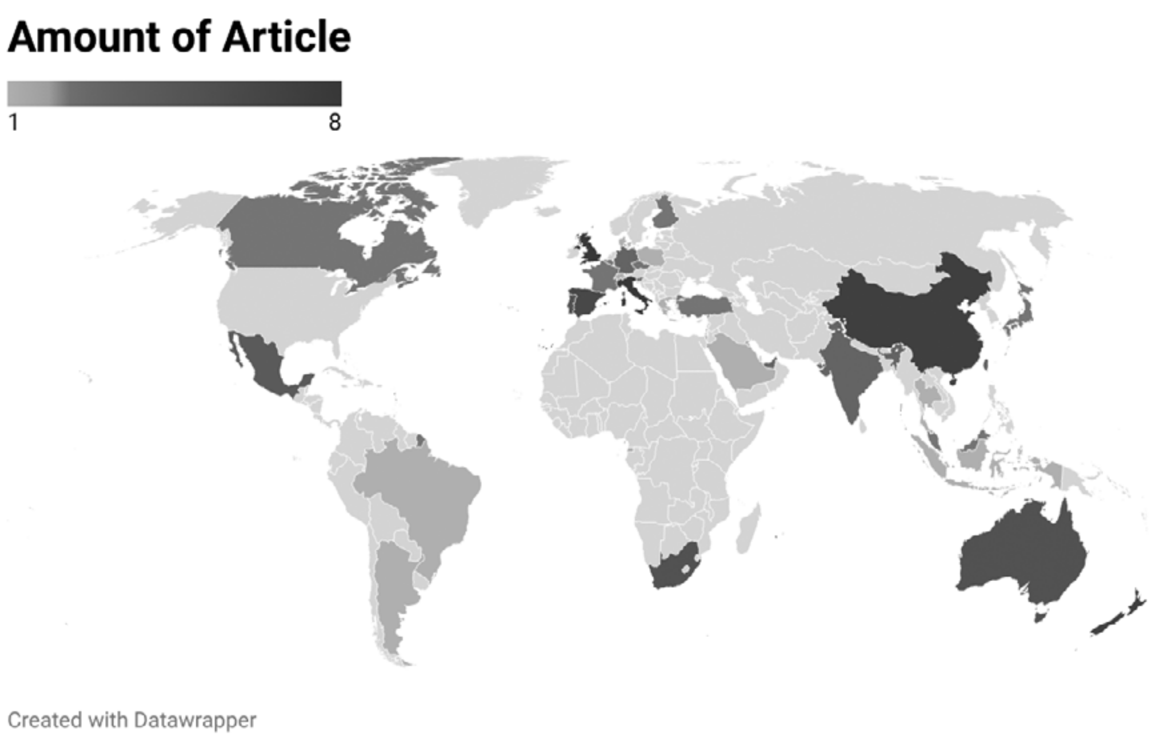

Figure 3 Countries with the Most Luxury Tourism Publications

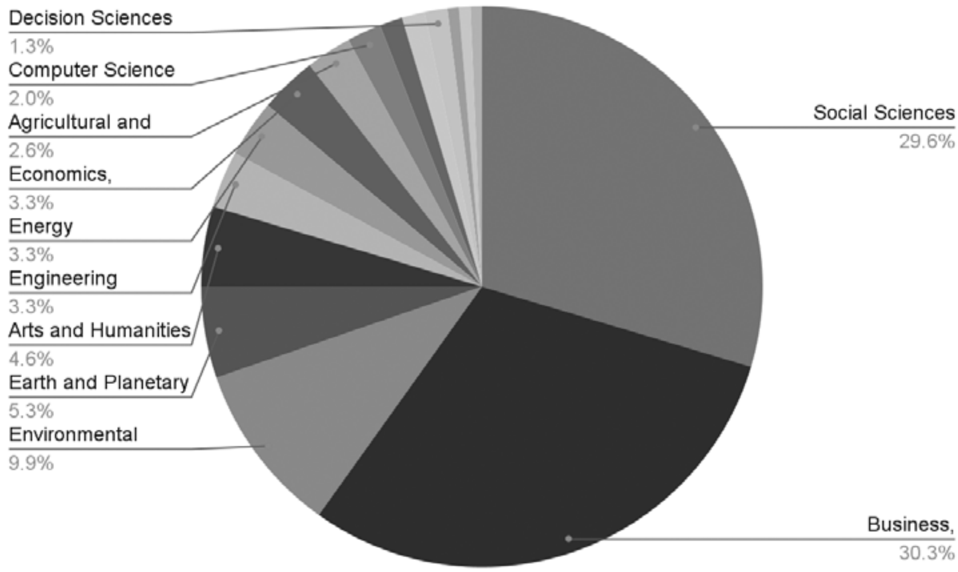

Figure 4 Subject Research

2020). This methodology offers a more integrated and thorough comprehension in luxury tourist research.

Descriptive Statistics

This study utilized data acquired from the Scopus database, downloaded on July 6, 2025, at 3:00 PM WIB. The dataset comprised 72 papers covering a 20-year period from 2000 to 2025, with the identification, screening, eligibility, and inclusion processes detailed in the Research Methods chapter. According to the data from the Scopus database presented in Figure 2, research pertaining to luxury tourism has been rather scarce during the past two decades, peaking in 2024 with 14 publications, while the most significant growth transpired between 2022 and 2023, yielding 4 articles. From 2005 to 2014, the quantity of articles effectively indexed by Scopus shows no growth.

Figure 3 illustrates that Italy, with 8 articles, was the leading nation of origin for published articles, followed by the United Kingdom, New Zealand, and China with 7 articles each, and the USA and Spain with 6 articles each, among others. Conversely, Indonesia has produced merely one article pertaining to luxury tourism. Figure 4 illustrates that, according to study subjects, the 'Business' group predominates over others, comprising 30.3%, with the 'Social Sciences' category following at 29.6%. These themes pertain to scientific disciplines associated with the luxury tourism research topic. Moreover, luxury tourism intersects with earth and planetary sciences, art and humanities, environmental sciences, agricultural sciences, engineering, and other related fields, all of which constitute a significant convergence.

Figures 5, 6, and 7 delineate the research components primarily employed in luxury tourism papers indexed by Scopus, encompassing research methodologies, analytical techniques, and data collection procedures, as detailed below:

a) Qualitative research was the predominant methodology, with 38 papers. Most researchers utilized case studies, literature reviews, and ethnographic investigations. The second most prevalent research approach was quantitative, with 29 publications, followed by mixed methods research, which included 5 articles.
b) In this analysis, researchers classified the research methodologies into five categories to streamline the diverse approaches employed in the papers.

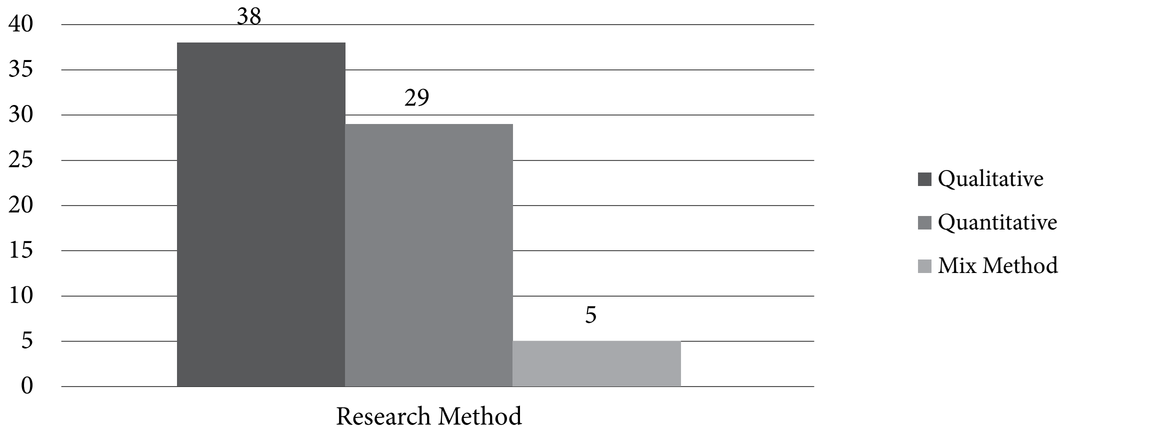

Figure 5 Research Method

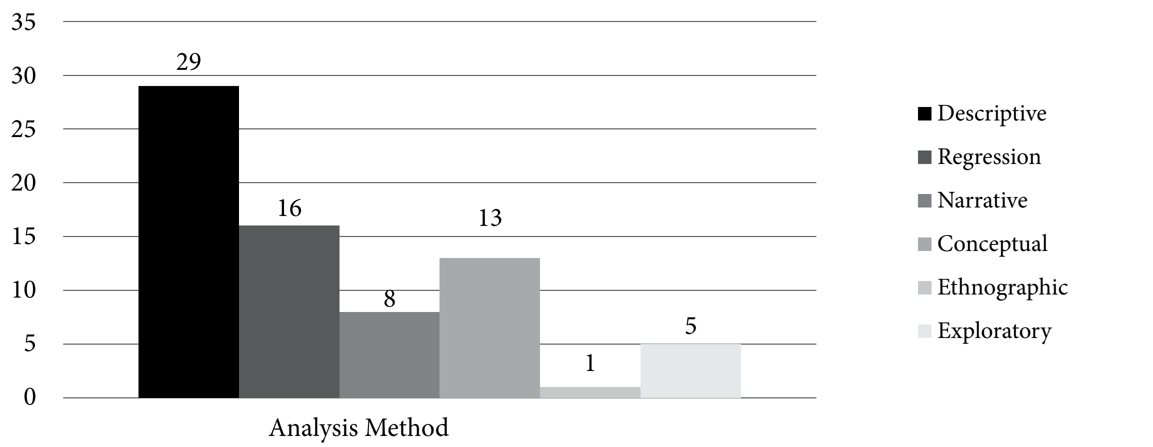

Figure 6 Analysis Method

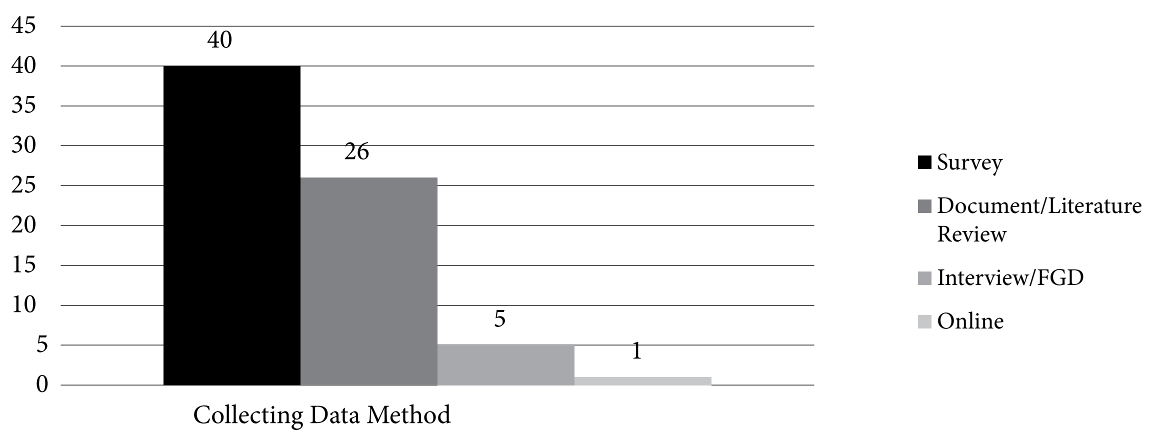

Figure 6 Analysis Method

Table 1 Top 10 Articles with the Most Citations

No	Title	Year	Journal	Country	Citation
1.	Backpacker tourism and Third World development	2002	Annals of Tourism Research	New Zealand	233
2.	The challenge of sustainable tourism development in the Maldives: Understanding the social and political dimensions of sustainability	2011	Asia Pacific Viewpoint	New Zealand	104
3.	Examining Chinese consumers' luxury hotel staying behaviour	2014	International Journal of Hospitality Management	United Kingdom	99
4.	Queering critical discourse studies or/and performing 'post-class' ideologies	2016	Critical Discourse Study	Switzerland	89
5.	The appeal of sustainability in luxury hospitality: An investigation on the role of perceived integrity	2021	Tourism Management	Italy	87
6.	Luxury tourism and regional economic development in Mexico	2012	Professional Geographer	Mexico	77
7.	Elite mobilities: The semiotic landscapes of luxury and privilege	2002	Social Semiotics	United States	77
8.	Examining the meaning of luxury in tourism: A mixed-method approach	2020	Current Issues in Tourism	Portugal	51
9.	Eco-tourism and luxury: The case of Al Maha, Dubai	2009	Journal of Sustainable Tourism	New Zealand	47
10	reconciling tourism development and conservation outcomes through marine spatial planning for a Saudi Giga-project in the Red Sea (the Red Sea project, vision 2030)	2020	Frontiers in Marine Science	Greece	45

The predominant method employed was descriptive research. Descriptive research approaches seek to methodically and properly depict a continuous occurrence, situation, or relationship without interfering or influencing variables. This research focuses on 'what' occurs, rather than 'why' or 'how' it occurs. The primary emphasis is on gathering data that delineates the traits, activities, alterations, or interrelations among phenomena observed in the natural environment (Nassaji, 2015). Regression analysis was the second most utilized method in this investigation, with 16 publications employed. Additional analytical methods, including conceptual, narrative, exploratory, and ethnographic analyses, were employed in the examination of data within luxury tourism studies.

c) The primary data collection method for the subject of luxury tourism were surveys, used in 40 research articles. Surveys may be categorized as qualitative research methods when they are structured to gather narrative or descriptive data, exemplified by open-ended questions that enable respondents to offer comprehensive responses regarding their experiences, opinions, or perception (Braun et al., 2021). Besides surveys, the data gathering methods employed in these publications comprised a literature analysis of 26 papers, interviews / focus group discussions from 5 articles, and an online review of 1 article.

Table 1 enumerates the periodicals most referenced by researchers. The *Annals of Tourism Research* features an article titled 'Backpacker Tourism and

Third World Development' published in 2002, which has received the highest number of citations, totalling 233. This study examines the impact of backpacker travellers on the local economy in relation to luxury tourists. The research employs a qualitative methodology utilizing secondary data collection techniques and several literature evaluations encompassing prior studies, governmental legislation, and visitor behaviour. The second most frequently cited journal is *Asia Pacific Viewpoint*, with 104 citations, followed by the *International Journal of Hospitality Management*, which has 99 citations.

Discussion

This research employed the VOSviewer application for data management and visualization. VOSviewer is utilized to generate, visualize, and evaluate bibliometric maps of scientific data, illustrating correlations among publications, authors, or keywords in the research literature (van Eck & Waltman, 2017). Figure 8 illustrates eight clusters of 59 items derived from 415 keywords, with a minimum occurrence of each term being two. The specifics of each cluster are elucidated as follows:

1. Cluster I (designated by red and 13 keywords)
   The, study indicated that the articles are intricately connected to cultural heritage, cultural tourism, economic conditions, gentrification, heritage, heritage tourism, Mexico, political power, regional development, tourism, tourist development, and tourism management. This cluster examines substantial transformations in a region resulting from tourism operations, encompassing the socio-cultural dimensions of the community. Their discourse encompasses the government's anticipation of delivering equitable focus to the commercial sector, the community, and the environment within its policies. Moreover, internal corporate management must comprehend the motives and preferences of luxury tourists to develop suitable and appealing marketing initiatives.
2. Cluster II (designated by green and comprising 10 keywords)
   The study indicated that the articles were intricately connected to economic development, well-being, conspicuous consumerism, luxury hotels, luxury shopping, luxury yachts, luxury tourism, social standing, tourist behaviour, and Chinese tourists. This cluster examines the types, qualities, characteristics, and behaviours of luxury tourists, the selected activities during their travels, and the impact of these activities, including their contribution to community well-being.
3. Cluster III (designated by dark blue and comprising 9 keywords)
   The study indicated that the articles were intricately connected to COVID-19, customer experience, hospitality, the hospitality sector, luxury, luxury hospitality, the Maldives, marketing, and sustainable tourism. This cluster examined management preparedness to accommodate and serve various luxury tourists, notably during the COVID-19 pandemic disruption. Moreover, it was discovered that luxury tourists exhibited a greater interest in organizations that communicated information pertaining to the execution of sustainable practices, since this reflected the company's credibility in its dedication to sustainability. The data collection methods employed in this instance involved information acquisition on the internet, encompassing comments and responses, and field observations.
4. Cluster IV (designated by yellow and comprising seven keywords)
   The study indicated that the articles were intricately connected to experience luxury, Finland, perception, tourism economics, tourism market, tourism attraction, and tourism destination. This cluster examines the tourism industry's viewpoint on delivering optimal service to luxury travellers, encompassing the selection of attractions and destinations, expenditure patterns, vacation frequency, motivations, and additional factors, while also promoting the formulation of targeted marketing strategies for this demographic.
5. Cluster V (designated by purple and comprising seven keywords)
   The study indicated that the articles pertained to consumer behaviour, the hotel sector, loyalty, luxury consumption, luxury accommodations, travel behaviour, and travel motivation. This cluster ex-

amines tourist motivation and its impact on destination selection, satisfaction, and the intention to revisit. Moreover, it was determined that loyalty to a tourist site does not invariably develop post-visit but is affected by other elements, including desire, attitude toward act, subjective norms, and CBI. The primary data collection method employed was a questionnaire survey.

6. Cluster VI (designated by light blue and comprising 6 keywords)
   The analysis indicates that the publications pertain to Asia, ecotourism, Eurasia, Europe, sustainable development, and the United Arab Emirates. This cluster examines stakeholder assertions that tourist development is predicated on sustainable tourism; nonetheless, numerous elements remain incongruent with sustainable principles in practice. The identification of diminishing demand for luxury packages in specific locales and the detrimental effects of mass tourism have prompted individuals to explore areas that adopt ecotourism and sustainable tourism practices. The study additionally examines many luxury hotels in the UAE that employ visual communication to entice travellers by highlighting the opulence of their offerings. The two most critical elements of communication are client perceptions of the hotel and the hotel's perspectives, which epitomize the social media communication of luxury hotels.
7. Cluster VII (designated by orange and comprising four keywords)
   The study indicated a strong correlation among the articles concerning conservation, the Red Sea, Saudi Arabia, and sustainability. This cluster examines how luxury tourist development in coastal regions can preserve environmental integrity and even augment conservation value, contingent upon effective spatial planning, designated conservation zones, and interdisciplinary collaboration.
8. Cluster VIII (designated by brown and comprising three keywords)
   The investigation indicated that the papers are intricately connected to competitiveness, literature reviews, and social media. This cluster examines the increasing interest in luxury tourism destinations in the Middle East and Asian nations, which exhibit unique competitive advantages, especially in cultural attractions bolstered by conservative

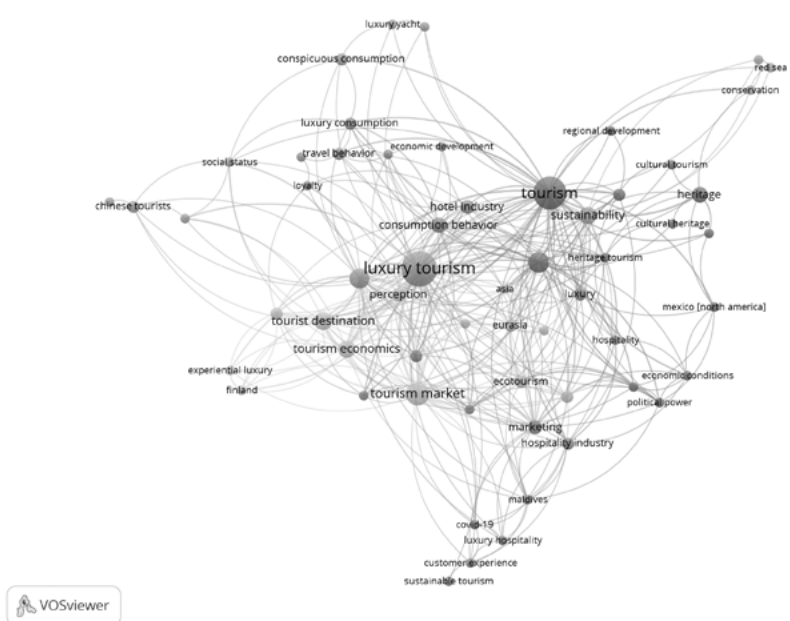

Figure 8 Network Visualization

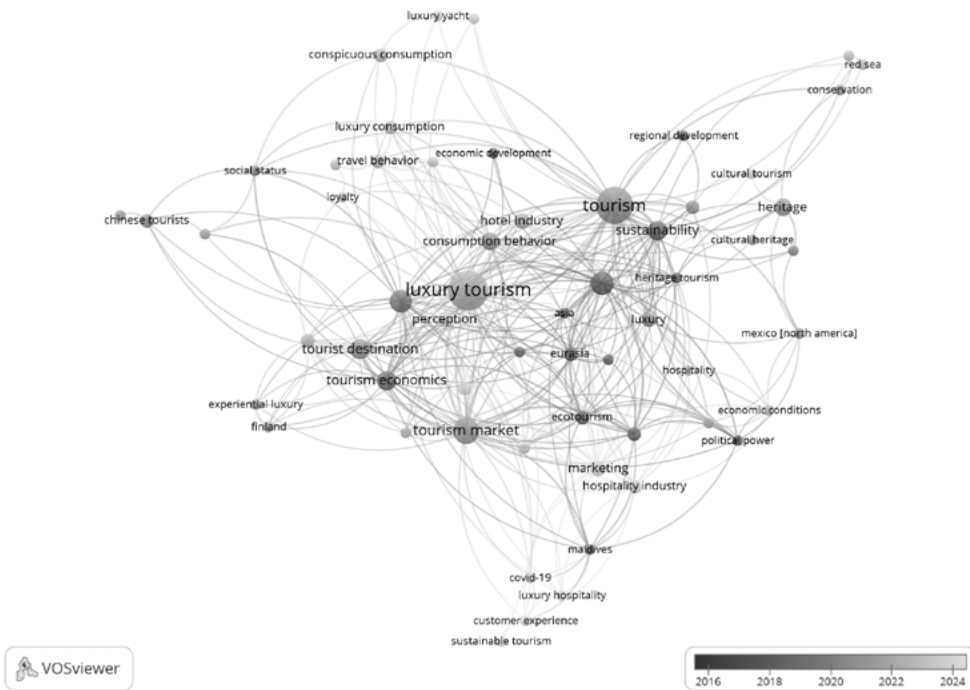

Figure 9 Overlay Visualization

legislation. Additionally, it examines how luxury tourism employs social media to cultivate its image, establish connections with affluent clients, and integrate sustainability storylines. The informative function of social media is crucial, and tactics emphasizing content quality, authenticity, and prompt engagement can foster loyalty and enhance brand perception.

Figure 9, Overlay Visualization, depicts the research keywords according to colour, indicating that lighter hues (yellow) signify more recent publications, while darker hues (purple) denote older publications. Articles published in 2025 predominantly emphasize customer experience, luxury hospitality, marketing, social media, perception, and sustainable tourism. This suggests that stakeholders are increasingly prioritizing the creation of memorable experiences for consumers, particularly by promoting sustainable tourism practices through their products across various social media platforms, utilizing contemporary strategic marketing approaches aimed at luxury tourists.

Figure 10 demonstrates that the prevalent phrases associated with this topic include tourism, tourism market, tourist destination, tourism economics, sustainability, and historical tourism. This illustrates the intricate connection between luxury tourism and various elements of the tourism product or attraction, encompassing its effects and developmental concepts.

Figure 11 depicts international research collaboration on luxury travel, with a minimum criterion of two documents. The nation of origin will be displayed if it produces a minimum of two Scopus-indexed articles. The VOSviewer analysis produced four interconnected clusters.

1. Cluster I comprises five nations: Australia, Belgium, Fiji, France, and Japan;
2. Cluster II comprises five nations: New Zealand, Slovenia, South Korea, Spain, and the United Arab Emirates;

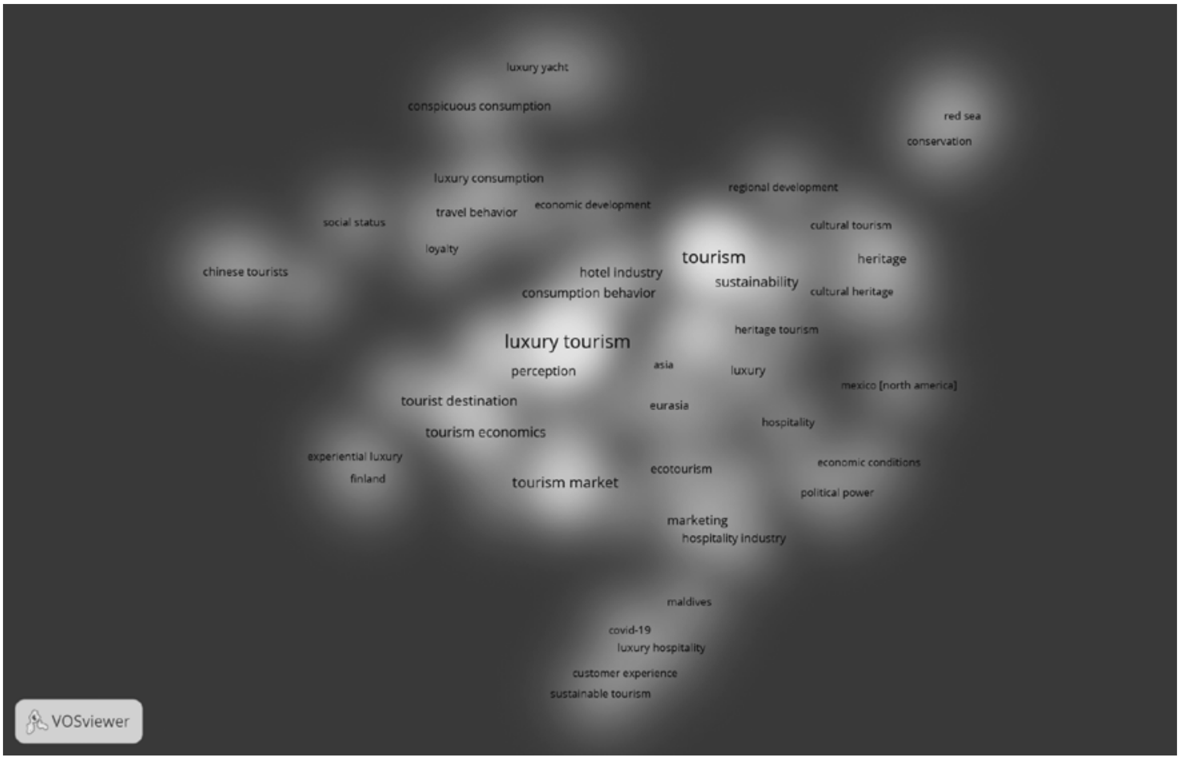

Figure 10 Density Visualization

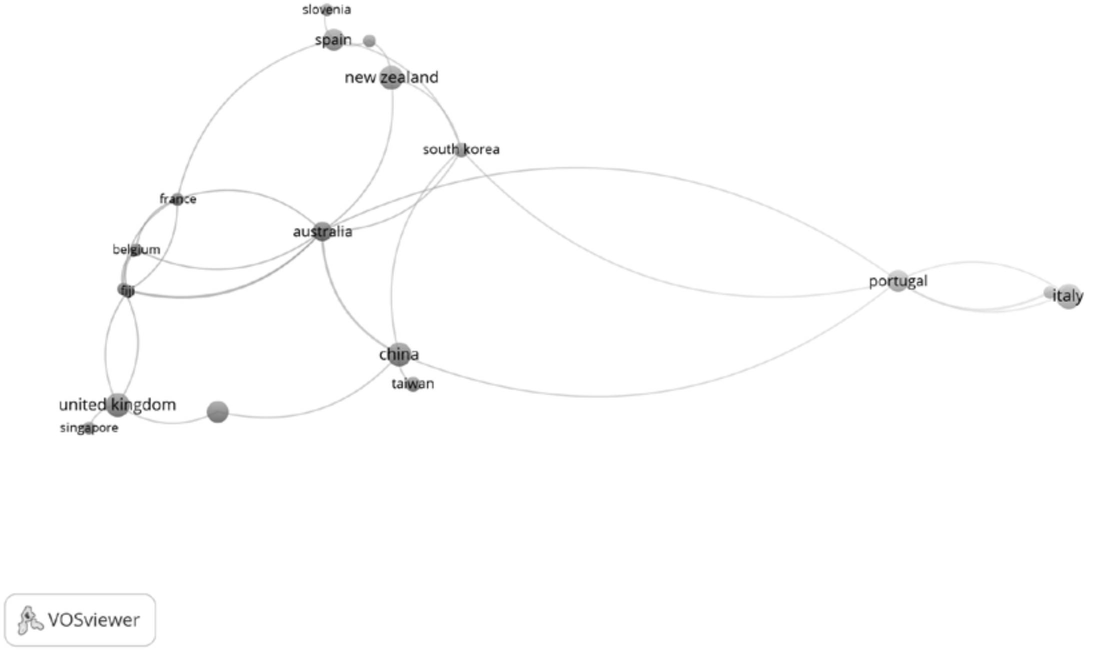

Figure 10 Density Visualization

3. Cluster III comprises five nations: China, Singapore, Taiwan, the United Kingdom, and the United States;
4. Cluster IV comprises four nations: Italy, Portugal, South Africa, and Turkey.

Conclusion

Luxury tourism research depends on both primary and secondary data sources to provide thorough and credible results. Secondary data, like literature and policy papers, offer historical and contextual insights but may lack contemporary relevance. Primary data, such as surveys and interviews, provide current and detailed information but necessitate greater resource allocation for collection. Digital data, such as online reviews and social media, have gained prominence owing to their accessibility and extensive range. Analytical methods differ, with qualitative approaches such as theme analysis examining depth and context, whilst quantitative methods like SEM and regression facilitate generalizable results. Emerging technologies, including machine learning and natural language processing, are transforming data analysis by revealing patterns in unstructured data. Research strategies encompass case studies, experiments, and systematic reviews, with an increasing inclination towards the amalgamation of conventional and technology-driven methods such as big data analytics.

Luxury tourism research employs three main-categories of data – qualitative, quantitative, and unstructured – each possessing unique advantages and limits. Qualitative data, shown by interviews, provide profound contextual insights yet are inherently subjective, whereas quantitative data, such as survey results, facilitate statistical analysis but may neglect social subtleties. Unstructured data, such as internet evaluations, is progressively evaluated utilizing sophisticated methods like natural language processing (NLP). Mixed-methods approaches are increasingly popular, integrating qualitative depth with quantitative breadth to offer a more comprehensive understanding. This amalgamation of varied data sources, analytical methods, and research approaches illustrates the dynamic and interdisciplinary character of luxury tourist studies, striving to reconcile specificity with generalizability while utilizing technology innovations for enhanced insights.

This study indicated that publications on luxury tourism have been rather few during the past twenty years, reaching a maximum of 14 papers in 2024. Substantial growth transpired between 2022 and 2023, but the 2005–2014 interval exhibited minimal advancement. Italy had the largest contribution with 8 articles, followed by the UK, New Zealand, and China with 7 articles each, and the US and Spain with 6 articles each. Concurrently, Indonesia generated a singular article, underscoring the research deficiency in poor nations. Luxury tourism study is primarily characterized by Business, Management, and Accounting (30.3%) and Social Sciences (29.6%), while also encompassing environmental sciences, art, and earth sciences. Qualitative research methods (38 publications) were employed more frequently than quantitative methods (29 articles) or mixed methods (5 articles), with descriptive approaches being the predominant kind. Data gathering predominantly involved surveys (40 studies), followed by literature reviews (26 articles) and interviews (5 articles).

Recent studies have focused on luxury tourism products, including yachts, and strategies for accommodating luxury tourists, such as specialized services by the tourism sector, marketing techniques, and key communication strategies for sustainable tourism aimed at shaping perceptions and crafting distinctive and authentic customer experiences. These subjects remain relatively constrained and hence necessitate additional investigation and advancement, which may serve as a foundation or input for subsequent research. One strategy is to investigate target markets with varied attributes to harness the potential of luxury travellers, including those from China, Europe, and other nations. Moreover, further investigation is required into strategies for developing experienced luxury products and examining many external elements that impact luxury tourist development, including political, economic, social, and cultural influences.

Appendix

Table 2 List of articles in the reviewed literature

Author	Data Source	Analysis Method	Research Method	Data Type
Scheyvens (2002)	Tourism development literature	Literature Analysis	Theoretical Analysis	Secondary
Brenner and Aguilar (2002)	Regional data & policies	Geographical Analysis	Qualitative and Spatial	Secondary
d'Hauteserre (2005)	Public policy & official narrative	Discourse Analysis	Qualitative Discourse	Secondary
Andersen et al. (2008)	Home survey & electricity consumption	Energy Consumption Model	Quantitative	Primary
Ryan and Stewart (2009)	Al Maha resort data	Branding & CSR Analysis	Secondary Case Study	Secondary Case Study
Scheyvens (2011)	Secondary data (government, documents, political developments) + interviews	Qualitative Narrative Analysis	Qualitative case study: Interviews, policy documents, tourism statistics	Qualitative case study: Interviews, policy documents, tourism statistics
Thurlow and Jaworski (2012)	Elite spatial & symbolic observation	Semiotic Analysis	Visual Semiotics: Primary	Visual Semiotics: Primary
Tekken et al. (2013)	Saidia Resort Field Data, Climate Statistics	Water Demand Analysis, Management Scenarios	Quantitative modelling-based study: Per capita water consumption data on tourism and climate	Quantitative modelling-based study: Per capita water consumption data on tourism and climate
Chen and Peng (2014)	Luxury Hotel Consumer Respondents	Structural Equation Modelling	Quantitative survey (Value-Attitude-Behaviour Model): Primary survey of 368 Chinese consumers	Quantitative survey (Value-Attitude-Behaviour Model): Primary survey of 368 Chinese consumers
Ahmad (2014)	Western Tourists in India	Regression & Factor Analysis	Quantitative Social Theory: Primary	Quantitative Social Theory: Primary
Bernard and Cook (2015)	Denarau Resort, Fiji	Infrastructure Risk Analysis	Secondary Case Study	Secondary Case Study
Thurlow (2016)	Queer Literature and the Elite Class	Critical Discourse Analysis	Critical Discourse: Secondary	Critical Discourse: Secondary
Escobedo (2017)	Heritage Cities in Mexico	Observation + Narrative	Urban Study: Secondary	Urban Study: Secondary
Correia et al. (2018)	314 Chinese Tourists	Ordered Probit Model	Quantitative – Survey: Primary	Quantitative – Survey: Primary
Hunter-Pazzara (2019)	Mexican E-Festival	Observation + Narrative	Urban Ethnography: Primary	Urban Ethnography: Primary
Krauss (2019)	Transformation of the Island of Capri	Heritage Study	Historical Architectural: Secondary	Historical – Architectural: Secondary
Iloranta (2019)	11 Tourism Industry Players	Interviews & Thematic Analysis	Industry Narrative: Primary	Industry Narrative: Primary
Pié et al. (2019)	Hotel Financial Reports	Ratio & Profitability	Quantitative Financial: Secondary	Quantitative – Financial: Secondary

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Table 2 Continued from the previous page

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Andersen et al. (2008)	Home survey & electricity consumption	Energy Consumption Model	Quantitative	Primary
Ryan and Stewart (2009)	Al Maha resort data	Branding & CSR Analysis	Secondary Case Study	Secondary Case Study
Scheyvens (2011)	Secondary data (government, documents, political developments) + interviews	Qualitative Narrative Analysis	Qualitative case study: Interviews, policy documents, tourism statistics	Qualitative case study: Interviews, policy documents, tourism statistics
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Pié et al. (2019)	Hotel Financial Reports	Ratio & Profitability	Quantitative Financial: Secondary	Quantitative – Financial: Secondary

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Author	Data Source	Analysis Method	Research Method	Data Type
Riensche et al. (2019)	Cost Alegre Region	Observation, Survey, Interview	Qualitative – Participatory: Primary	Qualitative – Participatory: Primary
Correia et al. (2020)	Survey + Traveller Narratives	SEM + Content Analysis	Mixed Methods: Primary	Mixed Methods: Primary
Navarrete Escobedo (2020)	Historic Districts	Observation + Airbnb Data	Urban Ethnography: Primary	Urban Ethnography: Primary
Pastor et al. (2020)	Mendoza Vineyards	Interviews + Observation	Agrarian Ethnography: Primary	Agrarian Ethnography: Primary
Chalastani et al. (2020)	Red Sea Project	Marine Spatial Planning	Spatial + Policy Study: Secondary	Spatial + Policy Study: Secondary
Giannoni et al. (2020)	Country Macro Tourism Data	Regression Model	Econometric Panel Data: Secondary	Econometric Panel Data: Secondary
Noroozi (2021)	Iranian Tourism	Strategic Literature Review	Strategic Descriptive: Secondary	Strategic Descriptive: Secondary
Seo et al. (2021)	3 Mindset Experiments	ANOVA, Psychological Manipulation	Psychological Experiment: Primary	Psychological Experiment: Primary
Amatulli et al. (2021)	Luxury Hotels	Moderation & Mediation	Online Experiment: Primary	Online Experiment: Primary
Gupta and Kour (2021)	365 Indian Respondents	SEM	Quantitative – SEM: Primary	Quantitative – SEM: Primary
Thirumaran et al. (2021)	10 Years of Literature	NVivo, Thematic Analysis	Literature Review: Secondary	Literature Review: Secondary
Lecchini et al. (2021)	Coral Reefs 2006–2019	Longitudinal Analysis	Environmental Monitoring Primary	Environmental Monitoring Primary
Poljak Istenič and Fakin Bajec (2021)	Local Culinary Tourism	Discourse	Secondary Cultural Studies	Secondary Cultural Studies
Naipeng et al. (2021)	332 Respondents	SEM SmartPLS	Quantitative – Primary Survey	Quantitative – Primary Survey
Angelini (2023)	11 Tourism Service Providers	Thematic Analysis	Qualitative – Primary Industry	Qualitative – Primary Industry
Japutra et al. (2022)	10 Years of Literature	Framework Synthesis	SLR	SLR
Yang et al. (2022)	117 Countries (2020–21)	Fixed Effects Panel	Secondary Panel Data – Secondary Economics	Secondary Panel Data – Secondary Economics
Ramón-Cardona and Sánchez-Fernández (2022)	Ibiza Island	Tourism Potential Evaluation	Secondary Cultural Heritage Study	Secondary Cultural Heritage Study
Morando and Platania (2022)	415 Korean Tourists	SEM	Quantitative – Primary SEM	Quantitative – Primary SEM
Geerts and Masset (2022)	Users & Managers of the Private Sales Site	Analysis Thematic	Exploratory Qualitative (2-stage) Primary (consumer & manager interviews)	Exploratory Qualitative (2-stage) Primary (consumer & manager interviews)

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Table 2 Continued from the previous page

Author	Data Source	Analysis Method	Research Method	Data Type
Lai et al. (2022)	Online Traveller Community	PLS-SEM	Quantitative Survey Primary (questionnaire)	Quantitative Survey Primary (questionnaire)
Angelini (2023)	1,061 Guest Reviews	Content analysis & cause-and-effect diagrams	Exploratory Qualitative Secondary (Booking.com reviews)	Exploratory Qualitative Secondary (Booking.com reviews)
Santos et al. (2023)	Academics and Practitioners	Thematic analysis		
Connors (2023)	Yacht Industry & Luxury Tourism Data	Narrative analysis	Qualitative (Focus Group) Primary	Qualitative (Focus Group) Primary
Nabi (2023)	Australian Tourists	Cluster Analysis & ANOVA	Historical (business history approach) Secondary Archives	Historical (business history approach) Secondary Archives
Gil-Cordero et al. (2023)	Luxury Goods Consumers	PLS-SEM & fuzzy-set QCA	Quantitative Primary (481 respondents)	Quantitative Primary (481 respondents)
Lopes et al. (2023)	Web of Science	Bibliometric analysis (co-citation, cluster)	Mixed method (PLS-SEM & fsQCA) Primary	Mixed method (PLS-SEM & fsQCA) Primary
Williams (2023)	Well-Being & Superyacht Publications	Narrative synthesis	Bibliometric study Secondary data (340 WoS articles 1993–2022)	Bibliometric study Secondary data (340 WoS articles 1993–2022)
Motoki et al. (2023)	Mechanical Turk Experiment & linguistic brand framework	Descriptive statistics + regression	Conceptual review of literature synthesis Secondary data (literature and superyacht studies)	Conceptual review of literature synthesis Secondary data (literature and superyacht studies)
Kemp and Dłużewska (2023)	Academic literature & industry reports	Conceptual narrative analysis	Quantitative experiment & linguistic analysis Primary survey data + secondary literature data	Quantitative experiment & linguistic analysis Primary survey data + secondary literature data
Zain et al. (2023)	Luxury tourist respondents via social media	PLS-SEM (Partial Least Squares SEM)	Critical & conceptual review Secondary data (tourism & market theory) (high-end)	Critical & conceptual review Secondary data (tourism & market theory) (high-end)
Gladkikh and Séraphin (2023)	Contributions to publications on the topic of luxury yachting	Qualitative model synthesis	Primary quantitative online survey: 256 respondents (questionnaire via snowball sampling)	Primary quantitative online survey: 256 respondents (questionnaire via snowball sampling)
Katayama et al. (2024)	Water from rivers and references (WWTP and reference locations)	ANOVA	Synthesis review (thematic paper) Literature and articles in luxury yachting special issues	Synthesis review (thematic paper) Literature and articles in luxury yachting special issues
Michael and Fusté-Forné (2024)	Official hotel Instagram in the UAE	Content & semiotic analysis	Quantitative field study: Physicochemical & nutrient (N, P) data from 7 sampling sites	Quantitative field study: Physicochemical & nutrient (N, P) data from 7 sampling sites
She and Zheng (2024)	Saudi Vision 2030	GIS-based analysis	Semiotic visual content analysis of 1,866 Instagram posts from 4 luxury hotels	Semiotic visual content analysis of 1,866 Instagram posts from 4 luxury hotels

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Table 2 Continued from the previous page

Author	Data Source	Analysis Method	Research Method	Data Type
Sestino et al. (2024)	Luxury yacht & hotel consumer respondents	Regression & moderation (perceived usefulness, status consumption)	(No suitable summary found; likely an energy systems study)	(No suitable summary found; likely an energy systems study)
Eijdenberg et al. (2024)	Tourism stakeholders in Phnom Penh & Siem Reap	Thematic analysis using stakeholder theory	Two primary quantitative experimental studies: consumer surveys (yachts & hotels)	Two primary quantitative experimental studies: consumer surveys (yachts & hotels)
Gaggio (2024)	Costa Smeralda resort archives, secondary sources	Narrative & historical analysis	Qualitative study: 26 in-depth interviews with industry stakeholders	Qualitative study: 26 in-depth interviews with industry stakeholders
Petrescu et al. (2024)	Consumer reviews from OTAs and luxury hotel reviews	fsQCA (fuzzy-set Qualitative Comparative Analysis)	Qualitative historical study: Historical archives, political documents, media from 1960 to 1975	Qualitative historical study: Historical archives, political documents, media from 1960 to 1975
Liu et al. (2024)	Online survey with AI scenario implementation	Structural Equation Modelling (SEM)	Quantitative/comparative: Hundreds of online reviews from hotel platforms	Quantitative/comparative: Hundreds of online reviews from hotel platforms
Kaushal and Yadav (2024)	Consumer reviews on TripAdvisor	Sentiment & thematic analysis using NVivo and Leximancer researchgate.netouci.dntb.gov.ua +15researchgate.net +15deepdyve.com +15	Quantitative primary survey: tourist respondents, AI recommendation scenario	Quantitative primary survey: tourist respondents, AI recommendation scenario
Cunha et al. (2024)	Luxury hotel users in Portugal & Spain, booking platform data	[Is this meant to be blank?]	Exploratory quantitative (online review analysis): 4,302 real-time TripAdvisor reviews	Exploratory quantitative (online review analysis): 4,302 real-time TripAdvisor reviews
Lillie (2024)	School archives, space branding, global image	Descriptive statistics, geographic analysis of online bookings, multivariate regression	Exploratory quantitative (survey and secondary data) Booking behaviour dataset Online & AI applications	Exploratory quantitative (survey and secondary data) Booking behaviour dataset Online & AI applications
Besser et al. (2024)	Israeli online community respondents	Bourdieu's cultural analysis (materiality, symbolic capital)	Qualitative cultural-geographic study: Archival data & observations of elite schools	Qualitative cultural-geographic study: Archival data & observations of elite schools
Tedesco et al. (2024)	Venice case study: city centre, small islands, periphery land	MANOVA, correlation, parallel multiple mediation (PROCESS macro)	Quantitative (mediation analysis): Survey (n=1,342 Israelis)	Quantitative (mediation analysis): Survey (n=1,342 Israelis)
Shang and Li (2024)	Consumer Confidence Index statistics, tourism market data	Narrative analysis based on a geographic-territorial framework	Qualitative case study: Archival documents, observations of city areas	Qualitative case study: Archival documents, observations of city areas
Manfreda and Harkison (2025)	Stakeholders: guests, staff, local community in luxury lodges	Comparative statistical analysis (recession vs. prosperity)	Quantitative comparative: National economic data & consumer behaviour survey	Quantitative comparative: National economic data & consumer behaviour survey

Continued on the next page

Table 2 Continued from the previous page

Author	Data Source	Analysis Method	Research Method	Data Type
Ku et al. (2025)	Online questionnaire	Thematic analysis – reciprocal hospitableness model	Qualitative multiple case study: Lodge stakeholder interviews and observations	Qualitative multiple case study: Lodge stakeholder interviews and observations
Voltas et al., (2002)	Practitioner data and company documents	Partial Least Squares Regression (PLS-SEM)	Quantitative survey: 213 tourist respondents	Quantitative survey: 213 tourist respondents
Chen et al. (2025)	Retail & ERP company dataset	Statistical + thematic analysis	Mixed survey + interviews: Primary: Manager survey (Europe) + interviews	Mixed survey + interviews: Primary: Manager survey (Europe) + interviews
Tarquini-Poli and Klaus (2025)	Slow-yachting participants (clients & providers)	Machine learning, predictive regression	Quantitative study: Retail/distribution data, digitalization variables	Quantitative study: Retail/distribution data, digitalization variables
Veilleux and Sarrasin (2025)	Thailand national statistics & stakeholders Local	Thematic analysis	Exploratory qualitative study: Interviews & observations on a yachting trip	Exploratory qualitative study: Interviews & observations on a yachting trip
Huang et al. (2025)	Social media and travel forum respondents	Descriptive statistics + thematic analysis	Mixed method: Tourism economic data + stakeholder interviews	Mixed method: Tourism economic data + stakeholder interviews
Ismail et al. (2025)	Inbound travel agents in Malaysia	SEM + ANOVA	Quantitative experiment: Experimental survey of forum users	Quantitative experiment: Experimental survey of forum users

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Relevantnost navezanosti na kraj za trajnostnost v turizmu: bibliometrična analiza
Arun Bhatia, Saurabh Kumar, Umesh Kumar, and Divyam Sharma

Trajnostnost je osrednji in glavni cilj raziskav navezanosti na kraj, ki so na področju preučevanja turizma vse bolj priljubljene. Pomembna je zaradi socialnih in okoljskih vprašanj ter potrebe po ohranjanju dediščine in infrastrukture turističnih destinacij. V tej raziskavi so bili za identifikacijo dokumentov uporabljeni podatkovna zbirka Scopus in ključne besede, povezane z navezanostjo na kraj, s trajnostnostjo in turizmom. V bazi Scopus je bilo najdenih 720 člankov, objavljenih med letoma 1988 in 2023. Po filtriranju podatkov je bilo v nadaljnjo analizo vključenih le 448 člankov. V tej raziskavi avtorji uporabljajo tehniko bibliometrične analize, orodje VOS viewer in programsko opremo RStudio, da kvantificirajo in vizualizirajo obstoječo literaturo o navezanosti na kraj in trajnostnosti ter za ovrednotenje glavnih rezultatov raziskave. Namen raziskave je bil predstaviti bibliometrični pregled navezanosti na kraj in trajnostnost v raziskavah turizma. Raziskava je uporabila analizo sopojavnosti ključnih besed, najproduktivnejših avtorjev, držav, iz katerih prihajajo ti avtorji, največkrat citiranih člankov in soavtorstva pri avtorjih iz različnih držav. Ugotovitve kažejo znatno rast raziskav na obravnavanem področju.

Ključne besede: kraj, navezanost na kraj, trajnostnost, turizem, bibliometrična analiza
Academica Turistica, 18(2), 115–132

Ovire v gostinstvu: ekspedicija v izzive, s katerimi se sooča hotelska industrija
Swagat Praharaj, Bibhuti Bhusan Mishra, Uma Sankar Mishra, Rashmi Ranjan Panigrahi, and Padma Charan Mishra

Namen raziskave je opolnomočiti hotelske operaterje v perspektivnih turističnih krajih in jim pomagati pri odločanju na podlagi informacij pri navigaciji v dinamični gostinski pokrajini. Raziskava preučuje izzive v hotelski industriji z namenom pomoči strokovnjakom in raziskovalcem. Združuje sekundarne podatke s strokovnih blogov in iz raziskovalnih člankov s primarnimi podatki 230 indijskih hotelskih menedžerjev, anketiranih z vprašalnikaom Likertove lestvice od januarja do marca 2024. Veljavnost in zanesljivost sta zagotovljeni s konstrukti prvega reda. Analiza podatkov uporablja SPSS-22 za raziskovalno faktorsko analizo in Amos-17 za potrditveno faktorsko analizo. Teoretični okviri iz predhodne literature so bili preučeni, da bi zagotovili izbiro spremenljivk. Oblikovan je bil dvodelni vprašalnik za zbiranje demografskih podatkov, dolgoletnih izkušenj itd., ki mu je sledil del, ki uporablja petstopenjsko Likertovo lestvico za raziskovanje predlagane hipoteze. Sprva identificira 27 globalnih izzivov, raziskava pa izpostavlja tri ključne dejavnike – trženje, delovanje in človeški viri –, pomembne za indijski kontekst, ki zajema 23 posebnih izzivov. Predvsem izzivi na področju gospodarskega/finančnega dejavnika v Indiji kažejo nizko izraženost. Raziskava poudarja rastoči turistični potencial v vzhodni Indiji in proaktivne ukrepe, ki jih je hotelska industrija sprejela za izpolnjevanje svetovnih potreb gostov. Medtem ko je največji poudarek na vzhodni Indiji, se vpogled razširi na nastajajoče turistične destinacije po vsem svetu.

Ključne besede: hotelirstvo, izzivi, EFA, CFA
Academica Turistica, 18(2), 133–149

Ocena vpliva lastnosti jezera na cene najemnin: raziskava hedonističnih cen Ohridskega jezera v Albaniji

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Namen pričujoče raziskave je kvantificirati ekonomsko vrednost okoljskih, strukturnih in lokacijskih značilnosti, ki vplivajo na najemnine počitniških apartmajev v regiji Ohridskega jezera v Albaniji. Na naboru podatkov o 164 počitniških apartmajih, oglaševanih na Booking.com za vikend-bivanja v času vrhunca turistične sezone, je bil uporabljen hedonistični cenovni model. Uporabljen je bil delno log-log regresijski model, pri katerem sta bila tako najemnina kot površina apartmaja logaritmirana, da se upošteva asimetrična porazdelitev in zmanjševanje mejnih donosov. Rezultati poudarjajo močan vpliv naravnih danosti: razgled na jezero in bližina zelenih površin povečata najemnino približno za 12 oz. 15 %. Strukturne značilnosti, kot so večja površina apartmaja, večja kapaciteta ležišč, novejša gradnja in vključitev zajtrka, prav tako pomembno zvišujejo najemnino. Nasprotno pa značilnosti, kot so nadstropje, dostop do dvigala, parkirišče in balkon, niso pokazale statistično pomembnega vpliva na ceno. Model tudi razkrije, da večja oddaljenost od lokalne bolnišnice zmanjšuje najemnino, kar poudarja pomen dostopnosti. Ugotovitve ponujajo praktična izhodišča za nepremičninske investitorje, ponudnike namestitev in lokalne oblasti, ki si prizadevajo za podporo trajnostnemu turizmu in regionalnemu razvoju.

Ključne besede: nenadzorna vrednotenje, atributi jezer, hedonistična cena, Ohridsko jezero, Albanija
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Fenomenografija trajnostnega turizma v luksuznih hotelih

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Sodobno turistično okolje (zlasti luksuzni hoteli) si koncept trajnostnega turizma razlagajo na različne načine. Zato je težko določiti najboljše načine za uresničitev omenjenega koncepta in doseči pomembne rezultate. Trenutno razumevanje je torej treba zajeti empirično. Za ta namen članek uporablja fenomenografski pristop, ki vključuje 17 vodilnih od luksuznih hotelov v Indoneziji. Članek prinaša dva poudarka. Prvič, raziskava razkriva tri različna razumevanja uresničevanja trajnostnega turizma, in sicer: (1) fazo izpolnjevanja, (2) fazo vključevanja in (3) fazo zagovorništva. Drugič, predlagan je model z vstopnimi stopnjami za praktično uporabo postopnega uresničevanja trajnostnega turizma v luksuznih hotelih.

Ključne besede: trajnostni turizem, luksuzni hotel, fenomenografija, hotelir, trajnostnost
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Inovativna perspektiva zelenega turizma: narativni pregled kognitivne disonance v trajnostnem razvoju turizma
Kevin Fuchs

Kljub vse večji skrbi za trajnostnost so neskladja med vrednotami in vedenjem v turizmu še vedno razširjena, kar poudarja potrebo po konceptualni jasnosti. Zato je bila uporabljena induktivna tematska sinteza z namenom analizariti, kako je kognitivna disonanca konceptualizirana, sprožena in razreševana v različnih kontekstih zelenega turizma. Izoblikovale so se tri glavne tematske smeri: (1) neskladje med vrednotami in vedenjem, (2) zelena identiteta in vpliv skupine ter (3) situacijske omejitve in *greenwashing*. Turisti pogosto ohranjajo zeleno samopodobo kljub nasprotujočemu vedenju, pri čemer nanje vplivajo skupinske norme, znaki na destinaciji in infrastrukturne omejitve. Ugotovitve poudarjajo, da morajo upravljavci in tržniki destinacij zmanjšati vedenjsko trenje ter poskrbeti, da so trajnostne postavke verodostojne in izvedljive. Na teoretični ravni pregled prispeva konceptualni zemljevid kognitivne disonance v zelenem turizmu ter izpostavlja, kako disonanca nastane in se upravlja.

Ključne besede: kognitivna disonanca, zeleni turizem, trajnostno vedenje turistov, razkorak med vrednotami in vedenjem, okolju prijazno potovanje
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25-letna odisejada skozi raziskave luksuznega turizma
Aji Sudarsono, Ramiz Ansharil Haq

Pričujoča raziskava izvede bibliometrični in sistematični pregled literature (SLR) o raziskavah luksuznega turizma, pri čemer analizira 72 člankov, indeksiranih v Scopusu, iz obdobja 2000–2025. Ugotovitve kažejo na naraščajoče zanimanje za luksuzni turizem, s vrhom objav v letu 2024 (14 člankov) ter izrazito rastjo med letoma 2022 in 2023. Italija po raziskovalni produkciji vodi (osem člankov), sledijo Združeno kraljestvo, Nova Zelandija in Kitajska (po sedem člankov), medtem ko so države v razvoju, kot je Indonezija, še vedno slabše zastopane. Tematska analiza prepoznava ključne raziskovalne sklope, vključno s družbeno-ekonomskimi vplivi, vedenjem luksuznih potrošnikov in s trajnostnostjo v gostinstvu. Raziskave kot glavno orodje zbiranja podatkov uporabljajo večinoma kvalitativno metodologijo (38 raziskav). V ospredju novih trendov so digitalizacija, trajnostnost in doživljajski luksuzni turizem, ob vse večji uporabi umetne inteligence, strojnega učenja in analitike družbenih omrežij. Raziskava poudarja multidisciplinarno naravo luksuznega turizma, ki se prepleta s poslovnimi vedami, z družboslovjem in okoljskimi raziskavami. Vedno večji pomen dobivajo kombinirani pristopi, ki združujejo kvalitativno poglobljenost s kvantitativno posplošljivostjo. Ključni izzivi vključujejo uravnoteženje gospodarskih koristi luksuznega turizma s trajnostnostjo ter odpravljanje infrastrukturnih vrzeli v nastajajočih destinacijah. Analiza z orodjem VOSviewer izpostavlja globalna raziskovalna sodelovanja, pri čemer Evropa in Azija vodilno prispevata. Praktične implikacije kažejo, da bi morali deležniki dajati prednost trajnostnim praksam, digitalnemu marketingu in personaliziranim izkušnjam, da bi zadovoljili potrebe luksuznih turistov. Prihodnje raziskave bi morale raziskati

razvijajoče se trge, kulturne vplive in učinke politik za boljše razumevanje dinamike luksuznega turizma na globalni ravni.

Ključne besede: luksuzni turizem, bibliometrična analiza, sistematični pregled literature, PRISMA, digitalizacija, vedenje potrošnikov
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