Journal of ENTREPRENEURSHIP, MANAGEMENT and INNOVATION
JEMI
Volume 20, Issue 3, 2024

JEMI

Managing Resilience, Sustainability, and Networks of Tourism Enterprises in the New Global Economic Order

Edited by

Anna Ujwary-Gil
Diana Dryglas
Anna Lis

Journal of ENTREPRENEURSHIP, MANAGEMENT and INNOVATION
JEMI

Managing Resilience, Sustainability, and Networks of Tourism Enterprises in the New Global Economic Order

Edited by

Anna Ujwary-Gil
Diana Dryglas
Anna Lis

Volume 20 Issue 3
2024

Journal of ENTREPRENEURSHIP, MANAGEMENT and INNOVATION
JEMI

Journal of Entrepreneurship, Management and Innovation (JEMI) ([e] ISSN 2299-7326, [p] ISSN 2299-7075) is an interdisciplinary, double-blind peer-reviewed journal, emphasizing theoretical and empirical articles on entrepreneurship, management, and innovation. The journal is published in ELECTRONIC (online first) and PRINT (occasionally) formats. See our website: http://www.jemi.edu.pl.

JEMI is an interdisciplinary, focused on economics, business, and management journal that uniquely combines three thematic areas: i) entrepreneurship, including entrepreneurial process, entrepreneurial finance, and SME and entrepreneurship policy; ii) all types of management; iii) innovation, comprising innovation economics, policy, and management. In this vein, the JEMI contributes to economics, business, and management research, as well as business practice and policy in the closely related areas of new venture creation and growth, knowledge generation, retention, appropriation, transfer, and governance, as well as innovation processes and their economic impacts. In a nutshell, our journal addresses the interrelated research fields of entrepreneurial venturing and growth, management, and innovation economics and management. We also acknowledge the context of business venturing, knowledge and innovation, by linking these areas with such background topics as social context of entrepreneurship, environmental and energy issues, human resource migration, or entrepreneurial finance.

THE ENTREPRENEURSHIP AREA OF THE JOURNAL

The entrepreneurship area of the journal covers the three major topics: 1) venture creation and small business, 2) the impact of entrepreneurship on economic growth including local and regional development, and 3) entrepreneurial attitudes and motives. We invite original papers of theoretical and empirical nature, rooted in the disciplines of economics, management, sociology, political science, and psychology. The interdisciplinary research is encouraged to assure a comprehensive approach to the topics discussed and to advance both theory and practice.

THE MANAGEMENT AREA OF THE JOURNAL

We welcome articles interpreting contemporary management problems, new methods and management tools, new forms of organization and management, new threats in management, or new challenges in the organization's environment. Management, as a thematic scope of the journal, focuses on theoretical and empirical considerations of various areas (but not limited to): such as strategic management, business process management, operation or production management, human resource management, information management, and network management.

THE INNOVATION AREA OF THE JOURNAL

The innovation area of the Journal's focus emphasizes a broad range of topics and approaches, including (but not limited to): comparative analyses of national and regional policy or sector issues, such as R&D trends, patents, citations, etc., empirical studies on within-organization innovation management, viewed from various perspectives (organizational behavior, psychology of creativity, organizational structures, styles of leadership and team-building strategies, promoting creativity among employees), development, testing, and application of heuristic methods of creative thinking in the context of management and entrepreneurship, with an emphasis on translating creativity into result-oriented innovative business projects, profiles of innovative products, structures, and processes, aimed at improving management practice and providing inspiration for entrepreneurs, theoretical work on economic, organizational, and scientific aspects of innovation, encouraging the search for inspiration from various disciplines, including natural sciences, the arts, and humanities.

THE FINANCE AREA OF THE JOURNAL

The entrepreneur or entrepreneurial firm, the institutions providing finance to the entrepreneurs, and the different types of financial sources used by the entrepreneurial firms or investors. We welcome articles covering all of the topics with both qualitative and quantitative approaches. Among the areas of our special interests might be enumerated: accounting and corporate finance, financial market as a background for SME development, entrepreneurial finance, regulatory and supervisory aspects related to corporate finance.

EDITORIAL BOARD

PUBLISHER

'Cognitione' Foundation for the Dissemination of Knowledge and Science, os. Bohaterów Tobruku 5, 34-400 Nowy Targ, Poland, www.fundacjacognione.org, e-mail: fundacja@cognitione.org, KRS: 0000587704. Journal website: www.jemi.edu.pl

JEMI IS INDEXED AND ABSTRACTED IN

SCOPUS, WEB OF SCIENCE, ANVUR, ERIH PLUS, CEON, GALE Science in Context: Academic OneFile, Business&Company Profiles, Business and Economics Theory, General Business File ASAP, GREENR, Infotrac Custom Journals, Internati onal Business, Cabell's Directories, Directory of Open Access Journals (DOAJ), EBSCO, Google Scholar, Index Copernicus, CEJSH, NLU-Library, Urlichsweb, WorldCat, SSRN, ARIANTA, Electronic Journals Library, E-journals.org, BazEkon, WSB-NLU Institutional Repository.

The original version: Online first
ISSN 2299-7326 (ONLINE)
eISBN: 978-83-966591-8-7

Cover: Joanna Pierzchała
Typesetting and printed by:
Wydawnictwo i Drukarnia NOVA SANDEC
ul. Lwowska 143, 33-300 Nowy Sącz, www.novasandec.pl

Table of Contents

Journal of Entrepreneurship, Management and Innovation (2024)
Volume 20 Issue 3: 5-24

DOI: https://doi.org/10.7341/20242031
JEL Codes: L83, M210, Q56, Z320

The role of resilience in explaining hotel growth: A fuzzy-set QCA approach

***Diana Dryglas*[1], *Anna Lis*[2], *Marcin Suder*[3]**

Abstract

PURPOSE: *Due to the detrimental effects of the recent pandemic on the hotel sector, hotel resilience research and its impact on hotel recovery have received lots of academic attention. However, a sustainable perspective on hotel resilience, as an approach for investigating its impact on long-term hotel growth, has been largely overlooked in the hospitality resilience literature. Therefore, this paper aims to address the research gap by identifying the configuration of factors that constitute sustainable hotel resilience, leading to the growth of selected hotels operating in Poland.* ***METHODOLOGY:*** *Data for analysis were obtained from surveys conducted with 120 managers of one- and two-star hotels. A fuzzy-set qualitative comparative analysis (fsQCA) was chosen to achieve the goal, which belongs to the group of configurational analysis methods.* ***FINDINGS:*** *Due to the asymmetric nature of the method, the analysis reveals configurations of factors leading to high hotel growth and those leading to low growth. In both cases, two such factor configurations were obtained. For high levels of hotel growth, it was found that maintaining a high level of three factors simultaneously, namely employee resilience, CSR activities and leadership resilience or CSR activities, team resilience and leadership resilience, provided sufficient conditions. For low levels of growth, fsQCA indicated sufficient conditions in the form of a low level of CSR activities and leadership resilience or a low level of employee resilience and team resilience. These findings emphasize the role of combining different factors to improve hotel growth.* ***IMPLICATIONS:*** *The research contributes to the literature on resilience in the hospitality industry by developing a new theoretical perspective on the complex nature of combinations of factors that contribute to sustainable hotel resilience, leading to both high and low growth. The research results also provide significant implications for entrepreneurs and managers, indicating the role of different combinations of factors in determining hotel growth.* ***ORIGINALITY AND VALUE:*** *The knowledge regarding sustainable hotel resilience is still insufficient. The study identified the best combinations of factors (both internal and external) that constitute sustainable hotel resilience, which may be vital for hotel growth.*

Keywords: *hotel resilience, CSR activities, employee resilience, leadership resilience, team resilience, financial resilience, hotel growth, Poland, fsQCA*

1 Diana Dryglas, Associate Professor, AGH University of Krakow, Faculty of Management, Gramatyka 10, Krakow, 30-067, Poland, e-mail: ddryglas@agh.edu.pl (ORCID: https://orcid.org/0000-0001-6136-1369).

2 Anna Lis, Associate Professor, Gdańsk University of Technology, Faculty of Management and Economics, G. Narutowicza 11/12, Gdańsk, 80-233, Poland, e-mail: Anna.Lis@zie.pg.gda.pl (ORCID: https://orcid.org/0000-0002-1527-7796).

3 Marcin Suder, Assistant Professor, AGH University of Krakow, Faculty of Management, Gramatyka 10, Krakow, 30-067, Poland, e-mail: msuder@agh.edu.pl (ORCID: https://orcid.org/0000-0001-6279-7359).

Received 22 December 2023; Revised 28 March 2024; Accepted 15 April 2024.

INTRODUCTION

The tourism and hospitality sectors comprise some economic activities that are most exposed to new circumstances, changes, and uncertain environments worldwide (Hall, Safonov, & Naderi Koupaei, 2023). This has been evidenced by the COVID-19 pandemic, which has limited travel on a global scale or the possibility of running a business, not only as a result of the travel restrictions imposed by governments but also due to the fear generated by COVID-19 among consumers (Gössling, Scott, & Hall, 2020). In such times of crisis, it is essential to carry out solid research in hospitality to understand the aftermath of the COVID-19 phenomenon and to support managers (Rivera, 2020). The hotel industry, in particular, has undoubtedly been one of the hardest-hit (Farmaki, Miguel, Drotarova, Aleksic, Casni, & Efthymiadou, 2020; Jiang & Wen, 2020), having witnessed a dramatic fall in occupancy rates. This vulnerability has awakened academic interest in hotel resilience as a way to reduce or overcome such vulnerability. The hotel resilience concept has been increasingly explored in the hospitality and tourism literature, especially in the context of global challenges such as climate change (e.g., Becken, 2013), disasters (Brown, Rovins, Feldmann-Jensen, Orchiston, & Johnston, 2017), pandemics (e.g., Jiang & Wen, 2020; Marco-Lajara et al., 2022) and socio-economic instability (e.g., Melián-Alzola, Fernández-Monroy, & Hidalgo-Peñate, 2020). Hotel resilience is defined as "a dynamic condition describing the capacity of a hotel, together with its stakeholders (staff, guests, the local community), to assess, innovate, adapt and overcome possible disruptions that are triggered by disaster" (Brown et al., 2017, p. 365). However, hospitality studies have not had as strong a focus on resilience as tourism (Brown et al., 2017; Ritchie & Jiang, 2021). Tourism literature focuses on destination and community resilience, while hospitality research is more organization and individual resilience-oriented (e.g., Boto-García & Mayor, 2022; Dogru, Hanks, Suess, Line, & Mody, 2023). Specifically, existing studies on hotel resilience focus on the capital approach (Brown et al., 2017, Brown, Orchiston, Rovins, Feldmann-Jensen, & Johnston, 2018; Brown, Rovins, Feldmann-Jensen, Orchiston, & Johnston, 2019; Brown, Feldmann-Jensen, Rovins, Orchiston & Johnston, 2021), employee resilience (Aguiar-Quintana, Nguyen, Araujo-Cabrera, & Sanabria-Díaz, 2021; Xie, Zhang, Chen, & Morrison, 2023), leadership resilience (Zhang, Xie, & Huang, 2023), financial resilience (Chen, Su, & Chen, 2022), supply chain resilience (Jain, Shanker, & Barve, 2022), and organizational resilience (Melián-Alzola et al., 2020). However, limited studies focus on an integrative approach (individual-level, organizational-level, and community-level resilience) to hotel resilience.

The hospitality sector is primarily comprised of small and medium-sized hotels that are frequently family-owned and operated (Singal & Batra, 2021). Recent research has indicated that the size of a business may impact its ability to withstand challenges, such as the COVID-19 pandemic. For example, international hotel chains were found to have better preparedness and planning compared to local hotels (Filimonau, Derqui, & Matute, 2020; Bhaskara & Filimonau, 2021; Giousmpasoglou, Marinakou, & Zopiatis, 2021). Larger hotels have access to knowledge and financial resources necessary to adapt more effectively to challenging business environments, resulting in longer survival rates compared to smaller enterprises with limited resources, capacity, and organizational structure (Hall &Williams, 2020; Melián-Alzola et al., 2020; Usher et al., 2020). In this regard, the present study examines small independently owned hotel businesses (one- and two-star hotels), which face serious challenges when confronted with unexpected disruptions such as economic crisis, or global pandemics. By studying how these budget hotels navigate through crises and bounce back from adversity, we can not only gain valuable insights into their resilience practices but also extrapolate our findings to other contexts within the hospitality industry. Understanding the resilience of 1- and 2-star hotels can provide valuable lessons for all types of accommodation providers, from small guesthouses to luxury resorts, in terms of effectively responding to and recovering from unforeseen challenges.

Furthermore, among the few studies to emerge is that of Gursoy et al. (2020), who reported that removing restrictions on tourism will not lead to an immediate influx of hotel guests, indicating the profound and lasting impact this crisis might have on the hotel sector. Souza, Alves, Macini, Cezarino, and Liboni (2017) and Brown et al. (2017) argued that long-term plans are needed to develop hotel business resilience towards sustainability. In the hospitality industry, sustainability means managing the business through sustainable operations that interact with the environment, the community, and the economy to ensure long-term business success (Jones, Hillier & Comfort, 2014). Several authors (Sobaih, Elshaer, Hasanein, & Abdelaziz, 2021; Gamage, Pyke, & de Lacy, 2023) have called for a sustainable perspective in developing more resilient hotel businesses. According to Sobaih et al. (2021), the resilience of small hotels has a direct, positive and significant influence on sustainable tourism development; Gamage et al. (2023) show a relationship between resilience outcomes and sustainable-HRM in the SME tourism and hospitality sectors; while Shin et al. (2021) and Marco-Lajara, Úbeda-García, Ruiz-Fernández, Poveda-Pareja, and Sánchez-García (2022) find a positive relationship between the CSR activities of hotel companies and their performance. In the post-pandemic context, resilience requires an adaptive capacity (Orchiston, Prayag, & Brown, 2016; Prayag, Chowdhury, Spector, & Orchiston, 2018; Fang, Prayag, Ozanne, & de Vrieset, 2020) and can be considered an attribute that can mitigate uncertainty by changing social, economic and ecological practices (Espiner, Orchiston, & Higham, 2017). Despite the recognition in the tourism and hospitality literature that resilience and sustainability are related concepts (Hall et al., 2023), limited studies focus on a sustainable approach to building hotel resilience. As a result, we introduce a new paradigm, sustainable hotel resilience, in which these concepts are integrated to align recovery strategies with hotel performance.

We agree with some researchers (Gamage et al., 2023) that hospitality resilience research needs to build a new paradigm of enhancing hospitality adaptability in the future, which can facilitate organizational outcomes, i.e., hotel performance (hotel growth). Furthermore, the ability of tourism and hospitality firms to demonstrate resilience has come to be seen as a source of competitiveness (Hall et al., 2018). Prior research on hospitality suggests that adaptive strategies of organizational resilience post crises significantly influence a hotel's operational performance (Tibay et al., 2018; El-Said, Smith, Al-Yafaei, & Salam, 2023), task performance (Aguiar-Quintana et al., 2021) and financial (e.g., market share) and non-financial (e.g., customer loyalty) performance indicators (Melián-Alzola et al., 2020). Furthermore, several authors find a positive impact between the CSR activities of hotel companies and their performance (Shin et al., 2021; Marco-Lajara, Úbeda-García, Ruiz-Fernández, Poveda-Pareja, & Sánchez-García, 2022). Thus, existing studies linking organizational (e.g., hotel) resilience and hotel performance are generally limited and superficial, and although there are often signs of how important the issue is for hospitality managers (e.g., Melián-Alzola et al., 2020), little research has been carried out to understand how to increase hotel resilience in a way to maximize hotel growth.

Therefore, the research aim is to identify the configuration of factors that constitute sustainable hotel resilience leading to the growth of selected hotels operating in Poland. To achieve this objective, with the matched dataset collected from hotel managers, we conduct a fuzzy-set qualitative comparative analysis (fsQCA) and uncover multiple configurations that produce high and low hotel growth. Based on these findings, we develop two propositions that prescribe multiple alternative ways to configure sustainable hotel resilience to achieve high performance. We also formulate two proposals containing sets of factors leading to a low level of hotel growth.

Thus, this study contributes to the hospitality resilience literature by developing new theoretical insights into the complex nature of combinations of sustainable hotel resilience components that produce high performance. Specifically, our research conceptual framework and the matching configurational approach with fsQCA can guide hospitality resilience researchers to investigate versatile relationships among key sustainable hotel resilience components from the hotel managers' perspective. Furthermore, our prescriptive propositions help hotel managers to configure their own sustainable resilience to achieve growth effectively.

THEORETICAL BACKGROUND

The period following the pandemic offers a practical opportunity to study the resilience of tourism and hospitality (Utkarsh et al., 2021; Yang, Zhang, et al., 2021), prompting scholars in these fields to consider strategies for swift industry recovery (Yeh, 2021) and the future directions of tourism and hospitality development in the post-pandemic landscape (Yang, Zhang, et al., 2021). Despite the increasing academic focus on tourism and hospitality resilience in recent years (Hu & Xu, 2022), there is still a need to broaden the conceptualization of hotel resilience in order to enhance our understanding of hotel resilience in changing context (Melián-Alzola et al., 2020). Thus, there is no consensus on the specific elements that make up this intricate concept. Some studies on hospitality sector point to multi-level character of resilience (Hall et al., 2023; Prayag, 2023), other studies emphasize its multi-dimensional nature (Prayag, Chowdhury, Spector & Orchiston, 2018), and still others indicate its multi-stage aspect (Conz & Magnani, 2020).

According to Hall et al. 2023 resilience research within hospitality sector was conducted on three levels: individual, organizational, and community. To date, most of the studies focus separately on individual (Aguiar-Quintana et al., 2021; Xie et al., 2023; Zhang et al., 2023), organizational (Jain, Shanker & Barve et al., 2022; Melián-Alzola et al., 2020) and community (Sobaih et al., 2021; Marco-Lajara et al., 2022) levels. Notably, within the hotel context, individuals, organizations, and communities are inextricably linked (Brown et al., 2017). Thus, the present study attempts to use an integrative approach covering these three levels simultaneously. Hospitality-related resilience literature identifies different components of hotel resilience on various resilience levels, e.g. employee resilience (Aguiar-Quintana et al., 2021; Xie et al., 2023), leadership resilience (Zhang, Xie & Huang, 2023) (individual level), hotel resilience *per se* (Melián-Alzola et al., 2020), leadership and management, situational awareness, network robustness, planning and preparedness, adaptive ability, market sensitivity, innovation and diversification, access to external resources, ability to leverage knowledge and information, compliance and regulations, reflective business model, and core competence of staff (Tibay et al., 2018) (organizational level), CSR practices (Shin et al., 2021; Marco-Lajara et al., 2022), and sustainable development (Ayuso, 2006; Sobaih et al., 2021) (community level). In the latter mentioned aspect, the involvement of local authorities that can foster competitiveness and innovation (Najda-Janoszka, 2013) and resilience also seems crucial.

Among the few studies to emerge is that of Brown et al. (2018, 2019), which define and measure hotel resilience using a capital-based framework to assess the performance implications of different dimensions for recovery and growth. In light of the research findings by the aforementioned authors, it is evident that hotel resilience is a complex concept that integrates human, economic, social, physical, natural, and cultural capital, all of which affect hotel performance. According to resilience research in hospitality sector, human capital is linked to employee resilience, entrepreneur resilience (Prayag, 2023), leadership resilience (Zhang, Xie, & Huang, 2023) (individual level), social, economic, physical and cultural capital are related to team resilience (Prayag, 2023), financial resilience (Chen, Su & Chen, 2022), supply chain resilience (Jain, Shanker, & Barve, 2022), and organizational resilience (Melián-Alzola et al., 2020) (organizational level), and natural capital fits into resilience at the community level (Lew et al., 2016). In the post-pandemic context, long-term strategies are essential for enhancing the resilience of hotel businesses towards sustainability (Sobaih et al., 2021). Hence, hotels that are sustainably resilient actively incorporate CSR activities into resilience-building to ensure that recovery and development efforts following disruptions also advance environmental, economic and social goals (Melián-Alzola et al., 2020). Therefore, based on a key framework that has shaped resilience thinking in hotel sector proposed by Brown et al. 2018 complemented by CSR practices and using Exploratory Factor Analysis, we develop a conceptual framework that identifies five components of sustainable hotel resilience (i.e., employee resilience, leadership resilience, team resilience, financial resilience, and CSR activities).

Given the resilience stages (before, during, and after the event) resilience can be understood as a desired outcome (Melián-Alzola et al., 2020) or as a process to reach a desired outcome (Dryglas & Salamaga, 2023) or as process and outcome simultaneously (Andersson, Caker, Tengblad, & Wickelgren, 2019). Resilience, viewed as an outcome, is tied to the capacity for recovery and can be assessed only post-disruption. Resilience seen as a process entails effectively managing adverse situations not just in their aftermath, but also beforehand and during their occurrence (Duchek, Raetze, & Scheuch, 2020). Therefore, resilience as an outcome represents a goal state, while resilience as a process involves the organizational structures that facilitate achieving that state (Melián-Alzola et al., 2020). Furthermore, resilience as an outcome includes recovery, transformation/and or growth (Sharma et al., 2021; Tomej, Bilynets, & Koval, 2023). Resilience as an ongoing process requires constant learning, flexibility, adaptation, and evaluation (Sharma et al., 2021). Our study treats resilience as a process because resilience predictors (components) describe activities/factors that foster hotel resilience and as an outcome because hotel performance recognizes resilience as a result.

On this basis, this paper measures hotel resilience using an integrative and sustainable approach and resilience as a process and outcome, which includes the overall construct (i.e., sustainable hotel resilience), as well as the consequent effect on organisational performance (i.e., hotel growth).

Theoretical framework

Figure 1 depicts our research conceptual framework of the configuration of sustainable hotel resilience. We adopt a configurational approach to effectively investigate the interrelated sustainable hotel resilience components in order to uncover how the multiple components of hotel resilience combine into configurations to produce high hotel growth. The present research is constructed on the theoretical assumption that sustainable hotel resilience is constituted by relevant components, and the way that these components are combined matters in relation to hotel resilience, achieving the outcomes of interest. Therefore, this configurational perspective enables us to examine the overall systemic impact rather than the isolated impact of individual elements (Ragin & Davey, 2022).

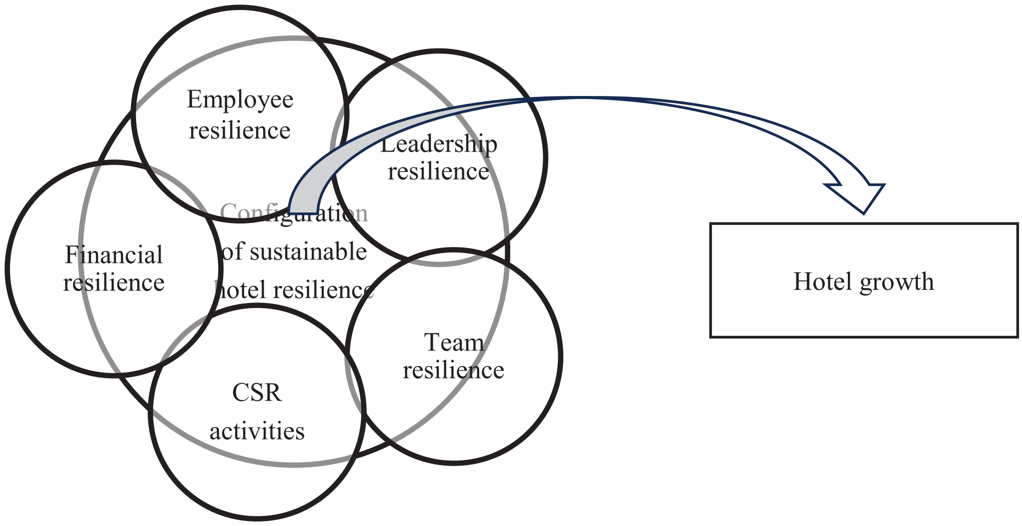


Figure 1. The research conceptual framework

Hotel employee resilience

Human capital, comprising employees' skillsets and capacities, plays a significant role in building hotel resilience and in determining whether a hotel can respond and adapt to change in uncertain and dynamic environments (Brown et al., 2018; Hall et al., 2018; Prayag, Spector, Orchiston, & Chowdhury, 2020; Xie et al., 2023). Kuntz, Naswall, and Malinen (2016) define employee resilience as the behavioral capability to leverage work resources to ensure continual adaption and growth at work, supported by the organization. The attributes and traits that employees need to adapt and thrive in the changing environment of a hotel include health, skills, capacity to adapt, knowledge, and business continuity (Brown et al., 2018). Employees' mental health and well-being are critical in the hospitality industry, especially during crises. Supportive workplace environments and mental health resources can help build resilience. There is a growing trend towards ensuring and investing in the well-being of hotel employees (Bohdanowicz & Zientara, 2009; Agarwal, 2021). The authors argue that understanding this factor can help hotels better support their employees and enhance their overall well-being. Recent studies indicate that, among other skills, employees' creative self-efficacy has a significant positive influence on employee resilience (Prayag & Dassanayake, 2023). Organizations that foster resilience in their workforce by enhancing their ability to handle change, adversity, and risk generally find themselves better equipped to manage, react to and adjust to unforeseen shifts and challenges (Lengnick-Hall et al., 2011; Hall et al., 2018; Prayag et al., 2020) and achieve more sustainable outcomes in the longer term (Brown et al., 2018; Nyaupane, Prayag, Godwyll, & White, 2020; Prayag & Dassanayake, 2023). Nyaupane et al. (2020) noted that organizational traits such as a safe/secure working environment, thinking beyond the status quo, including the right people in decisions, and effective long-term planning are perceived by employees as critical for organizational resilience. However, resilient employees do not necessarily imply resilient organizations (Prayag, 2018). In this line, some authors investigate the moderating effects of perceived risk and challenge stressors on the relationship between the resilience of hotel employees and their work outcomes (Xie et al., 2023). Other authors suggest that hotel employees' resilience can be a beneficial factor in mitigating the negative impact of job insecurity-related stress, such as anxiety and depression, on their performance (Aguiar-Quintana et al., 2021). This is particularly relevant during the COVID-19 pandemic, where resilience helps reduce stress and positively affects outcomes like task performance.

Hotel leadership resilience

Entrepreneurs often face high levels of uncertainty and a significant risk of failure. Psychological resilience helps them to cope with these challenges without losing motivation or confidence (Prayag, 2023). It is often difficult to distinguish the entrepreneur from the organization, as the entrepreneur's actions and behaviors are closely tied to those of the organization (Prayag et al., 2020). Entrepreneur resilience ought to be viewed as a factor of individual resilience, largely stemming from the entrepreneur's thinking patterns and the application of entrepreneurial strategies within their business (Prayag, 2023). Some scholars suggest that successful hotel entrepreneurs often exhibit resilient leadership, which enables them to navigate the complexities of the hospitality industry effectively (Zhang, Xie, & Huang, 2023). Different leadership styles and traits have been studied as critical in managing different crises. The hospitality literature review highlighted leadership styles such as abusive supervision, empowering leadership, ethical leadership, and authentic leadership (Guchait, Peyton, Madera, Gip, & Molina-Collado, 2023), which are critical for crisis management. A study by Zhang et al. (2023) conceptualized the seven dimensions of resilient leadership: contingency planning, improvisation, adaptive instructing, contingency control, emergency care, adjustment recovery, and mutual growth. Other authors indicate the necessity of leadership traits such as vision sharing, leadership of tasks, and management of change (Prayag et al., 2023) for crisis management. The emphasis on improvisation and learning as key aspects of resilience underscores the dynamic nature of leadership in challenging times (Lombardi, Pina, Cunha, & Giustiniano, 2021). These specific leadership styles and behaviors are crucial for building and sustaining resilience in the hotel industry, enabling leaders to effectively manage their teams, respond to crises, and navigate the challenges of the dynamic hospitality environment. Recent studies also highlight that resilient leadership behaviours significantly impact employee and organizational (e.g., team resilience) resilience (Prayag et al., 2023; Zhang, Xie, & Huang, 2023). Thus, strong leadership that fosters a supportive and inclusive environment is crucial. Leaders in hospitality should encourage teamwork, provide resources, and support staff in challenging situations.

Hotel team resilience

The success of a hotel often relies on the cooperative efforts and commitment of its teams, and there is a common belief that resilient teams play a major role in strengthening the hotel's ability to adapt and endure (Brown et al., 2017, 2018; Melián-Alzola et al., 2020; Nyaupane et al., 2020; Prayag, 2023). Team resilience is deeply intertwined with organizational resilience, competitiveness, and growth (Hartmann, Weiss, & Hoegl, 2020). According to Brown et al. (2018), social resources, connectedness, cohesion, the capacity to work as a group, and trust create social capital. Baum (2002) identified effective communication and collaboration as vital for hospitality industry success. This includes sharing information, supporting each other, and working together to solve problems and improve service delivery (Sydnor-Bousso et al., 2011). The ability of an organization to collaborate and tackle problems can be measured by examining its approach to the decision-making process. This involves assessing whether managers and leaders favor a collaborative, participatory style, thus a sense of mutual support and trust among team members, fostering a strong team bond, or leaning towards a more hierarchical method (Brown et al., 2018). Resilient organizations tend to have team structures capable of detecting subtle signs of weakness in organizational and market dynamics by monitoring ongoing operations (Bowers, Kreutzer, Cannon-Bowers, & Lamb, 2017). Teams with advanced response capabilities are more adept at recognizing weak signals, enabling them to adaptively respond to disruptions more effectively (Prayag, 2023). However, team resilience has received no research attention in tourism and hospitality studies because researchers do not transition from examining the individual-level resilience of employees to group-level resilience (Prayag, 2023).

Hotel financial resilience

Financial resilience is critical for hotels as it enables them to withstand economic shocks and uncertainty in the industry. An essential component of a hotel's resilience is financial capital, characterized by the availability of financial resources, the diversity of income, financial strength, and the personal economic resilience of staff members (Brown et al., 2018). Some scholars suggest that financial recovery should focus on re-benchmarking and viability stress under various shock scenarios, minimizing expenses, and preserving cash as key resilience strategies (Kizildag, Weinland, & Demirer, 2022). These components form a strong foundation for hotels to navigate economic uncertainties and ensure their sustainability in the long run. Recent research results indicate that environmental, social, and governance (ESG), as a framework for anchoring responsible corporate behavior, can improve future financial resilience and create crisis-resilient value for hotel corporations from the effects of COVID-19 (Chen et al., 2022).

CSR activities

According to Kim, Barber, and Kim (2019), one of the most important topics for future research suggestions is the sustainable development practices of hotels. Hotel sustainability is often synonymous with CSR activities, where the focus is on how hotels engage with key stakeholders such as employees, guests, local communities, suppliers, and the environment to operate responsibly, embrace ethical practices, display economic fairness, and respect for people, communities and the environment (Bohdanowicz & Zientara, 2008; Gürlek & Tuna, 2019; Marco-Lajara et al., 2022). More and more hotels are shifting towards sustainable business models that balance the specificities of all the dimensions of sustainability with a company's interests and its stakeholders (Dos Santos, Méxas, Meiriño, Sampaio, & Costa, 2020). An environmental approach assumes "the commitment to the integration of environmentally-friendly practices into daily operations, reducing the environmental impact while ensuring economic and social benefits" (Chan & Hawkins, 2010, p. 643). The implementation of energy-saving technologies and water conservation measures has been a key focus of Gunduz Songur, Turktarhan, and Cobanoglu (2022), reduction, reuse, and recycling, including food waste reduction, have been emphasized by Pirani and Arafat (2014). CSR activities address environmental issues and adopt a social approach that includes fair labor practices, community engagement, cultural preservation, and a contribution to local economies (Bohdanowicz & Zientara, 2008). Garay and Font (2012) emphasize preserving resources, respecting and supporting local cultures, and providing economic benefits to local communities, all within the operational context of providing accommodation services to guests. Thus, the social approach ensures that hotels contribute positively to the local community and culture. This might include hiring local staff, providing fair wages and working conditions, supporting local businesses, preserving cultural heritage, and engaging in community development projects (Brown et al., 2018). The economic approach refers to the practices and strategies that hotels implement in an ecologically and socially responsible way, while also being economically viable. For example, by reducing energy, water consumption, and waste emissions, hotel managers reduce the hotel's costs, or by focusing on employment of the local society, they promote stability and loyalty within the local workforce. Furthermore, hotels are increasingly aligning with global sustainability standards and seeking certifications (Bianco, Bernard, & Singal, 2023). Hence, the sustainable approach helps to achieve hotel business efficiency and competitive advantage (Jones et al., 2014).

Hotel growth

The findings of some studies highlight the significance of hotel performance as a catalyst for hotel growth, shedding light on the relationship between these two notions (Tibay et al., 2018; Melián-Alzola et al., 2020; Sobaih et al., 2021). Achieving high performance in terms of financial and non-financial indicators translates into overall hotel growth. Hotel resilience has been identified as an influential factor in enhancing financial and non-financial performance within the hospitality sector (Prayag, Chowdhury, Spector, & Orchiston, 2018; Melián-Alzola et al., 2020; Sobaih et al., 2021). Melián-Alzola et al. (2020) emphasize that hotel resilience positively influences financial performance, measured by economic indicators such as return on investment, average sales growth and average market share growth, suggesting that financially stable organizations are better equipped to weather adverse events. Hotel resilience is essential to non-financial performance (customer loyalty, company image, and reputation) (Melián-Alzola et al., 2020). Some authors indicate that employee resilience positively affects hotel employees' self-rated task performance, as contented employees are more likely to contribute positively to the organization's adaptability and recovery (Aguiar-Quintana et al., 2021).

RESEARCH SITE AND METHODS

Sample, data collection, and variables

In the analysis, five independent variables and one dependent variable were considered. The genesis of the constructs under consideration involved literature review coupled with exploratory factor analysis. Specifically, for constructs delineating sustainable hotel resilience based on the literature (Brown et al., 2019; Prayag, 2023), 37 questions pertaining to the scope of activities and attitudes encountered in hotel management were prepared. Conversely, questions related to the performance aspect of hotels, totaling 13, were developed based on works by Hughes and Morgan (2007), Covin and Slevin (1989), and Kusa et al. (2021). Subsequently, a questionnaire was formulated, comprising 50 questions in this segment of the study. A seven-point Likert scale was employed in the questionnaire. The questionnaire was previously verified in terms of its content and design by three entrepreneurship scientists as well as during interviews with several hotel sector managers. Their comments were taken into account in the final version of the questionnaire.

The research focused on hotels operating in Poland. One- and two-star hotels were selected for the study. According to the Central Register of Hotels, at the beginning of January 2023, 541 enterprises met the established criteria. Stratified random sampling without replacement was used to draw the samples. The data for the study were collected by a specialized research company that submitted survey questionnaires in May and June 2023. Data were collected using a questionnaire administered through Computer-Assisted Personal Interviewing (CAPI) or Paper and Pencil Interviewing (PAPI) techniques.

As a result, 120 completed questionnaires were obtained. After verification, the data from all questionnaires were used in the further analysis, translating into a 9% sample error with an assumed 95% confidence level. Table 1 provides basic information about the selected hotel group for the study.

Table 1. Sample characteristics

Characteristic	Range	N	%
Age	10 and less	28	23.3
	11–20	35	29.2
	21–30	32	26.7
	above 30	25	20.8
Type of enterprise	micro	65	54.2
	small	52	43.3
	medium	3	2.5
Number of beds	50 and less	71	59.2
	51–100	28	23.3
	more than 100	21	17.5
Standard category	one-star	24	20
	two-star	96	80

In the next step of data processing, utilizing exploratory factor analysis, five dimensions of sustainable hotel resilience and one outcome dimension were identified. Table 2 presents the number of indicators used to construct individual constructs.

Table 2. Characteristics of outcome and conditions

Name	Abbreviation	Type	No. of items	Statistic			Construct Reliability		
				Average	Median	Standard deviation	Cronbach's alpha	Rho_A	Composite Reliability
Employee Resilience	ER	condition	7	5.33	5.64	1.33	0.899	0.903	0.921
CSR activities	CSRa	condition	5	6.12	6.40	0.93	0.791	0.820	0.850
Team Resilience	TR	condition	5	5.96	6.20	1.03	0.861	0.862	0.906
Leadership Resilience	LR	condition	5	4.88	4.80	1.26	0.875	0.895	0.910
Financial Resilience	FR	condition	6	5.18	5.17	1.05	0.811	0.826	0.869
Hotel growth	HG	outcome	4	4.26	4.25	1.31	0.903	0.910	0.928

Table 2 also includes information on the internal consistency reliability of constructs. In this regard, the considered constructs exhibit appropriate properties. All reliability measures have values above 0.7 (Hair et al., 2022). The problem of redundancy does not arise because the values of all measures are below 0.95 (Diamantopoulos et al., 2012). According to Dijkstra and Henseler (2015), the rho A statistic should be greater than Cronbach's alpha and smaller than the values of composite reliability (CR); this condition holds for our data.

Table 2, which presents basic descriptive statistics for the considered constructs, shows that the average values of variables (expressed as the mean) are higher than the mean value of the scale, which is 4. Among the independent variables, CSR activities exhibit the highest level (6.12), while Leadership Resilience has the lowest (4.88). The average level of the outcome variable, Hotel growth, is 4.26, slightly higher than the mean value of the scale. The variability of the variables, expressed by the standard deviation, ranges from 0.93 to 1.33, indicating a relatively low level compared to the average value.

Data analysis techniques

To conduct a causal analysis and identify the dimensions of sustainable hotel resilience that are significant in shaping hotel growth, we employed a method known as fuzzy-set qualitative comparative analysis (fsQCA). This technique belongs to the group of configurational analysis methods introduced and developed by American sociologist Charles Ragin (1987), further refined by the author and other researchers (Ragin, 2008, 2023; Fiss, 2011; Schneider & Wagemann, 2012; Ragin & Fiss, 2017; Duşa, 2019; Pappas & Woodside, 2021). The main goal of fsQCA is to identify causal relationships between the adopted conditions and the predicted outcome by comparing cases subjected to analysis. In contrast to classical approaches such as regression analysis, methods from the QCA group distinguish themselves through asymmetric relationships, equifinality, and the complexity of causes (Ragin, 2008; Woodside, 2013).

Although the QCA method was initially developed as a technique that integrates quantitative and qualitative approaches, typically applied to small samples (with fewer than 50 cases), as indicated by Greckhamer, Misangyi, and Fiss (2013), there are no restrictions on using it for larger datasets (over 100 cases). This approach has been employed in numerous studies focusing on tourism, particularly in the hotel industry sector (Palacios-Marques et al., 2017; Kallmuenzer et al., 2021; Kusa et al., 2022; Suder, 2023; Salem et al., 2023; Kumar et al., 2023).

RESULTS

The examination proceeded through multiple phases following the framework suggested by Pappas and Woodside (2021). These stages included data calibration, the examination of necessary conditions, the implementation of a truth table procedure, and the identification of sufficient conditions leading to high and low levels of the outcome independently. The analytical process employed fsQCA 4.0 software (Ragin & Davey, 2022).

Data calibration

The process of calibration, involving the transformation of initial data into fuzzy sets, was executed using the logistic function (Ragin & Davey, 2022). To employ this function, it is necessary to define cut-off thresholds. In alignment with the methodologies outlined by Ragin (2008) and Pappas & Woodside (2021), this study employs thresholds (or breakpoints) set at the 95th, 50th, and 5th percentiles. The choice of such cutoff points, apart from the methodological indications, has also been confirmed in published works addressing topics related to hotel management and/or resilience (Kallmuenzer et al., 2019; Haddoud et al., 2022; Suder, 2023)[4]. The values of the cut-off thresholds for the analysis are presented in Table 3.

Table 3. Calibration thresholds for conditions and outcome

Variable	95th percentile (Full member)	50th percentile (Cross-over point)	5th percentile (Full non-member)
ER	7.00	5.64	2.71
CSRa	7.00	6.40	4.60
TR	7.00	6.20	4.01
LR	7.00	4.80	2.80
FR	7.00	5.17	3.50
HG	6.50	4.25	1.78

4 However, to verify whether the choice of cutoff thresholds significantly affects the obtained results, an analysis was conducted for other cutoff thresholds used in calibrating the data, namely 0.9, 0.5, and 0.1. The obtained results did not differ from those applied in our study.

In the fsQCA procedure, some cases may fall precisely on the cross-over point (0.5), which would consequently result in their exclusion from further analysis (Ragin, 2008). To prevent this, in accordance with Fiss's (2011) recommendation, 0.001 was added to each value. The final calibrated results are presented in Figure 2.

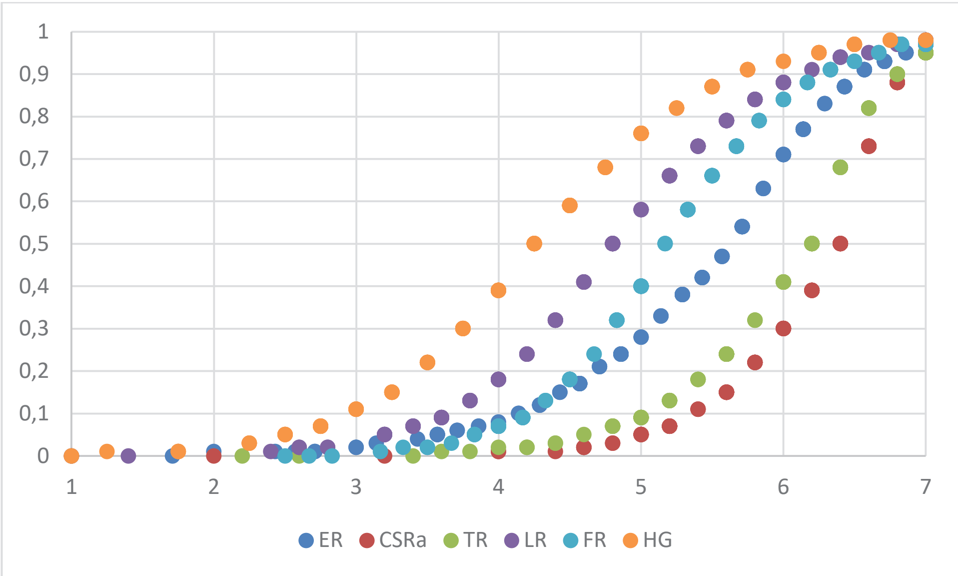


Figure 2. Results of data calibration

Analysis of necessary conditions

The analysis of necessary conditions aims to identify those conditions whose occurrences are indispensable for achieving the specified outcome. The outcomes of this analysis for both high and low levels of HG are presented in Table 4. As a result, this analysis determines the basic parameters for the fsQCA method, namely consistency and coverage. Consistency gauges the extent to which an outcome (as a fuzzy set) is encompassed by a condition, akin to a correlation coefficient in regression analysis (Woodside, 2013). Coverage determines the extent to which a condition aligns with an outcome. In line with Schneider and Wagemann (2012), a condition with consistency exceeding 0.9 is considered necessary. If such a condition is identified, it is excluded from further analysis but included in all the resulting combinations.

Table 4. Analysis of necessary conditions

Conditions	HG		~HG	
	Cons.	**Cov.**	**Cons.**	**Cov.**
ER	0.5209	0.5192	0.7244	0.7162
~ER	0.7153	0.7235	0.5137	0.5154
CSRa	0.5359	0.5251	0.7130	0.6932
~CSRa	0.6869	0.7070	0.5115	0.5223
TR	0.5498	0.5286	0.7430	0.7086
~TR	0.6969	0.7321	0.5057	0.5270
LR	0.5315	0.5175	0.7741	0.7477
~LR	0.7409	0.7678	0.5005	0.5145
FR	0.5312	0.5372	0.7477	0.7500
~FR	0.7528	0.7505	0.5387	0.5327

Note: Cons. = consistency; Cov. = coverage.

Since none of the consistency values in Table 4 exceeds 0.9, we conclude that among the considered constructs, there are no factors that constitute a necessary condition for achieving a high outcome or a low outcome.

Truth table procedure

A truth table serves as the primary analytical tool within the fsQCA method, playing a crucial role in executing the minimization process, which directly leads to the final results of an analysis. This table is structured as a matrix, with a column count equivalent to the number of causal conditions and a row count equal to 2^n (where n represents the number of conditions). In our specific analysis, this table had 5 columns and 32 rows. Following the recommendations of Pappas and Woodside (2021), the selection of combinations from the truth table considered in the subsequent stages was based on the values of the number of cases, row consistency, PRI consistence. The recommendations provided in the mentioned study led us to choose a frequency cutoff point of two. The threshold for the PRI consistency measure was set at 0.5. Cutoff values for raw consistency were not fixed but were established based on indications of breaks between their respective values in the truth table (Pappas & Woodside, 2021). Significant parts of the truth tables, along with the threshold values for the adopted criteria and cases marked (in bold) that meet the accepted criteria, are provided in Appendixes 1 and 2.

Logical minimization and analysis of sufficiency

FsQCA relies on the logical minimization process, aiming to identify the most straightforward expression associated with the explained value of the outcome. Through this approach, fsQCA allows the identification of factor combinations leading to an anticipated outcome (Fiss, 2011). The use of fsQCA 4.0 software allows the possibility of obtaining three types of solutions: parsimonious, intermediate, and complex (Ragin, 2008). This study specifically focused on an intermediate solution, deemed superior, as it confines the remainders to the most plausible ones (Ragin, 2008; Fiss, 2011). Conditions can manifest as core and contributing causals in an intermediate solution. The analysis's main output, sufficiency solutions leading to a high level of HG and leading to a low level of HG, is detailed in Table 5.

Table 5. Combination of conditions leading to the presence or absence of hotel growth

	Sets/Solutions						
Conditions	**Presence of HG**			**Absence of HG**			
	PS1a	**PS1b**	**PS2**	**AS1a**	**AS1b**	**AS2a**	**AS2b**
ER - Employee Resilience	●	●			•	○	○
CSRa - CSR activities	●	●	●	○	○		•
TR - Team Resilience	•		●	◦	•	○	○
LR - Leadership Resilience	●	●	●	○	○	◦	•
FR - Financial Resilience		•	•	•		◦	•
Consistency	0.865	0.866	0.874	0.876	0.930	0.876	0.899
Raw coverage	0.485	0.461	0.457	0.259	0.218	0.511	0.200
Solution consistency		0.845			0.846		
Solution coverage		0.560			0.617		

Note: ● = core causal condition (present); ○ = core causal condition (absent); • = contributing causal condition (present); ◦ = contributing causal condition (absent); the blank represents the "don't care" condition.

Using fsQCA, this study identified two primary combinations of conditions that can lead to a high level of hotel growth, as presented in Table 5. The first solution, PS1, is based on the simultaneous presence of three core causal conditions: Employee Resilience, CSR activities, and Leadership Resilience. Within this solution, two intermediate solutions were obtained, namely PS1a, where Team Resilience is a contributing causal condition, and PS1b, where the contributing condition is the presence of a high level of Financial Resilience. The second combination leading to a high level of hotel growth (solution PS2) differs from PS1a in that Team Resilience replaces Employee Resilience as the core causal condition. The strength of the relationship among all sufficient conditions, as determined by consistency, is relatively high at 0.845 (above the acceptable threshold of 0.75). These solutions explain approximately 56% of cases associated with high hotel growth, which is deemed acceptable (the acceptance threshold is 25%).

Based on the results presented in Table 5, it is also possible to discern the combinations of factors that lead to a low level of hotel growth. In this regard, fsQCA identified two main solutions. The first, AS1, is based on low CSR activities and Leadership Resilience levels. Within this solution, two intermediate solutions were obtained: AS1a, where contributing conditions include a low level of Team Resilience and a high level of Financial Resilience, and AS1b, with support from a high level of Employee Resilience and Team Resilience. The second solution, AS2, for low hotel growth, is primarily influenced by two factors: low levels of Employee Resilience and Team Resilience. Supporting factors can include low levels of Leadership Resilience and Financial Resilience (solution AS2a) or the presence of three conditions: CSR activities, Leadership Resilience, and Financial Resilience. The consistency level, indicating how well the obtained solutions lead to low hotel growth, is relatively high at 0.846. Moreover, the presented solutions explain the observed outcome to around 61.7%.

DISCUSSION

The results of our analysis (presented in Table 5) show that each condition (i.e., Employee Resilience, CSR activities, Leadership Resilience, Team Resilience, and Financial Resilience) co-creates sustainable hotel resilience and belongs to at least one combination that leads to hotel growth. Our study, which searched for combinations of factors that led hotels to their growth, showed the main combinations (labeled PS1 and PS2). Each solution is based on three main conditions, with the PS1 solution distinguishing two intermediate solutions that differ in contributing conditions. Thus, the results obtained from our analysis allow us to formulate four research propositions (P) relating to obtaining a positive result in terms of hotel growth:

P1: For the one- and two-star hotels surveyed, simultaneously maintaining high levels of the factors: Employee Resilience, CSR activities, and Leadership Resilience leads to high levels of hotel growth, while these factors can be supported by either Team Resilience (PS1a) or Financial Resilience (PS1b).

P2: For the one- and two-star hotels surveyed, simultaneously maintaining high levels of the factors: CSR activities, Team Resilience and Leadership Resilience leads to high levels of hotel growth, while these factors can be supported by Financial Resilience. Due to the asymmetry of the results obtained by the fsQCA method, two combinations of factors leading to low hotel growth were also obtained (labeled AS1 and AS2). Within each of the two main solutions, there are two intermediate solutions that differ in supporting conditions. Based on this, two further propositions were formulated as conclusions from this part of the analysis:

P3: For the one- and two-star hotels surveyed, simultaneously maintaining low levels of the CSR activities and Leadership Resilience factors leads to low levels of hotel growth. At the same time, the supporting factors for this combination could be high Financial Resilience and low Team Resilience (AS1a) or high levels of Employee Resilience and Team Resilience (AS1b).

P4: For the one- and two-star hotels surveyed, simultaneously maintaining low levels of the Employee Resilience and Team Resilience factors leads to low levels of hotel growth while supporting factors for this combination could be low levels of Leadership Resilience and Financial Resilience or high levels of CSR activities, Leadership Resilience and Financial Resilience.

Our study, therefore, shows that a coexistence of the factors accepted for analysis that constitute sustainable hotel resilience is needed to achieve hotel growth and, conversely, the absence of these factors can result in stunted hotel growth. Our findings support the thesis that hotel resilience is an important factor in improving hospitality industry performance (Melián-Alzola et al., 2020; Sobaih et al., 2021). They also overlap with previous findings on resilience in the broader tourism industry (Becken, 2013; Jiang & Wen, 2020; Marco-Lajara et al., 2022; Hallet et al., 2023). The turbulent environment in which hotels operate today requires greater resilience to adapt to changing conditions and ensure continued growth. Following Brown et al. (2017), we defined hotel resilience quite broadly, including in this category a whole range of different factors that allow hotels to overcome various types of disruptions. Among them were both internally oriented factors (i.e., Employee Resilience, Leadership Resilience, Team Resilience and Financial Resilience), as well as those that affect the outside of the organization (in the case of CSR activities).

Our research indicates that almost all combinations of the factors adopted to analyze a hotel's sustainable resilience include the co-occurrence of the four conditions, except for the last combination, which is based on all five analyzed conditions. Thus, our research reveals the complementarity and synergistic mechanism between the different conditions and proves that hotel resilience studies require a holistic view and a combination of different elements to achieve the intended hotel growth.

The relationships identified between the factors also made it possible to distinguish those conditions that, from the point of view of hotel development, constitute core causal conditions and those that, while not core, are important complements to the solutions that emerged (contributing causal conditions). Thus, the growth of hotels in each solution is determined by three core causal factors (presence analysis), while in the opposite configuration, the growth can be inhibited with just two core causal conditions (absence analysis). The analysis shows that two factors in particular seem indispensable for hotel growth: Leadership Resilience and CSR activities, which appear as core causal conditions in each of the two approaches adopted (in the presence analysis). This indicates that a hotel's growth is primarily supported by factors attributed to either the individual level (Leadership Resilience) or the community level (CSR activities). In addition, the individual level is also represented by the second factor adopted in the analysis – Employee Resilience – which co-occurs as a core condition in the first solution obtained. This does not mean, however, that the organizational level turned out to be completely irrelevant, for in the second scenario, it is Team Resilience that completes the triad of core conditions. Our results can be seen as complementary to previous research on hotel resilience focusing on the individual and organizational levels (e.g., Boto-García & Mayor, 2022; Dogru et al., 2023). This is because they add an additional level of analysis – the community-based level, considering sustainable pillars. While our findings are essentially about the combination of different factors that make up a hotel's sustainable resilience, they also confirm prior research focusing on the single factors we adopted for analysis. This is true for the two factors assigned to the individual level – the impact of Employee Resilience (Nyaupane et al., 2020) and Leadership Resilience (Lombardi et al., 2021; Prayag et al., 2023; Zhang et al., 2023) on organizational resilience (analyzed separately) has been confirmed in prior studies. This is also true for both factors attributed to the organizational level. Our research confirms previous findings for Team Resilience (Brown et al., 2017, 2018; Bowers et al., 2017; Melián-Alzola et al., 2020; Nyaupane et al., 2020; Prayag, 2023) and Financial Resilience (Brown et al., 2018; Kizildag et al., 2022) as factors that build organizational resilience. In our analyses, of the five conditions considered, only Financial Resilience does not appear as a core casual condition in any combination leading to high or low hotel growth (in both the present and absent analysis, this factor appears as a contributing casual condition). This evidences that while each scenario requires financial resources to support it, they are not the key factor in building sustainable resilience to ensure long-term hotel growth. This observation appears to be particularly valuable for hotels that face constraints in accessing financial resources.

Finally, our discoveries are consistent with findings on CSR activities. Several papers linking sustainable threads to hotel resilience can be found in the literature (Brown et al., 2017, 2019; Brown et al., 2018; Brown et al., 2021). However, it is worth noting that these studies omit the lower levels (individual and organizational) we have included in our analysis to build a more integrated approach. Through our analysis, we see the need for hotels to take sustainable actions in social, economic and environmental pillars that would strengthen their resilience to ensure business success. This is in line with previous studies and findings by other authors (e.g., Jones et al., 2014; Souza et al., 2017, Brown et al., 2017; Kim et al., 2019; Melián-Alzola et al., 2020; Sobaih et al., 2021; Gamage et al., 2023) who point to sustainability as a means to increase resilience in the hospitality industry. Our additional insights relate to the environmental dimension, which is still highly marginalized in sustainability and hotel resilience research. The attention of scholars in this area has focused primarily on the other two dimensions (such as Brown et al., 2017, 2018, 2019, 2021; Melián-Alzola et al., 2020).

CONCLUSIONS

Theoretical implications

We initiated this study by observing an incomplete understanding of hotel resilience in hotel growth. We found that existing research on hotel resilience focused mainly on fragmented areas: examining the impact of single factors on hotel resilience. We identified even fewer studies with regard to the impact of hotel resilience on hotel growth. Therefore, our goal was to develop a holistic, systemic effect that takes into account the complex dynamics between the interdependent factors that make up hotel resilience, resulting in higher hotel performance. Our research relies on a holistic and deeper understanding of the joint and synergistic impact of the factors comprising sustainable hotel resilience that leads to hotel growth. With the configurational approach, we incorporated all the elements that make up the individual conditions of sustainable hotel resilience in the conceptual framework. We conducted an empirical analysis to clarify the relationship between these conditions in the context of achieving hotel growth.

Thus, this study makes several theoretical contributions to the hotel resilience literature. Firstly, based on the literature review and exploratory factor analysis, we identified five factors that make up sustainable hotel resilience: Employee Resilience, CSR activities, Team Resilience, Leadership Resilience and Financial Resilience. We explained the nature of these factors and their interdependent impact on hotel growth.

Secondly, our study extends the knowledge of the impact of accepted factors on achieving growth in the hospitality industry. In our analysis, we took into account a model of presence as well as absence, which made our analysis more comprehensive. Through this, we have identified several combinations that lead to hotel growth and those configurations that lead to hotel underperformance. Our research shows that each condition identified has its own role and implications in creating opportunities for hotels to achieve sustainable growth. Related to this is a particularly valuable observation about the role of two factors: CSR activities and Leadership Resilience, which seem to support hotel growth very strongly (when other factors are taken into account).

Finally, our study confirms the usefulness of the configurational approach supported by fsQCA in explaining the impact of the factors that make up sustainable hotel resilience and lead to hotel growth in a systemic way.

Practical implications

Our study also provides some important implications for those involved in the hospitality industry. It points to the need to support the drivers of sustainable hotel resilience by strengthening factors at every level: individual, organizational, and community. Our findings also confirm several alternative ways to configure the key elements of sustainable hotel resilience to achieve high hotel growth, implying equivalent equifinal pathways leading to the same outcome. Pursuing high hotel growth does not necessarily entail ensuring high levels of all the conditions analyzed. This is because the same result can be achieved with less involvement of the hotel's resources, representing an additional saving (time, resources, etc.) for this type of entity. In practice, the suggested proposals and their implications can enable hotels to formulate and implement sustainable hotel resilience strategies to achieve high levels of growth.

Limitations

Our study is not free of limitations. The first limitation is related to the relatively small research sample and its structure. This is because, as assumed, only one- and two-star hotels operating in Poland were accepted for the study. Although fsQCA identifies existing combinations of conditions despite the small sample size, the sample we adopted may not be large enough to account for all possible combinations formed by the defined five conditions.

The second limitation is linked to a restricted sample in terms of country. Our research sample includes hotels operating in Poland. And while we tried to draw conclusions based on the studied slice of reality, we realized that cultural factors can influence the results.

The third limitation refers to the factors adopted for analysis as the main components of sustainable hotel resilience. This should be regarded as our own proposal for conceptualizing this concept, developed on the basis of a literature review (due to the fact that there is a lack of tested concepts). However, we do not exclude other possible ways of categorizing sustainable hotel resilience, which may shed new light on the issue.

The fourth constraint concerns one factor that makes up sustainable hotel resilience, namely CSR activities. We defined it broadly, including social, economic, and environmental aspects. However, survey respondents focused primarily on the first two mentioned aspects, neglecting the environmental aspect, which, on the one hand, informs of its relatively low rank, while on the other hand, may affect the final results.

Finally, the last limitation is rooted in the configuration analysis methodology used, which, despite its undoubted usefulness, has some limitations related, among other things, to the cutoff points adopted (which may affect the results obtained) or the inability to establish temporal causality (fsQCA only considers two aspects of causality in terms of the necessity and sufficiency of conditions for the outcome of interest).

Directions for further research

Given our findings, sustainable hotel resilience and its impact on the success of hotel operations appears to be a promising area for future research. Future studies should use larger and more diverse samples and take into account additional contextual factors, such as location (conducting studies in other countries) or industry category (the addition of new higher category hotels and other tourism operators), which may result in more detailed patterns. When looking at a restricted sample in terms of country, researchers can gain valuable insights into how different countries are recovering from the impacts of the pandemic on their hotel industry. By comparing the recovery strategies and outcomes of various countries, researchers can identify best practices and learn from successful approaches. Similarly, focusing on specific hotel types can also provide valuable information for future study. Different types of hotels, such as luxury hotels or budget accommodations, may have experienced varying levels of impact during the pandemic. Understanding these differences can help researchers better understand the resilience of different sectors within the hospitality industry. Contrasting the results of a restricted sample with those of other countries and hotel types can provide a broader perspective and allow for more robust conclusions to be drawn. By comparing and contrasting data from a variety of sources, researchers can identify trends and patterns that may not be apparent when analyzing a limited sample size. In addition to country and hotel type, it is important to consider other factors that may influence the outcomes of the study, such as government policies, consumer behavior, and industry trends. By taking a holistic approach and considering a wide range of variables, researchers can ensure that their findings are robust, relevant, and actionable for stakeholders in the tourism industry. In addition to this, it is worth investigating whether sustainable resilience is affected by functioning in corporate groups (Jankowska et al., 2016) or in tourism clusters (Kachniewska, 2013), which was not included in our study.

The results also confirm the need to develop each dimension of resilience regarding CSR activities and to analyze further their interrelationships leading to hotel growth. Our research suggests that CSR activities require special attention in understanding hotel resilience and, more broadly, its impact on hotel growth.

However, the search for optimal combinations of sustainable hotel resilience should not limit future research to the individual components of sustainable hotel resilience. In the context of applying the fsQCA methodology, it is worth considering combinations of additional factors influencing sustainable hotel resilience. It would be valuable to obtain a larger number of cases for the studied population in order to achieve a representative sample size (around 240 cases would yield a sample error of less than 5%). This would allow the transformation of proposals into statistical hypotheses, their verification (e.g., using structural equation models), and provide statistical grounds for generalizing the conclusions to the entire population of hotels under study. In addition, future research on the relationship between the factors adopted for analysis may include the use of other methods to estimate the strength of the impact of individual factors on sustainable hotel resilience, and indirectly on hotel growth, such as structural equation modeling. Such research would allow the investigation of causal paths and underlying mechanisms, which would significantly enrich the perspective.

References

Agarwal, P. (2021). Shattered but smiling: Human resource management and the wellbeing of hotel employees during COVID-19. *International Journal of Hospitality Management*, 93, 102765. https://doi.org/10.1016/j.ijhm.2020.102765

Aguiar-Quintana, T., Nguyen, T.H.H., Araujo-Cabrera, Y., & Sanabria-Díaz, J.M. (2021). Do job insecurity, anxiety and depression caused by the COVID-19 pandemic influence hotel employees' self-rated task performance? The moderating role of employee resilience. *International Journal of Hospitality Management*, 94, 102868, https://doi.org/10.1016/j.ijhm.2021.102868

Andersson, T., Caker, M., Tengblad, S., & Wickelgren, M. (2019). Building traits for organizational resilience through balancing organizational structures. *Scandinavian Journal of Management, 35*(1), 36–45. https://doi.org/10.1016/j.scaman.2019.01.001

Ayuso, S. (2006). Adoption of voluntary environmental tools for sustainable tourism: Analysing the experience of Spanish hotels. *Corporate Social Responsibility and Environmental Management*, *13*(4), 207-220. https://doi.org/10.1002/csr.103

Baum, T. (2002). Skills and training for the hospitality sector: A review of issues. *Journal of Vocational Education & Training*, *54*(3), 343–364. https://doi.org/10.1080/13636820200200204

Becken, S. (2013). Developing a framework for assessing resilience of tourism sub-systems to climatic factors. *Annals of Tourism Research*, 43, 506-528. https://doi.org/10.1016/j.annals.2013.06.002

Bhaskara, G.I., & Filimonau, V. (2021). The COVID-19 pandemic and organisational learning for disaster planning and management: A perspective of tourism businesses from a destination prone to consecutive disasters. *Journal of Hospitality and Tourism Management*, 46, 364-375. https://doi.org/10.1016/j.jhtm.2021.01.011

Bianco, S., Bernard, S., & Singal, M. (2023). The impact of sustainability certifications on performance and competitive action in hotels. *International Journal of Hospitality Management,* 108, 103379. https://doi.org/10.1016/j.ijhm.2022.103379

Bohdanowicz, P., & Zientara, P. (2008). Corporate social responsibility in hospitality: Issues and implications. A case study of Scandic. *Scandinavian Journal of Hospitality and Tourism*, *8*(4), 271-293. https://doi.org/10.1080/15022250802504814

Bohdanowicz, P., & Zientara, P. (2009). Hotel companies' contribution to improving the quality of life of local communities and the well-being of their employees. *Tourism and Hospitality Research*, *9*(2), 147-158. https://doi.org/10.1057/thr.2008.46
Boto-García, D., & Mayor, M. (2022). Domestic tourism and the resilience of hotel demand. *Annals of Tourism Research*, 93, 103352. https://doi.org/10.1016/j.annals.2022.103352
Bowers, C., Kreutzer, C., Cannon-Bowers, J., & Lamb, J. (2017). Team resilience as a second-order emergent state: A theoretical model and research directions. *Frontiers in Psychology,* 8, 1360. https://doi.org/10.3389/fpsyg.2017.01360
Brown, N.A., Rovins, J.E., Feldmann-Jensen, S., Orchiston, C., & Johnston, D. (2017). Exploring disaster resilience within the hotel sector: A systematic review of literature. *International Journal of Disaster Risk Reduction*, 22, 362-370. https://doi.org/10.1016/j.ijdrr.2017.02.005
Brown, N.A., Orchiston, C., Rovins, J.E., Feldmann-Jensen, S., & Johnston, D. (2018). An integrative framework for investigating disaster resilience within the hotel sector. *Journal of Hospitality and Tourism Management*, 36, 67-75. https://doi.org/10.1016/j.jhtm.2018.07.004
Brown, N.A., Rovins, J.E., Feldmann-Jensen, S., Orchiston, C., & Johnston, D. (2019). Measuring disaster resilience within the hotel sector: An exploratory survey of Wellington and Hawke's Bay, New Zealand hotel staff and managers. *International Journal of Disaster Risk Reduction*, 33, 108-121. https://doi.org/10.1016/j.ijdrr.2018.09.014
Brown, N.A., Feldmann-Jensen, S., Rovins, J.E., Orchiston, C., & Johnston, D. (2021). Exploring disaster resilience within the hotel sector: A case study of Wellington and Hawke's Bay New Zealand. *International Journal of Disaster Risk Reduction*, 55, 102080. https://doi.org/10.1016/j.ijdrr.2021.102080
Chan, E. S. W., & Hawkins, R. (2010). Attitude towards EMSs in an international hotel: An exploratory case study. *International Journal of Hospitality Management*, *29*(4), 641-651. https://doi.org/10.1016/j.ijhm.2009.12.002
Chen, Ch-D., Su, Ch-H., & Chen, M-H. (2022). Are ESG-committed hotels financially resilient to the COVID-19 pandemic? An autoregressive jump intensity trend model. *Tourism Management*, 93, 104581. https://doi.org/10.1016/j.tourman.2022.104581
Conz, E., & Magnani, G. (2020). A dynamic perspective on the resilience of firms: A systematic literature review and a framework for future research, *European Management Journal*, *38*(3), 400-412. https://doi.org/10.1016/j.emj.2019.12.004
Covin, J.G., & Slevin, D.P., (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal,* 10, 75-87. https://doi.org/10.1002/smj.4250100107
Diamantopoulos, A., Sarstedt, M., Fuchs, C., Wilczynski, P., & Kaiser, S. (2012). Guidelines for choosing between multi-item and single-item scales for construct measurement: A predictive validity perspective. *Journal of the Academy of Marketing Science*, 40, 434-449. https://doi.org/10.1007/s11747-011-0300-3
Dijkstra, T. K., & Henseler, J. (2015). Consistent partial least squares path modeling. *MIS Quarterly*, *39*(2), 297-316. https://doi.org/10.25300/MISQ/2015/39.2.02
Dogru, T., Hanks, L., Suess, C., Line, N., & Mody, M. (2023). The resilience of the lodging industry during the pandemic: Hotels vs. Airbnb. *International Journal of Hospitality Management*, 109, 103406. https://doi.org/10.1016/j.ijhm.2022.103406
Dos Santos, R.A., Méxas, M.P., Meiriño, M.J., Sampaio, M.C., & Costa, H.G. (2020). Criteria for assessing a sustainable hotel business. *Journal of Cleaner Production*, 262, 121347. https://doi.org/10.1016/j.jclepro.2020.121347
Dryglas, D., & Salamaga, M. (2023). Beyond the existing economic uncertainty: Spa enterprises' resilience capacity in the Polish tourism sector. *Entrepreneurial Business and Economics Review*, *11*(3), 107-121. https://doi.org/10.15678/EBER.2023.110307
Duchek, S., Raetze, S., & Scheuch, I. (2020). The role of diversity in organizational resilience: A theoretical framework. *Business Research*. 13, 387–423. https://doi.org/10.1007/s40685-019-0084-8
Duşa, A. (2019). *QCA with R: A Comprehensive Resource*. Cham: Springer.
El-Said, O.A., Smith, M., Al-Yafaei, Y., & Salam, S.A.A. (2023). From complexity to evolution: Mapping resilience management practices in the hospitality industry during the COVID-19 crisis, *International Journal of Hospitality Management*, 110, 103435. https://doi.org/10.1016/j.ijhm.2023.103435
Espiner, S., Orchiston, C., & Higham, J.E.S. (2017). Resilience and sustainability: A complementary relationship? Towards a practical conceptual model for the sustainability resilience nexus in tourism. *Journal of Sustainable Tourism, 25*(10), 1385-1400. http://dx.doi.org/10.1080/09669582.2017.1281929
Fang, S., Prayag, G., Ozanne, L.K., & de Vries, H. (2020). Psychological capital, coping mechanisms and organizational resilience: Insights from the 2016 Kaikoura earthquake, New Zealand. *Tourism Management Perspectives*, 34, 100637. https://doi.org/10.1016/j.tmp.2020.100637
Farmaki, A., Miguel, C., Drotarova, M.H., Aleksic, A., Casni, A. C., & Efthymiadou, F. (2020). Impacts of Covid-19 on peer-to-peer accommodation platforms: Host perceptions and responses. *International Journal of Hospitality Management*, 91, 102663. https://doi.org/10.1016/j.ijhm.2020.102663
Filimonau, V., Derqui, B., & Matute, J. (2020). The COVID-19 pandemic and organisational commitment of senior hotel managers. *International Journal of Hospitality Management*, 91, 102659. https://doi.org/10.1016/j.ijhm.2020.102659
Fiss, P.C. (2011). Building better causal theories: a fuzzy set approach to typologies in organization research. *Academy of Management Journal,* 54(2), 393–420. https://doi.org/10.5465/amj.2011.60263120
Gamage, A., Pyke, J., & de Lacy, T. (2023). Building resilience and sustainable HRM in the visitor economy: An uneasy relationship. *Journal of Hospitality and Tourism Management*. https://doi.org/10.1016/j.jhtm.2023.05.006
Garay, L., & Font, X. (2012). Doing good to do well? Corporate social responsibility reasons, practices and impacts in small and medium accommodation enterprises. *International Journal of Hospitality Management*, 31(2), 329-337. https://doi.org/10.1016/j.ijhm.2011.04.013
Giousmpasoglou, C., Marinakou, E., & Zopiatis, A. (2021). Hospitality managers in turbulent times: the COVID-19 crisis. *International Journal of Contemporary Hospitality Management*, *33*(4), 1297-1318. https://doi.org/10.1108/IJCHM-07-2020-0741
Gössling, S., Scott, D., & Hall, C.M. (2020). Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism*, *29*(1), 1-20. https://doi.org/10.1080/09669582.2020.1758708
Greckhamer, T., Misangyi, V. F., & Fiss, P. C. (2013). Chapter 3 The two QCAs: From a small-N to a large-N set theoretic approach. In *Configurational theory and methods in organizational research* (pp. 49-75). Bingley, UK: Emerald Group Publishing Limited.
Guchait, P., Peyton, T., Madera, J.M., Gip, H., & Molina-Collado, A. (2023). 21st century leadership research in hospitality management: A state-of-the-art systematic literature review. *International Journal of Contemporary Hospitality Management*, *35*(12), 4259-4296. https://doi.org/10.1108/IJCHM-05-2022-0620
Gunduz Songur, A., Turktarhan, G., & Cobanoglu, C. (2022). Progress on green technology research in hotels: A literature review, *Journal of Hospitality and Tourism Insights*. https://doi.org/10.1108/JHTI-10-2021-0280

Gürlek, M., & Tuna, M. (2019). Corporate social responsibility and work engagement: Evidence from the hotel industry. *Tourism Management Perspectives*, 31, 195-208. https://doi.org/10.1016/j.tmp.2019.05.004

Haddoud, M. Y., Onjewu, A. K. E., Al-Azab, M. R., & Elbaz, A. M. (2022). The psychological drivers of entrepreneurial resilience in the tourism sector. *Journal of Business Research*, *141*, 702-712. https://doi.org/10.1016/j.jbusres.2021.11.069

Hair, J., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3nd ed.). Thousand Oaks: SAGE Publications.

Hall, C. M., Prayag, G., & Amore, A. (2018). *Tourism and resilience: Individual, organisational and destination perspectives*. Bristol: Channel View Publications.

Hall, C.M., & Williams, A.M. (2020). *Tourism and innovation*. Abingdon: Routledge.

Hall, C.M., Safonov, A., & Naderi Koupaei, S. (2023). Resilience in hospitality and tourism: Issues, synthesis and agenda. *International Journal of Contemporary Hospitality Management*, *35*(1), 347-368. https://doi.org/10.1108/IJCHM-11-2021-1428

Hartmann, S., Weiss, M., & Hoegl, M. (2020). Team resilience in organizations: A conceptual and theoretical discussion of a team-level concept. In E. H. Powley, B. Barker Caza, & A. Caza (Eds.), *Research handbook on organizational resilience* (pp. 39–52). Cheltenham: Edward Elgar Publishing.

Hillmann, J., & Guenther, E. (2021). Organizational resilience: a valuable construct for management research? *International Journal of Management Reviews*, 23, 7-44. https://doi.org/10.1111/ijmr.12239

Hu, H., & Xu, K. (2022). Visualizing the development of research on tourism resilience with mixed methods. *Sage Open*, *12*(3). https://doi.org/10.1177/21582440221126684

Hughes, M. & Morgan, R.E. (2007). Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth. *Industrial Marketing Management,* 36, 651–661. https://doi.org/10.1016/j.indmarman.2006.04.003

Jain, A., Shanker, S., & Barve, A. (2022). Resilience against the COVID-19 pandemic: Is the hotel and tourism supply chain on the right path? *Benchmarking: An International Journal*, *29*(10), 3194-3225. https://doi.org/10.1108/BIJ-05-2021-0249

Jankowska, B., Mroczek-Dąbrowska, K., Gorynia, M., & Dzikowska, M. (2016). Are firms in corporate groups more resilient during an economic crisis? Evidence from the manufacturing sector in Poland. *Journal of Entrepreneurship, Management and Innovation*, *12*(4), 5-28. https://doi.org/10.7341/20161241

Jiang, Y., & Wen, J. (2020). Effects of COVID-19 on hotel marketing and management: A perspective article. *International Journal of Contemporary Hospitality Management*, *32*(8), 2563-2573. https://doi.org/10.1108/IJCHM-03-2020-0237

Jones, P., Hillier, D., & Comfort, D. (2014). Sustainability in the global hotel industry. *International Journal of Contemporary Hospitality Management*, *26*(1), 5-17. https://doi.org/10.1108/IJCHM-10-2012-0180

Kachniewska, M. (2013). Towards the definition of a tourism cluster. *Journal of Entrepreneurship, Management and Innovation*, *9*(1), 33-56. https://doi.org/10.7341/2013913

Kallmuenzer, A., Baptista, R., Kraus, S., Ribeiro, A. S., Cheng, C. F., & Westhead, P. (2021). Entrepreneurs' human capital resources and tourism firm sales growth: A fuzzy-set qualitative comparative analysis. *Tourism Management Perspectives*, *38*, 100801. https://doi.org/10.1016/j.tmp.2021.100801

Kallmuenzer, A., Kraus, S., Peters, M., Steiner, J., & Cheng, C. F. (2019). Entrepreneurship in tourism firms: A mixed-methods analysis of performance driver configurations. *Tourism Management*, 74, 319-330. https://doi.org/10.1016/j.tourman.2019.04.002

Kim, Y. H., Barber, N., & Kim, D.-K. (2019). Sustainability research in the hotel industry: Past, present, and future. *Journal of Hospitality Marketing & Management*, *28*(5), 576–620. https://doi.org/10.1080/19368623.2019.1533907

Kizildag, M., Weinland, J.T., & Demirer, I. (2022). Financial sensitivity analysis of small lodging establishments during COVID-19. *Journal of Hospitality and Tourism Insights*, *6*(5), 2257-2272. https://doi.org/10.1108/JHTI-05-2022-0176

Kumar, S., Sahoo, S., Ali, F. & Cobanoglu, C. (2023). Rise of fsQCA in tourism and hospitality research: A systematic literature review. *International Journal of Contemporary Hospitality Management*. https://doi.org/10.1108/IJCHM-03-2023-0288

Kuntz, J. R., Naswall, K., & Malinen, S. (2016). Resilient employees in resilient organizations: Flourishing beyond adversity. *Industrial & Organizational Psychology*, *9*(2), 456–462. https://doi.org/10.1017/iop.2016.39

Kusa, R., Duda, J., & Suder, M. (2021). Explaining SME performance with fsQCA: The role of entrepreneurial orientation, entrepreneur motivation, and opportunity perception. *Journal of Innovation & Knowledge*, *6*(4), 234-245. https://doi.org/10.1016/j.jik.2021.06.001

Kusa, R., Suder, M., Barbosa, B., Glinka, B., & Duda, J. (2022). Entrepreneurial behaviors that shape performance in small family and non-family hotels during times of crisis. *International Entrepreneurship and Management Journal*, *18*(4), 1545-1575. https://doi.org/10.1007/s11365-022-00812-7

Lew, A.A., Ng., P.T., Ni, C-C., & Wu, T-C. (2016). Community sustainability and resilience: Similarities, differences and indicators. *Tourism Geographies*, *18*(1), 18-27. https://doi.org/10.1080/14616688.2015.1122664

Line, N. D., & Hanks, L. (2019). The social servicescape: A multidimensional operationalization. *Journal of Hospitality & Tourism Research*, *43*(2), 167-187. https://doi.org/10.1177/1096348018767948

Lombardi, S., Pina e Cunha, M., & Giustiniano, L. (2021). Improvising resilience: The unfolding of resilient leadership in COVID-19 times. *International Journal of Hospitality Management*, 95, 102904. https://doi.org/10.1016/j.ijhm.2021.102904

Marco-Lajara, B., Úbeda-García, M., Ruiz-Fernández, L., Poveda-Pareja, E., & Sánchez-García, E. (2022). Rural hotel resilience during COVID-19: The crucial role of CSR. *Current Issues in Tourism*, *25*(7), 1121-1135. https://doi.org/10.1080/13683500.2021.2005551

Melián-Alzola, L., Fernández-Monroy, M. & Hidalgo-Peñate, M. (2020). Hotels in contexts of uncertainty: Measuring organisational resilience. *Tourism Management Perspectives*, 36, 100747. https://doi.org/10.1016/j.tmp.2020.100747

Najda-Janoszka, M. (2013). Innovative activity of small tourist enterprises–cooperation with local institutional partners. *Journal of Entrepreneurship, Management and Innovation*, *9*(1), 17-32, https://doi.org/10.7341/2013912

Nyaupane, G.P., Prayag, G., Godwyll, J., & White, D. (2020). Toward a resilient organization: Analysis of employee skills and organization adaptive traits. *Journal of Sustainable Tourism*, *29*(4), 658-677. https://doi.org/10.1080/09669582.2020.1822368

Orchiston, C., Prayag, G., & Brown, C. (2016). Organizational resilience in the tourism sector. *Annals of Tourism Research*, 56, 145–148. https://doi.org/10.1016/j.annals.2015.11.002

Palacios-Marques, D., Roig-Dobon, S., & Comeig, I. (2017). Background factors to innovation performance: Results of an empirical study using fsQCA methodology. *Quality & Quantity,* 51, 1939–1953. https://doi.org/10.1007/s11135-016-0414-2

Pappas, I.O., & Woodside, A.G. (2021). Fuzzy-set Qualitative Comparative Analysis (fsQCA): Guidelines for research practice in Information Systems and marketing. *International Journal of Information Management*, 58, 102310. https://doi.org/10.1016/j.ijinfomgt.2021.102310
Pirani, S.I., & Arafat, H.A. (2014). Solid waste management in the hospitality industry: A review. *Journal of Environmental Management*, 146, 320-336. https://doi.org/10.1016/j.jenvman.2014.07.038
Prayag, G. (2018). Symbiotic relationship or not? Understanding resilience and crisis management in tourism. *Tourism Management Perspectives*, 25, 133–135. https://doi.org/10.1016/j.tmp.2017.11.012
Prayag, G., Chowdhury, M., Spector, S., & Orchiston, C. (2018). Organizational resilience and financial performance. *Annals of Tourism Research*, 73, 193–196. https://doi.org/10.1016/j.annals.2018.06.006
Prayag, G., Spector, S., Orchiston, C., & Chowdhury, M. (2020). Psychological resilience, organizational resilience and life satisfaction in tourism firms: Insights from the Canterbury earthquakes. *Current Issues in Tourism*, *23*(10), 1216–1233. https://doi.org/10.1080/13683500.2019.1607832
Prayag, G. (2023). Tourism resilience in the 'new normal': Beyond jingle and jangle fallacies? *Journal of Hospitality and Tourism Management*, 54, 513-520. https://doi.org/10.1016/j.jhtm.2023.02.006
Prayag, G., Muskat, B., & Dassanayake, C. (2023). Leading for resilience: Fostering employee and organizational resilience in tourism firms. *Journal of Travel Research*. https://doi.org/10.1177/00472875231164984
Prayag, G., & Dassanayake, C. (2023). Tourism employee resilience, organizational resilience and financial performance: The role of creative self-efficacy. *Journal of Sustainable Tourism*, *31*(10), 2312-2336. https://doi.org/ 10.1080/09669582.2022.2108040
Prayag, G., Chowdhury, M., Spector, S., & Orchiston, C. (2018). Organizational resilience and financial performance. *Annals of Tourism Research*, 73, 193-196. https://doi.org/10.1016/j.annals.2018.06.006.
Ragin, C. C. (1987). *The comparative method. moving beyond qualitative and quantitative strategies*. Berkeley: University of California Press.
Ragin, C. C. (2008). *Redesigning social inquiry: Fuzzy sets and beyond*. Chicago: University of Chicago Press.
Ragin, C. C., & Fiss, P. (2017). *Intersectional inequality: Race, class, test scores, and poverty*. Chicago: University of Chicago Press.
Ragin, C.C., & Davey, S. (2022). *Fuzzy-Set/Qualitative Comparative Analysis 4.0*. Irvine, California: Department of Sociology, University of California.
Ragin, C. C., 2023, *Analytic induction for social research*. Berkley:University of California Press.
Ritchie, B.W., & Jiang, Y. (2021). Risk, crisis and disaster management in hospitality and tourism: A comparative review. *International Journal of Contemporary Hospitality Management*, *33*(10), 3465-3493. https://doi.org/10.1108/IJCHM-12-2020-1480
Rivera, M. A. (2020). Hitting the reset button for hospitality research in times of crisis: Covid-19 and beyond. *International Journal of Hospitality Management*, 87, 102528. https://doi.org/https://doi.org/10.1016/j.ijhm.2020.102528
Salem, I.E., Elbaz, A.M., Al-alawi, A., Alkathiri, N.A., & Elkhwesky, Z. (2023). Is eco-label hotel engagement the pathway to sustainability practices via entrepreneurial resilience and orientation in Oman? Findings from PLS-SEM and fsQCA. *International Journal of Contemporary Hospitality Management*, *35*(2), 717-742. https://doi.org/10.1108/IJCHM-02-2022-0229.
Schneider, C.Q., & Wagemann, C. (2012). *Set-theoretic methods for the social sciences: A guide to qualitative comparative analysis*. Cambridge: Cambridge University Press.
Shin, H., Sharma, A., Nicolau, J.L., & Kang, J. (2021). The impact of hotel CSR for strategic philanthropy on booking behavior and hotel performance during the COVID-19 pandemic. *Tourism Management*, 85, 104322. https://doi.org/10.1016/j.tourman.2021.104322
Singal, M., & Batra, S. (2021). The role of socioemotional wealth and entrepreneurial orientation in family-managed hotels. *Journal of Hospitality and Tourism Management*, 49, 204-213. https://doi.org/10.1016/j.jhtm.2021.09.012
Sobaih, A.E.E., Elshaer, I., Hasanein, A.M., & Abdelaziz, A.S. (2021). Responses to COVID-19: The role of performance in the relationship between small hospitality enterprises' resilience and sustainable tourism development. *International Journal of Hospitality Management*, 94, 102824. https://doi.org/10.1016/j.ijhm.2020.102824
Souza, A.A.A., Alves, M.F.R., Macini, N., Cezarino, L.O., & Liboni, L.B. (2017). Resilience for sustainability as an eco-capability. *International Journal of Climate Change Strategies and Management*, *9*(5), 581-599. https://doi.org/10.1108/IJCCSM-09-2016-0144
Suder, M. (2023). Impact of entrepreneurial orientation on performance and moderating role of crisis perception: multi-method examination. *Journal of Organizational Change Management*, *36*(8), 86-116. https://doi.org/10.1108/JOCM-04-2023-0124
Sydnor-Bousso, S., Stafford, K., Tews, M., & Adler, H. (2011). Toward a resilience model for the hospitality and tourism industry. *Journal of Human Resources in Hospitality & Tourism*, *10*(2), 195–217. https://doi.org/10.1080/15332845.2011.536942
Tibay, V., Miller, J., Chang-Richards, A., Egbelakin, T., Seville, E., & Wilkinson, S. (2018). Business resilience: A study of Auckland hospitality sector. *Procedia Engineering*, 212, 1217-1224. https://doi.org/10.1016/j.proeng.2018.01.157
Tomej, K., Bilynets, I., & Koval, O. (2023). Tourism business resilience in the time of war: The first three months following Russia's invasion of Ukraine. *Annals of Tourism Research,* 99, 103547. https://doi.org/10.1016/j.annals.2023.103547
Usher, L.E., Yusuf, J.E. & Covi, M. (2020). Assessing tourism business resilience in Virginia Beach. *International Journal of Tourism Cities*, *6*(2), 397-414. https://doi.org/10.1108/IJTC-02-2019-0019
Utkarsh, & Sigala, M. (2021). A bibliometric review of research on COVID-19 and tourism: Reflections for moving forward. *Tourism Management Perspectives*, 40, 100912. https://doi.org/10.1016/j.tmp.2021.100912
Woodside, A.G. (2013). Moving beyond multiple regression analysis to algorithms: Calling for adoption of a paradigm shift from symmetric to asymmetric thinking in data analysis and crafting theory. *Journal of Business Research, 66*(4), 463–472. https://doi.org/10.1016/j.jbusres.2012.12.021
Xie, Ch., Zhang, J., Chen, Y., & Morrison, A.M. (2023). The effect of hotel employee resilience during COVID-19: The moderation role of perceived risk and challenge stressors. *Tourism Management Perspectives*, 46,101087. https://doi.org/10.1016/j.tmp.2023.101087
Yang, Y., Zhang, C. X., & Rickly, J. M. (2021). A review of early COVID-19 research in tourism: Launching the Annals of Tourism Research's curated collection on coronavirus and tourism. *Annals of Tourism Research*, *91*, 103313. https://doi.org/10.1016/j.annals.2021.103313
Yeh, S. S. (2021). Tourism recovery strategy against COVID-19 pandemic. *Tourism Recreation Research*, *46*(2), 188–194. https://doi.org/10.1080/02508281.2020.1805933
Zhang, J., Xie, C., & Huang, S.(S). (2023). Resilient leadership in hospitality and tourism enterprises: Conceptualization and scale development. *International Journal of Contemporary Hospitality Management*. https://doi.org/10.1108/IJCHM-10-2022-1274

Appendix 1. True table for high level HG analysis

ER	HS	TR	LR	FR	Number	Raw consist.	PRI consist.	SYM consist
1	1	1	0	1	1	0.9091	0.6812	0.6812
1	**1**	**0**	**1**	**1**	**3**	**0.9051**	**0.6393**	**0.6781**
1	**1**	**1**	**1**	**0**	**4**	**0.8932**	**0.6762**	**0.6843**
0	1	0	0	1	1	0.8903	0.4875	0.4875
1	**1**	**1**	**1**	**1**	**16**	**0.8848**	**0.7903**	**0.8295**
0	**1**	**1**	**1**	**1**	**3**	**0.8802**	**0.6151**	**0.6548**
0	1	0	1	0	1	0.8778	0.3712	0.3828
1	0	1	1	0	2	0.8706	0.4242	0.4599
1	0	0	1	0	1	0.8548	0.3061	0.3061
0	1	0	1	1	4	0.8535	0.4079	0.4079
0	0	0	1	1	1	0.8529	0.2955	0.2955
0	1	0	0	0	2	0.8524	0.3607	0.3607
1	0	1	1	1	8	0.8484	0.6410	0.6555
1	0	1	0	1	2	0.8385	0.3310	0.3310
1	1	0	0	0	1	0.8350	0.3284	0.3284
1	0	0	0	1	2	0.8266	0.3168	0.3168
0	1	1	0	1	3	0.8247	0.4230	0.4230
1	1	1	0	0	2	0.8231	0.4018	0.4018
0	0	0	0	1	3	0.8197	0.3326	0.3404
0	1	1	0	0	4	0.7914	0.3116	0.3480
1	0	1	0	0	2	0.7822	0.1367	0.1367
0	0	0	0	0	23	0.5401	0.1352	0.1426

Note: frequency cutoff = 2, row consistency cutoff=0.88, PRI consistency cutoff=0.5, Combinations of conditions that were considered in further analysis are indicated in bold.

Appendix 2. True table for low level HG analysis

ER	HS	TR	LR	FR	Number	Raw consist.	PRI consist.	SYM consist
1	**0**	**1**	**0**	**0**	**2**	**0.965517**	**0.863334**	**0.863333**
0	0	0	1	1	1	0.938307	0.704468	0.704467
1	0	0	1	0	1	0.935964	0.69395	0.69395
0	1	0	1	0	1	0.921944	0.598485	0.617188
1	**0**	**1**	**0**	**1**	**2**	**0.920103**	**0.66904**	**0.66904**
1	**0**	**0**	**0**	**1**	**2**	**0.919622**	**0.68323**	**0.68323**
1	1	0	0	0	1	0.919331	0.671597	0.671598
0	**1**	**0**	**0**	**0**	**2**	**0.916719**	**0.639345**	**0.639345**
0	**0**	**0**	**0**	**1**	**3**	**0.903965**	**0.644495**	**0.659624**
0	**0**	**0**	**0**	**0**	**23**	**0.900419**	**0.812727**	**0.857417**
0	**1**	**0**	**1**	**1**	**4**	**0.899103**	**0.592145**	**0.592145**
0	**1**	**0**	**0**	**1**	**1**	**0.895625**	**0.512544**	**0.512544**
1	0	1	1	0	2	0.887207	0.498317	0.540146
1	1	1	0	0	2	0.881175	0.598194	0.598194
0	1	1	0	0	4	0.873879	0.583827	0.651983
0	1	1	0	1	3	0.871508	0.577011	0.577011
1	1	0	1	1	3	0.816754	0.303482	0.321899
1	1	1	0	1	1	0.805718	0.318766	0.318766
0	1	1	1	1	3	0.789714	0.324268	0.345212
1	1	1	1	0	4	0.772954	0.311972	0.315699
1	0	1	1	1	8	0.719956	0.336815	0.344459
1	1	1	1	1	16	0.539705	0.162404	0.17047

Note: frequency cutoff = 2, row consistency cutoff=0.89, PRI consistency cutoff=0.5, Combinations of conditions that were considered in further analysis are indicated in bold.

Acknowledgments

The research leading to these results received funding from the National Science Centre, Poland (Narodowe Centrum Nauki); project's registration number: 2022/06/X/HS4/01050; project's title: Impact of market conditions on changes in strategy and entrepreneurial orientation of enterprises in SME sector (Wpływ warunków rynkowych na zmiany strategii i orientacji przedsiębiorczej przedsiębiorstw sektora MŚP).This work was financed from the statutory funds for the maintenance and development of the research capacity of the Faculty of Management of AGH University of Krakow, Poland.

Biographical note

Diana Dryglas (Ph.D., Hab.) is an Associate Professor at the Faculty of Management, AGH University of Krakow, Poland. Her research and teaching interests focus on economy and management in tourism, and management of spas. Author and co-author of numerous scientific publications on health tourism management, tourism destination management, and tourism marketing published in journals with global reach (e.g., *Journal of Travel & Tourism Marketing, Journal of Destination Marketing & Management, Tourism Planning & Development*). Reviewer in prestigious international journals. She has been working on projects in Visegrad countries. Expert in numerous research teams. Member of the Association of Polish Spa Communes and Hot Springs Initiative at the Global Wellness Institute.

Anna Maria Lis (Ph.D., Hab.) is an Associate Professor at the Faculty of Management and Economics, Gdańsk University of Technology, Poland. Her research and teaching interests focus on innovation management, inter-organizational cooperation and environmental management. Her scientific achievements include over 70 publications. She was engaged in international cooperation, including participation in European programs (INNET, COSME, ERASMUS, LOCALISED – Horizon 2020, NEPTUN – Europe Horizon) and numerous internships at foreign universities (including University of Michigan, Nanjing University of Aeronautics and Astronautics, Aalborg University, Karlsruhe Institute of Technology, Norwegian University of Science and Technology). She has cooperated with counseling and training companies, cluster organizations, and business environment institutions.

Marcin Suder is an Assistant Professor at the Faculty of Management, AGH University of Krakow, Poland, with a Ph.D. in Economics from the Faculty of Management at the AGH University of Science and Technology in Krakow (Poland) and a Master Degree in Mathematics from the Jagiellonian University in Krakow (Poland). His research interests include organizational management, organizational entrepreneurship, application of mathematics in financial and quantitative research methods. He has been an author, co-author, and referee for several distinguished international academic journals (e.g., *Journal of Innovation and Knowledge*, *Journal of Business Research, Technological Forecasting and Social Change*).

Authorship contribution statement

Diana Dryglas: Conceptualization, Writing – Original Draft Preparation, Writing – Review and Editing, Supervision, Revisions. **Anna Lis:** Writing – Original Draft Preparation, Writing – Review and Editing, Revisions. **Marcin Suder:** Data Curation, Methodology, Project Administration, Investigation, Validation, Software.

Conflicts of interest

The authors declare no conflict of interest.

Citation (APA Style)

Dryglas, D., Lis, A., & Suder, M. (2024). The role of resilience in explaining hotel growth: A fuzzy-set QCA approach. *Journal of Entrepreneurship, Management and Innovation*, *20*(3), 5-24. https://doi.org/10.7341/20242031

Journal of Entrepreneurship, Management and Innovation (2024)
Volume 20 Issue 3: 25-45

DOI: https://doi.org/10.7341/20242032
JEL Codes: L.16, L.83, O.25, R.11, Z.31, Z.32

Exploring resilience of the hotel industry using the example of Polish regions. The case of COVID-19 pandemic

Ewa Wszendybył-Skulska[1], Marta Najda-Janoszka[2], Adam Jezierski[3], Szczepan Kościółek[4], Aleksander Panasiuk[5]

Abstract

PURPOSE: *This study explores the relationship between the resilience of the hotel industry (an underdeveloped concept) and the factors that support the development of this industry. It examines whether the resilience of the hotel industry varies regionally and whether it is influenced either by the characteristics of the hotel industry or by regional economic conditions. The study focuses on the COVID-19 pandemic, which particularly hit the hotel industry.* ***METHODOLOGY:*** *The clustering method is used to identify regions in Poland with similar pre-pandemic hotel industry development are identified. Secondly, Potthoff's analysis and Kruskal-Wallis tests with Dunn's tests are used respectively to identify variations in the resilience responses of the industry in different regions and to examine the antecedents of these variations.* ***FINDINGS:*** *The data collected indicate variations between clusters in terms of resilience response. Not all factors that support the development of the hotel industry in a particular region are equally conducive to its resilience. Our study shows that the pandemic was not an isolated or unique event but rather a catalyst that brought long-standing issues for the hotel and tourism sector.* ***IMPLICATIONS FOR THEORY AND PRACTICE:*** *This study contributes to the development of resilience theory by providing evidence-based arguments for separating the domains of resilience and development and for a more granular exploration of the trade-offs between them. From the perspective of the hotel industry, insights into narrowly channeled agglomeration externalities during a crisis could inform strategic decisions regarding the location of hotel investments, the value proposition created, and business model diversification. Therefore, there is a need for more resilient crisis management strategies that can be applied across the tourism sector. These strategies should encompass effective supply chain management and a robust framework for labor security.* ***ORIGINALITY AND VALUE:*** *The findings suggest that hotel industry development factors, which include both industry characteristics and regionally shaped economic conditions, provide mixed support for the resilience of this industry. The study revealed clear tensions between development and resilience impacts by highlighting existing trade-offs. Focusing attention on trade-off tensions advances both the conceptual validity and application potential. Although the present study was defined for the specific circumstances of the hotel industry, this approach can be replicated in different industries that are components of the supply chain of the tourism market and its value chain.*

Keywords: *hotel industry, resilience, multidimensionality, pandemic, regional conditions, COVID-19.*

1 Ewa Wszendybył-Skulska, Associate Professor, Jagiellonian University in Krakow, Faculty of Management and Social Communication, Institute of Entrepreneurship, Łojasiewicza 4, 30-348 Krakow, Poland, e-mail: e.wszendybyl-skulska@uj.edu.pl (ORCID: https://orcid.org/0000-0003-1308-6803).

2 Marta Najda-Janoszka, Associate Professor, Jagiellonian University in Krakow, Faculty of Management and Social Communication, Institute of Entrepreneurship Łojasiewicza 4, 30-348 Krakow, Poland, e-mail: marta.najda-janoszka@uj.edu.pl (ORCID: https://orcid.org/0000-0002-5040-7250).

3 Adam Jezierski, PhD student, Doctoral School in the Social Sciences of the Jagiellonian University, Rynek Główny 34, 31-010 Kraków, Poland, e-mail: adam.jezierski@doctoral.uj.edu.pl (ORCID: https://orcid.org/0000-0002-6462-837X).

4 Szczepan Kościółek, Assistant Professor, Jagiellonian University in Krakow, Faculty of Management and Social Communication, Institute of Entrepreneurship, Łojasiewicza 4, 30-348 Krakow, Poland, e-mail: szczepan.kosciolek@uj.edu.pl (ORCID: https://orcid.org/0000-0001-7705-4216).

5 Aleksander Panasiuk, Professor, Jagiellonian University in Krakow, Faculty of Management and Social Communication, Institute of Entrepreneurship, Łojasiewicza 4, 30-348 Krakow, Poland, e-mail: aleksander.panasiuk@uj.edu.pl (ORCID: https://orcid.org/0000-0002-5807-6636).

Received 29 December 2023; Revised 8 April 2024; Accepted 15 April 2024.

INTRODUCTION

The hotel industry represents a key link in the tourism value chain, as it is fundamental to the provision of further services in a tourism destination (Mitchell et al., 2015) and, accordingly, contributes to the economic social and cultural development of the community (Nikolskaya et al., 2018). However, the COVID-19 crisis has ignited and fuelled major disruptions across tourism-related businesses (Farmaki et al., 2020). The severity of the restrictions imposed has raised questions concerning the resilience of the hotel industry, particularly given its indispensable role in the development of further services in a tourism destination (Brown et al., 2017). Understanding the resilience of the hotel industry is paramount as it directly impacts the stability of local economies, community livelihoods, and the overall competitiveness of tourist destinations, requiring effective crisis management strategies and policy interventions.

While resilience in the tourism sector has been studied in relation to various crises such as climate change (Cellini & Cuccia, 2019), natural disasters (Biggs et al., 2012), economic downturns (Perles-Ribes et al., 2016), terrorist attacks (Chen, 2011), and epidemics (Chen et al., 2007), there remains an uneven distribution of studies, with industry analyses being relatively underrepresented (Brown et al., 2021; Di Tommaso et al., 2023; Kurth et al., 2019). Despite the growing interest in resilience research at different levels—destination (Filimonau et al., 2020; Matteucci et al., 2022), organizational (Ntounis et al., 2022), and intra-organizational (Giousmpasoglou et al., 2021)—limited attention has been paid to examining resilience from a hotel industry perspective (Filimonau et al., 2020; Giousmpasoglou et al., 2021; Ozdemir et al., 2021). Furthermore, existing studies often focus on selected specific factors such as employment rates, visitor arrivals, and revenues, rather than taking a comprehensive view that considers both industry-specific characteristics and regionally shaped conditions (Bangwayo-Skeete & Skeete, 2021; Khan et al., 2021; Peco-Torres et al., 2021). While the importance of resilience for the industry's long-term viability is widely acknowledged, the precise nature of the relationship between resilience and development remains ambiguous, oscillating between overlap, synergy, and trade-off (Hillmann & Guenther, 2021; Holm & Østergaard, 2015).

This study aims to address these gaps by investigating the relationship between the resilience of the hotel industry and the factors that support its development by providing answers to the main research question (RQ):

RQ: Are the factors supporting the development of the hotel industry in a particular region conducive to its resilience?

The research examines both industry-specific characteristics and regionally specific factors, leveraging the Covid-19 pandemic as a lens to explore the intersection of resilience and development in the hotel industry. Resilience is emerging as a critical competency for hotels, with studies indicating that resilient hotels are better equipped to navigate challenges. Resilience not only contributes to financial performance but also fosters sustainable organizational success and enhances competitive advantage (Cavaco, 2015). Resilient enterprises, particularly those with innovative characteristics, tend to sustain higher levels of performance compared to their counterparts (De Carvalho et al., 2016). Orchiston et al. (2016) further highlight the importance of problem solving, strategic planning, and building external networks in cultivating resilience, which in turn positively impacts both individual entities and entire industries. The impact of resilience on business performance is particularly pronounced in small businesses (Prayag et al. 2017) which are dominant in the hotel industry.

Despite general discussions on the industry's resilience during global shocks, regional variations exist due to differences in pre-crisis economic situations and hotel structures. This study examines the differential impact of crises across regions, taking into account location-specific amenities, economic structures, and externalities. Through regional clustering and analysis of resilience responses, it seeks to identify the factors driving resilience variations.

Our research focuses on the hotel industry in Poland, which is characterized by significant natural and regional economic heterogeneity, mirroring of other regions in Central and Eastern Europe (CEE). Our findings suggest that highly developed hotel industries may not necessarily exhibit high resilience, highlighting the need to differentiate between factors supporting industry development and resilience. This research highlights significant limitations in extrapolating the impact of industry development factors in a region and emphasizes the importance of parallel analysis to foster regional resilience. As such, this study contributes to the broader discourse on resilience within the tourism sector, and informs future policy and industry practice.

LITERATURE REVIEW

Industrial resilience

Conceptually, resilience has been defined as the resistance and adaptation of the structure and function of a particular system in the face of disruption while maintaining its identity (Biggs et al., 2012). Thus, developed proposals frame organizational resilience as a capability, process, outcome, or characteristic (Hillmann & Guenther, 2021). In this study, we draw on the capability-based approach (Duchek, 2020; Najda-Janoszka, 2016) and argue that organizational resilience is not an organizational process per se but is embedded in processes that are observed when it is activated (Duchek, 2020). Activation refers to accessing and mobilizing appropriate resources along developed routines to perform and coordinate organizational survival in the face of unexpected adversity, such as events with potentially high consequences for organizational functioning and survival (Lengnick-Hall et al., 2011). As such, the patterns of actions taken may vary across organizations (Kantur & İşeri-Say, 2012) and thus leading to different degrees of resilient responses, such as maintaining functions and access to resources, and mobilizing timely actions (Hillmann & Guenther, 2021).

While previous research has predominantly examined differences in resilience at the organizational and individual levels (Hillmann & Guenther, 2021), a growing body of literature focuses on understanding resilience at the industry level. These studies recognize the significant economic impact of industries, and their varying levels of exposure and vulnerability to risk (Brown et al., 2021; Di Tommaso et al., 2023; Holm & Østergaard, 2015). It is essential to study the resilience of industries, as the failure of industries to withstand shocks could jeopardize the sustainability of systems at different levels, including that of individual enterprises (Di Tommaso et al., 2023).

The global and evolving nature of events such as the COVID-19 pandemic has intensified discussions about the scale at which the effects of unexpected shocks are experienced and managed (Sharma et al., 2021). From an industrial level perspective, it becomes apparent that maintaining the continuity of individual business is intricately linked to maintaining the functioning of complex production networks and market structures that span regions and countries (Di Tommaso et al., 2023; Sharma et al., 2021; Haraguchi et al. 2016).

Studies on industrial resilience delve into the unique characteristics of industries and the external contexts that encompass location-specific features (Holm & Østergaard, 2015; Martin & Sunley, 2015). These insights highlight the role of complex local factors in shaping the boundaries within which individual strategic maneuvering occurs in the face of adversity (Boschma, 2015; Giannakis & Bruggeman, 2017). Furthermore, by showcasing the heterogeneous responses of industries to shocks, research on industrial resilience provides insights for the development of tailored vertical industrial policies that are relevant to policymaking (Di Tommaso et al., 2023). However, despite the growing academic interest in this area, comprehensive proposals that take into account both the internal characteristics of industries (Holm & Østergaard, 2015; Kurth et al., 2019) and regionally shaped conditions (Wójcik & Cojoianu, 2018; Xiao et al., 2018) are still lacking.

Additionally, the resilience domain remains unclear in terms of its relationship with related growth and development constructs (Hillmann & Guenther, 2021). Understanding this relationship is crucial because factors that support industry growth and development may not necessarily contribute to its resilience (Holm & Østergaard, 2015).

Based on these arguments, the approach of this study aims to address this gap by combining the above-mentioned perspectives and exploring the relationship between industry resilience and the factors that support its development, which in turn include both industry characteristics and regionally shaped economic conditions. We chose the hotel industry because of its recognized characteristics, which produce a unique combination of significant economic impact, high exposure and vulnerability to risk, and strong spatial embeddedness.

Hotel industry development

The dynamically developing hotel industry is a key link in the tourism value chain (Mitchell et al., 2015) and, accordingly, its extensive cross-sectoral relationships generate significant multiscalar economic impacts at regional (Mitchell et al., 2015), national (Rivera, 2017), and international levels (Niewiadomski, 2015).

Furthermore, knowledge of the region's profile is required to determine the development potential of the sector. A region's profile is defined as a set of physical and social characteristics (Gilboa et al., 2015). According to Assaf et al. (2015), regional characteristics significantly impact hotel performance and best explain the dynamics of its changes. The hotel industry is deeply rooted in local conditions, despite the fact that the influence of regional factors on hotel performance is rarely studied in the literature. Nonetheless, all studies analyzing this aspect emphasize the importance of regional attractiveness, which is a direct cause of tourist travel and affects hotel efficiency (Lee, 2015; Liu & Wang, 2002). More attractive regions have higher tourism potential (e.g., size and growth rate of the tourism industry) and receive more government investment (Chen, 2016; Barros et al., 2011). These markets also have greater access to tourism-related resources (Assaf & Josiassen, 2012). This view further supports the relationship between tourism development and hotel performance (Chen, 2010),

Therefore, location decisions have generally explained spatially determined differences in the development of the hotel industry (Yang & Cai, 2016) based on proximity, in relation to the amenities of tourist destinations and agglomeration economies (Canina et al., 2005; Valenzuela-Ortiz et al., 2022).

According to the researchers, more detailed factors that contribute to the development of the hotel industry are the number of tourist arrivals (Yang & Wong, 2013; Luo & Yang, 2014), access to resources, and leading suppliers or special services (Canina et al., 2005), legal regulations, socio-cultural and transport factors (Adam & Amuquandoh, 2013).

In addition, tourism development has a positive impact on the hotel industry (Chen, 2011; Yang et al., 2020). The expansion of international tourism contributes to an increase in the number of hotels in a region, thereby strengthening the overall hotel industry. As the number of hotels in a given region increases (Yang et al., 2014), tourism expansion can both directly and indirectly. On the one hand, international tourism can directly enhance hotel performance by increasing hotel occupancy rates and sales revenue (Chen, 2016; Ubeda-García et al., 2014). On the other hand, developing international tourism can indirectly enhance hotel performance by stimulating economic development (Kim et al., 2006). Dogru and Bulut (2018) state that tourism development can contribute to economic output and positively affect most sectors of the economy while improving the economy, which, in turn, can enhance hotel performance.

As mentioned above, regionally shaped conditions include location-specific amenities (Batista e Silva et al., 2021; Lado-Sestayo et al., 2020; K. H. Lee et al., 2018), economic structure (Calgaro et al., 2014; Zuo et al., 2021) and externalities generated by the destination's hotel establishments (Valenzuela-Ortiz et al., 2022). However, previous studies on the hotel industry's resilience have focused separately on either location-specific externalities (Cellini & Cuccia, 2019; Gong et al., 2020), internal industry characteristics (Filimonau et al., 2020; Krishnan et al., 2020), or intra-organizational factors (Melián-Alzola et al., 2020; Ntounis et al., 2022).

Hotel industry resilience and its regionally shaped conditions

Among all tourism-related industries, hotels are characterized by the highest capital intensity (Lee et al., 2011; Singal, 2015) and long-term investment process (Liu & Hu, 2022). The pivotal dependency on tourist inflows determines the hotel location choices; conversely, it exposes the hotels to external shocks that generate significant, beyond seasonal, demand fluctuations (Brown et al., 2021; Pappas, 2018). Owing to the high fixed costs associated with service readiness, the flexibility to adapt to these external disruptions is limited (Baum et al., 2020), often only to the human resources management dimension (Baum et al., 2020; Ozdemir et al., 2021). The existing studies on hotel performance during global shocks discuss the general ability of the industry to withstand the caused demand turbulence (Cellini & Cuccia, 2019), however, they indicate certain variations when referring to less aggregated populations (regions), characterized by different conditions for the development of the hotel industry (Chen et al., 2007; Kubickova et al., 2019).

The differences discussed highlight the pre-crisis economic situation and structure of the hotel industry in a region (Calgaro et al., 2014; Kubickova et al., 2019) and the varied scale of the shocks studied – from localized events affecting selected industries and regions to global crises (Calgaro et al., 2014; Kosová & Enz, 2012; Kubickova et al., 2019). As the COVID-19 pandemic is a global crisis, it allows for a more thorough examination of regional differences in the impact of the shock on the hotel industry and its responses. However, based on available studies on global-type crises, while destination (Cellini & Cuccia, 2019; Filimonau & De Coteau, 2019), organization- (Duarte Alonso et al., 2020; Ntounis et al., 2022), and intra-organization level focused research (Aguiar-Quintana et al., 2021; Giousmpasoglou et al., 2021) have been gaining momentum, studies on resilience from the perspective of the hotel industry are scarce (Ozdemir et al., 2021).

Therefore, based on the argument that the hotel industry evolves differently across regions (Batista e Silva et al., 2021) because some regions provide more supportive conditions for hotel industry development than others (Yang & Cai, 2015; Holm & Østergaard, 2015), we decided to investigate whether these conditions are also conducive to hotel industry resilience. Therefore, we propose the following hypothesis:

H1: Hotel industry resilience exhibits a regional variation.

Given that amenity-driven, regionally agglomerated tourist inflows may differ significantly, for example, in terms of intensity, seasonality, or country of origin, hotel supply tends to exhibit diverse dynamics, resulting in distinct territorial structures (e.g., hotel chains, categorization, and size) and regionally differentiated hotel performance (Batista e Silva et al., 2021; Yang & Cai, 2016). Importantly, a common strategy of incorporating proximity to tourist attractions and access points leads to an agglomeration of hotels in a given location, which in turn can generate important spillover effects related to increased competition but improved performance (location conformity) (Canina et al., 2005; Valenzuela-Ortiz et al., 2022). Yang and Cai (2016) indicate that the influence of regional factors increases as the standard of a hotel rises.

The development of hotel chains is also important for the development of the industry. Hotels belonging to hotel chains perform better than independent hotels, achieving better total revenue, income per room, and total income (Tari & Pereira, 2012). Chains can offer a consistent value proposition with guaranteed quality, access to different amenities (Richard & Cleveland, 2016), and standard services to satisfy customers from different cultural backgrounds (Gao et al., 2018). The sales dimension is also relevant: hotel chains drive revenue growth through innovative financial structuring and total revenue management (Richard, 2017). According to Carvell et al. (2016), brand affiliation helps offset competition by reducing the impact of competitors' marketing activities.

In general, tourism demand is concentrated in places with rich natural and built amenity resources (Clark, 2011); therefore, the type, quantity, quality, and spatial distribution of these amenities are the key criteria in hotel location decisions (Batista e Silva et al., 2021; Lado-Sestayo et al., 2020). Proximity to significant social and natural attractions is a critical factor in hotel location decisions and performance, as travelers prefer a location that allows access to various services (Yang et al., 2012; Li & Du, 2018). Accessibility to significant social and natural attractions has a positive impact on hotel performance because tourists prefer hotels located near these sites (Rigall-I-Torrent & Fluvia, 2011; Li & Du, 2018). Travelers also prefer hotels located in areas with appropriate environmental quality and natural diversity, green protected areas (Sellers-Rubio & Casado-Díaz, 2018; Lee et al., 2015). As such, we propose the following hypotheses:

H2: Regional variation in hotel industry resilience is related to the structural characteristics of the hotel industry.

Given the labor-intensive nature of hotel services, a key externality affecting hotel productivity relates to the pool of trained employees generated in the local market (Valenzuela-Ortiz et al., 2022; Yang & Cai, 2016). Educational units are being developed in densely populated urban agglomerations, providing better access to qualified and competent staff to work in hotels. Therefore, agglomerations attract hotel chains and investors who want to build luxury brands for business tourists (Ribaudo et al., 2020).

However, when the demand for tourism services decreases, the demand for hotel services also decreases, leading to an increase in unemployment (Romão et al., 2016). Thus, the lack of economic resilience in the region accounts for the unprecedented level of job losses. The regional economic context considered in the resilience study also includes the level of salaries in the region (Masik, 2018). The available findings indicate that job cuts and salary freezes have been the main responses of business owners to the crisis.

The hotel industry also benefits from economic growth, stability, and development of destination communities. Research shows that central business districts (CBDs) and shopping malls attract business tourists and contribute to its development (Zhang et al., 2012; Ferreira & Boshoff, 2013). In addition, consumers prefer hotels with access to commercial clusters and convention centers (Li & Du, 2018). According to researchers, more detailed factors contributing to the development of the hotel industry include the economic condition of the region (Luo & Yang, 2014), GDP (Kalnins & Chung, 2004; Zhang et al., 2012; Luo & Yang, 2014), foreign investment (Zhang et al., 2012; Luo & Yang, 2014). In terms of GDP per capita, less developed regions were more vulnerable to recessionary shocks (Giannakis & Bruggeman, 2017). Public investment is crucial for hotel development and activation of a resilient response (Psycharis et al., 2022). Government support is also a critical factor in enabling the hospitality sector to weather crises (Asaf et al., 2017) including the one caused by the COVID-19 pandemic (Salem et al., 2021). Therefore, it is hypothesized as follows:

H3: Regional variation in hotel industry resilience is related to economic condition of the region.

METHODOLOGY

In this study, the period from the first to the third wave of COVID-19 infections was selected as an unexpected external shock that has challenged the industry. Guided by the capability-based perspective, the study of the activated observable resilience response covered the critical timeframe of the selected disruption, i.e. March 2020 to December 2021. The detailed calendar of lockdowns and restrictions in Poland is presented in Appendix 1.

The study followed an exploratory and quantitative approach. The developed research procedure consisted of three stages: a) regional clustering of the hotel industry, b) assessment of the resilience of the hotel industry resilience across regional clusters, and c) verification of the differences between clusters in terms of regionally shaped economic, and hotel industry characteristics.

The research setting covered the hotel industry in Poland. Poland was selected because (a) the Polish hotel industry has shown visible resilience characteristics during past global adversities (e.g., lower impact and faster recovery from the 2007-2009 financial crisis compared to other EU countries (*Local Data Bank*, 2021), (b) the demand and supply conditions in the Polish hotel market reflect the specificity of the CEE regions (e.g., the low saturation of domestic demand combined with a low but dynamically growing number of hotels), and (c) Poland is characterized by significant regional heterogeneity not only in terms of natural amenities but also economic development (Majewska, 2015).

Given the regional contextual perspective of the study and the largely uneven spatial distribution of hotels across 16 regions in Poland, clustering analysis was used to define the appropriate research sample: clusters of regions with similar characteristics of the hotel industry prior to the COVID-19 pandemic (Pinto et al., 2019). The required information was retrieved from Polish public statistics on tourism (Statistics Poland and Local Data Bank - LDB), which is collected in accordance with European standards (OJ EU L 192 22.07.2011).

The study focuses strictly on the hotel industry, which, according to Polish law (Journal of Laws of 2017, item 2361), includes establishments with at least 10 rooms, most of which are single and double rooms, offering a wide range of services related to a customer's stay. The name 'hotel' can only be used by an entrepreneur who has successfully passed the formal verification and has been assigned to an appropriate category (i.e., similar to the whole Europe). Therefore, only officially categorized hotels were included in the analyses.

The clustering procedure involved three main variables and Ward's hierarchical cluster analysis with Euclidean distance:

- the average hotel occupancy in each of the 12 months of 2019 [HOcc] provides insight into the seasonality of demand in the industry (Pappas, 2018);
- the number of hotels in the region [HDens] is an indicator of the development of the hotel industry (Fang et al., 2021). The total number was used instead of the ratio to the size of the region because the development of the hotel industry development is determined by other factors such as the quality of the workforce (Yang & Cai, 2016); and
- the share of foreign tourists in the region [FTRatio] has a particularly strong impact on hotel performance (Barbhuiya & Chatterjee, 2020).

We used aggregated data at the NUTS-2 regional level (Brakman et al., 2015; Crescenzi et al., 2016) and defined three regional clusters (Figure 1). The significantly higher variable values obtained for the Malopolskie region are in line with its commonly recognized distinct position among regional tourist destinations in Poland (MOMR, 2020) and support its categorization as a distinct regional cluster.

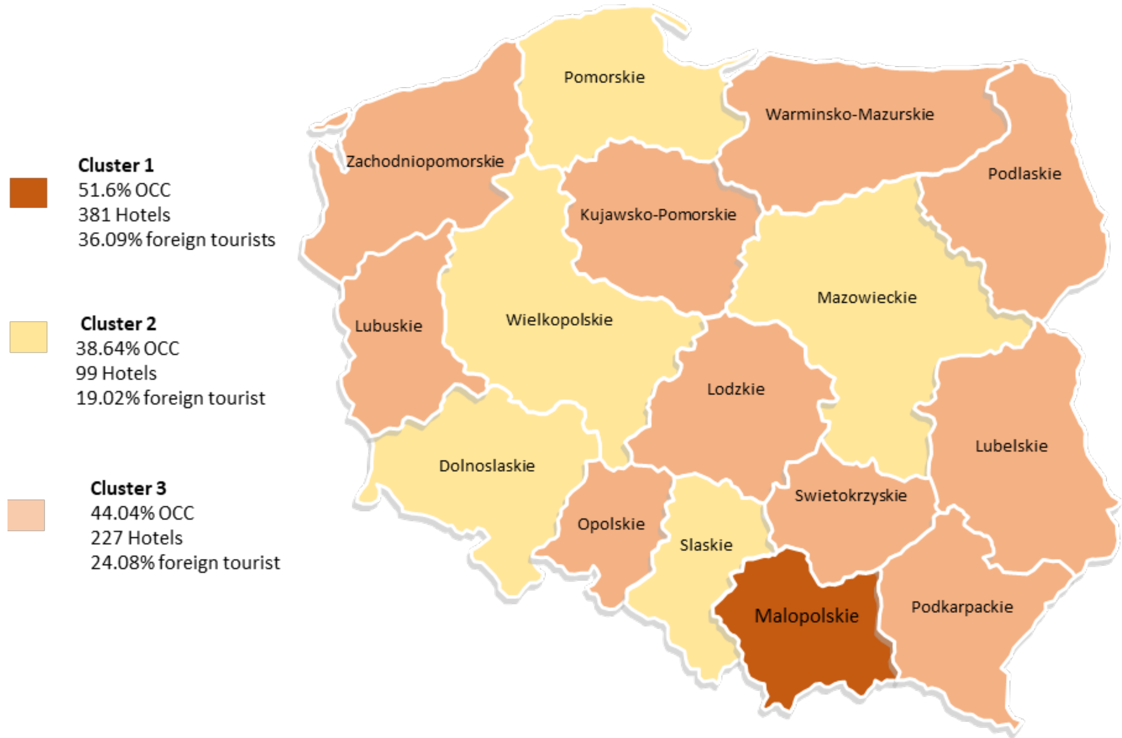


Figure 1. Map of defined regional clusters (indicated average values)

Source: Own study based on Statistics Poland (2021).

The next stage of the research was to assess the resilience of the hotel industry across regional clusters. For a more nuanced view, the focus was on the variation rather than the average level of hotel industry resilience. Therefore, the research effort was directed towards individual components of the construct, i.e. resilient response indicators (Hillmann & Guenther, 2021):

- change in the average occupancy rate of hotels – indicating the recovery time in terms of basic operations (Ozdemir et al., 2021). Data source: LDB;
- change in hotels' average debt – indicating the need to maintain access to critical resources (Chowdhury et al., 2019). Data source: proprietary databases of the Credit Information Office in Poland; and
- change in employment in the hotel sector – indicating the need to maintain the basic functional area (Khan et al., 2021). Data source: local offices of the Polish Statistical Office.

In order to test the variation, the 'decomposed' Seasonal Autoregressive Integrated Moving Average (SARIMA) was applied for each resilience response indicator from 2018 to 2021, ensuring a balance between the pre-COVID and COVID periods (Jollant et al., 2022). The SARIMA analysis, in SPSS was used to decompose the trends of the time series, and the trend functions were calculated from the resulting deseasonalised data. The coefficients of the regression lines for each of the clusters' trends were then compared using Potthoff analysis (Potthoff & Roy, 1964). Thus, both regression slopes and intercepts were tested across clusters.

Finally, the antecedents of the variations were examined. The defined set of variables included factors identified in existing studies as important for the development of the hotel industry development in a given destination (Table 1). The data used was collected at the end of 2019– the last full year before the COVID-19 pandemic – for each county in the regions. The share of legally protected areas was added to the section of hotel-specific variables, as it is crucial for hotel development, although it does not characterize hotel industry precisely.

Due to the violation of the normality assumption in the distribution, we verified which key economic and hotel-specific characteristics differed in each cluster using non-parametric ANOVA, namely the Kruskal-Wallis tests. At the beginning of this stage, we examined the correlation between the variables used for clustering and Kruskal-Wallis tests.

We found that there was only a modest correlation, which we considered acceptable to proceed with the subsequent analysis (see the results in Appendix 2). Post-hoc Dunn's tests were then used to present pairwise comparisons.

Table 1. Variables and their descriptions

Variable	Description	Mean	Stand. dev.
Hotel-specific variables			
ECONHOT	Share of economy hotels (1-2-*star*) in the total number of hotels in the region [%]	0.34	0.30
MIDDLEHOT	Share of middle-class hotels (3-*star*) in the total number of hotels in the region [%]	0.54	0.30
LUXHOT	Share of luxury hotels (4-5-*star*) in the total number of hotels in the region [%]	0.12	0.19
CHAIN	Share of hotels belonging to branded hotel chain/systems [%]	0.04	0.12
PROTECTED_AREA	Share of legally protected areas in total area [%]	28.81	23.02
Economic variables			
SALARY	Average salary in the county [PLN]	4,454.30	594.12
UNEMPLOYMENT	Unemployment rate in the county [%]	2.65	1.81
INCOME	Self-income of the county per capita [PLN]	1,031.17	1,278.94
INVESTMENT	Investment outlays in enterprises per capita [PLN]	4,063.34	4,505.02
SUPPCOMPAN	Number of companies that received the first anti-COVID public aid	955.08	1,594.74
SHIELDPERCOMP	Average amount of the first anti-COVID public aid per company in the county [PLN]	157,844.39	25,162.47

Source: Own study based on Statistics Poland, LDB, Polish Development Fund (2020, 2021).

RESULTS

The 'decomposed' SARIMA models were statistically significant for each measure of the resilient response (Table 2). Furthermore, with the exception of the occupation change in Clusters 1 and 2, the Potthoff analyses revealed the differences in intercepts and slopes between clusters for each pair of trends (Table 3). Figures 2-4 also show that the decomposed trend (without seasonal correction) was associated with politically decided lockdowns and openings.

Table 2. Regression analyses on deseasonalized data

Cluster	F	R-square	Intercept	Slope
Occupation change				
1	40.003***	0.454	73.508	-1.110
2	42.989***	0.483	62.885	-0.806
3	27.163***	0.371	50.94	-0.487
Employment change				
1	55.059***	0.540	5186.34	-26.217
2	59.507***	0.564	24904.42	-88.030
3	15.960***	0.258	13574.53	-35.606
Debt change				
1	869.292***	0.950	815623.9	-6050.640
2	347.890***	0.883	750401.6	3319.241
3	229.838***	0.833	676072.1	1976.877

Note: *p<0.05; **p<0.01; ***p<0.001.

Government lockdowns led to significant declines in hotel occupancy across all regions, with less dynamic decreases in 2021 compared to 2020. While occupancy levels declined across the board, temporary recoveries were observed in the summers of 2020 and 2021, as well as in February-March 2021. According to the deseasonalised trend analysis, Cluster 3 displayed the highest resilience, being the only one to return to pre-pandemic occupancy levels. Although Clusters 1 and 2 did not have statistically different occupancy levels, Cluster 1 experienced more pronounced declines throughout the pandemic. This suggests varying resilience responses across clusters.

Table 3. Results of Potthoff analyses

Cluster checked	R-square change	F change	Slope diff.	Intercept diff.
Occupation change				
1 & 2	0.018	1.578	0.304	10.623
1 & 3	0.097	8.421***	0.623**	22.568***
2 & 3	0.047	3.990*	0.319*	11.945**
Employment change				
1 & 2	0.985	6066.774***	61.813***	19718.08***
1 & 3	0.976	1886.903***	9.389***	8388.190***
2 & 3	0.939	1261.159***	52.424	11329.890***
Debt change				
1 & 2	0.941	1548.574***	9369.885***	65222.282***
1 & 3	0.946	688.813***	8027.521***	139551.723***
2 & 3	0.951	633.835***	1342.364***	74329.441***

Note: *p<0.05; **p<0.01; ***p<0.001.

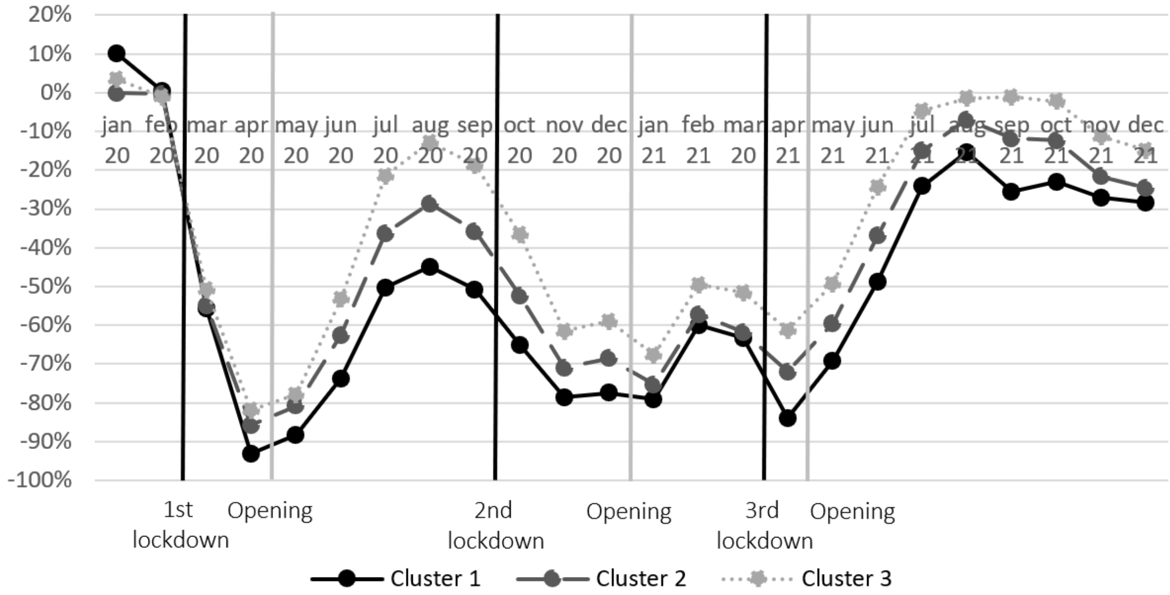


Figure 2. Change in hotels' average occupancy percentage as compared to 2019

The first lockdown initiated a decline in employment across all clusters, particularly pronounced in Cluster 3 (Figure 3). The partial reopening in May halted the trend, and in June, there was a significant increase in Clusters 2 and 3, albeit only slightly in Cluster 1. The analysis of deseasonalised trend supports this, with Cluster 1 having the lowest negative slope and intercept. The second lockdown further reduced employment across all clusters, with Cluster 1 experiencing even greater declines than during the first lockdown. The reopening in winter 2021 reopening benefited Cluster 1 (due to its mountain location), but significant declines reemerged in summer 2021, unlike Clusters 2 and 3 (which experienced less significant declines). It was therefore concluded that the resilience in employment changes varied across clusters.

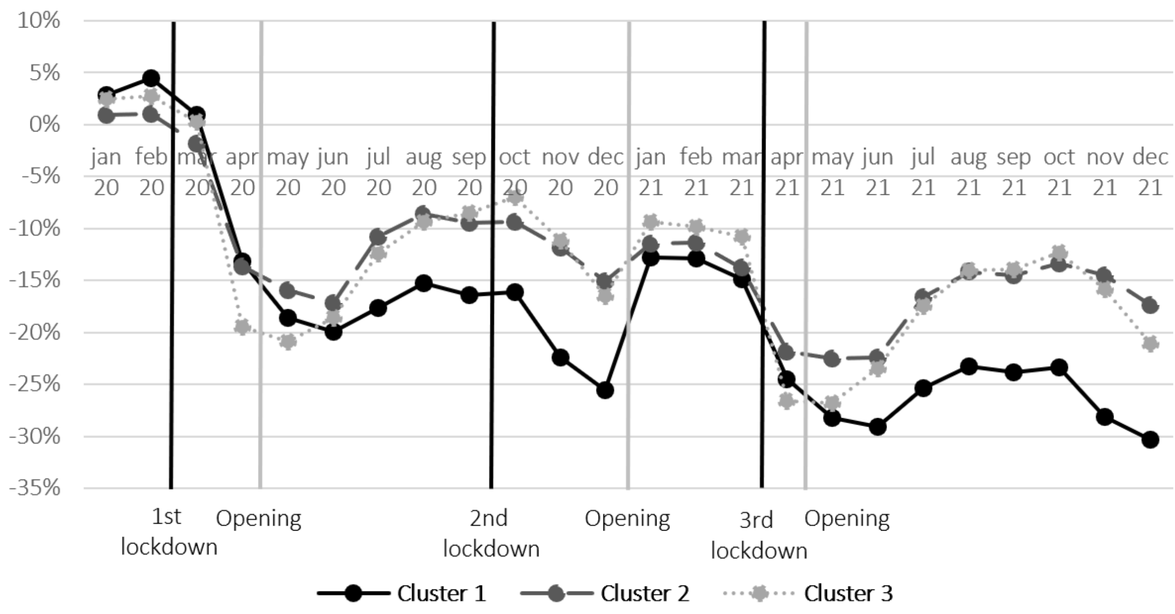


Figure 3. Changes in hotel industry employment compared to 2019

Debt data highlighted Cluster 1's unique profile: prior to the first lockdown, its hotels had a wider range of debt compared to Clusters 2 and 3, but experienced a steady decrease throughout the pandemic (Figure 4). Conversely, Clusters 2 and 3 experienced a slight increase in average debt per hotel. A notable decrease in debt in Cluster 1 in January 2023 coincided with an increase in employment due to the reopening of hotels in winter. The deseasonalised trend analysis confirmed significant differences between clusters, indicating varied resilience responses to changes in debt.

Taken together, the analysis results confirmed variations between clusters for all three indicators of the resilience response. Thus, H1 was supported.

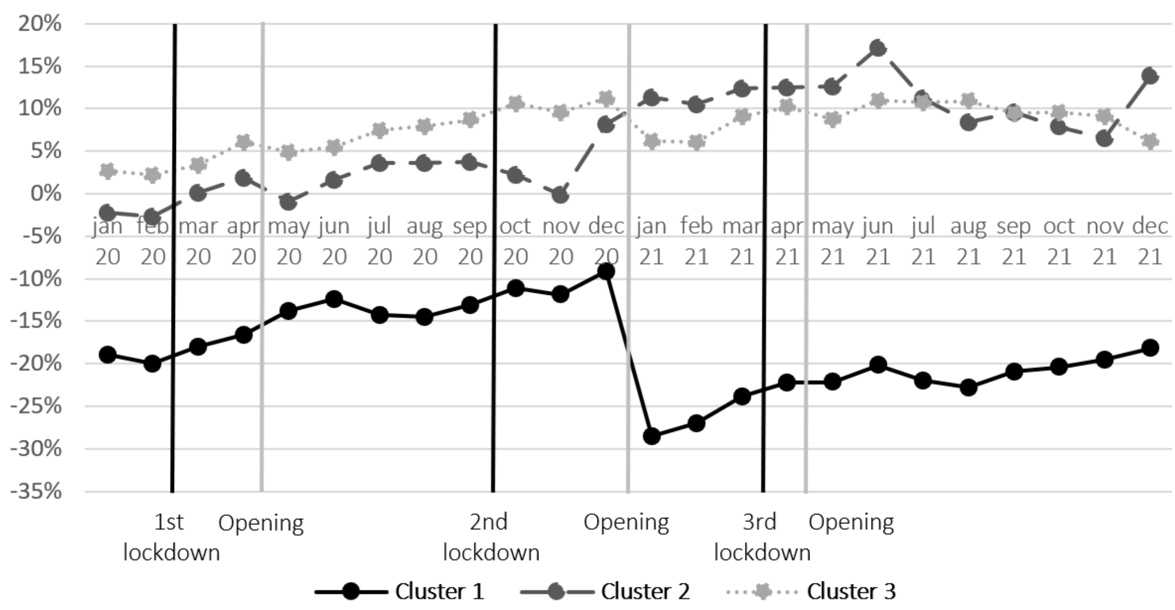


Figure 4 Change in the average value of hotels' debt as compared to 2019

Kruskal-Wallis and Dunn's tests were used to examine the antecedents of the identified variation (Table 4). Among the hotel-specific variables, statistically significant differences were identified in two items: ECONHOT and CHAIN. The differences were observed between Cluster 1 and the other two clusters. For PROTECTED_AREA the difference was statistically significant between Cluster 2 and each of the other Clusters. Based on the results obtained, H2 was partially supported. In the group of economic variables, statistically significant differences were identified for INCOME, and UNEMPLOYMENT, as well as SUPPCOMPAN, and SHIELDPERCOMP. These differences were noticeable between Cluster 3 and the other two clusters. However, we found no significant differences between clusters in terms of SALARY and INVESTMENT. Given the majority of confirmed factors, H3 was supported.

Table 4. Clusters characteristics – means, Kruskal-Wallis H tests, and post-hoc Dunn's tests

Variable	Mean for each subregion in cluster 1	2	3	H
Hotel-specific variables				
ECONHOT	15.7	34.3[a]	35.5[a]	7.947*
MIDDLEHOT	64.5	53.0	53.4	4.348
LUXHOT	19.8[a]	12.7[ab]	11.2[b]	8.281*
CHAIN	6.42[a]	5.91[a]	2.7	11.620**
PROTECTED_AREA	40.74[a]	24.81	30.68[a]	6.609*
Economic variables				
INCOME	879.98[a]	1234.69	882.24[a]	19.884***
UNEMPLOYMENT	1.91[a]	2.04[a]	3.24	56.117***
SALARY	4327	4501	4437	3.705
INVESTMENT	3130	4521	3806	2.716
SUPPCOMPAN	1616	1137	657	53.816***
SHIELDPERCOMP	157 784[ab]	162 466[a]	153 553[b]	5.483**

Note: For each variable (row), the means for different clusters with the same superscript (*a* or *b*) are not significantly different based on Dunn's post hoc tests; $^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$.

DISCUSSION

The results confirmed the regional variation of hotel industry resilience across regions with different levels of hotel industry development (Kubickova et al., 2019; Yang & Cai, 2016). In terms of occupancy and employment, the most resilient were hotels from Cluster 3, regions generally considered to be socially and economically underdeveloped areas for tourism (but with unique natural amenities), which visibly lagged behind Clusters 1 and 2. Hotels in clusters 1 and 2, which were heavily dependent on foreign and business tourists, had to contend with with the introduction of a ban on the organization of traditional business events, the consequent loss of the ability to serve the key customer segment. With regard to the indebtedness indicator, a downward trend was observed in Cluster 1; but, this coincided with massive hotel liquidations and bankruptcies (Statistics Poland, 2021). Thus, the evidenced differences regarding individual indicators of a resilient response do not indicate a full correspondence with the level of hotel industry development in a given region, thus calling for a more thorough analysis of regional conditions in terms of their impact on both development and industry resilience (Holm and Østergaard, 2015).

The results indicate that some factors identified as supporting the development of the hotel industry in a given region do not have such a positive effect during the crisis and may even be adverse to the resilience of hotels. Notably, such factors were identified in both hotel industry characteristics and regional economic conditions.

Conformity in location has been found to improve hotel performance only for selected hotel segments and to increase risk for others. In general, co-location provides opportunities for externalities for all hotel segments (Vanezuela-Ortiz et al., 2022), particularly for economy hotels (Canina et al., 2005). However, a supportive effect was found only in economy hotels during the crisis. Previous studies have confirmed that lower-class hotels perform better during economic or environmental shocks (Kosová & Enz, 2012) while being less resilient to terrorist crises (Kubickova et al., 2019). In our study, regions dominated by economic hotels (Cluster 3 and 2) showed higher resilience, as these hotels benefited from the increase in budget-oriented domestic travel and earned revenue by serving as medic hotels. In Cluster 1, dominated by luxury and chain hotels, being cut off from the key segment of foreign and business tourists meant going out of business (Krishnan et al., 2020; Sahlins, 2013).

In addition, the dense social fabric in Cluster 1, despite its extensive protected natural areas, discouraged tourists during the pandemic, as they preferred hotels in the less populated, 'green' regions of Poland (Cluster 3). During the pandemic, concerns about the risk of contracting the virus made travelers wary of more densely populated areas, creating uncertainty and anxiety that directly affected their sense of safety. This link between population density and tourist preferences has been intensively studied by researchers studying overtourism (Butler & Dodds, 2021; Yu & Egger, 2021) and crowd management (Filingeri et al., 2017). Therefore, Buhalis' recommendation (2000) that ensuring tourist safety should be an integral part of Destination Management Organizations' (DMOs) strategies for developing prosperous and sustainable destinations is increasingly supported by evidence. Research during the COVID-19 pandemic revealed a shift in travel preferences, with individuals seeking out destinations perceived as safer and previously less familiar to tourists and visitors (Neuburger & Egger, 2021; Kubickova et al., 2019). In our findings, safety was consistent with a desire for locations remote from densely populated areas. Furthermore, remote location areas with untapped market opportunities provided an incentive for tourism businesses to innovate and gain market advantages, such as pivoting towards local and ultra-local markets (Bhaskara et al., 2023).

Interestingly, while belonging to a hotel chain has historically been perceived as advantageous during crises due to corporate support (Filimonau et al., 2020; Le & Phi, 2021), the COVID-19 pandemic revealed that this association did not consistently confer benefits. Consistent with the findings of Krishnan et al. (2020) and Ozdemir et al. (2021), it was observed that despite the availability of corporate support funds and services, hotel chains were unable to significantly reduce their rates due to the imperative of maintaining their premium brand image. In addition, the dependence of hotel chains on the Tourism Supply Chain (TSC), which is vulnerable to the economic impact of pandemics and other disasters, made their situation more challenging (Tasnim et al., 2023). As a result, there is a growing recognition that hotel chains may need to realign their priorities, shifting their focus from operational efficiency to improving labor relations (Gonzales-Torres et al., 2021).

In this context, supply chain visibility is emerging as a critical success factor in building resilience in the hospitality and tourism sector (Jain et al., 2022). Effective supply chain management becomes imperative to meet the challenges posed by various crises - be it a natural disaster, economic crisis, international conflict, terrorism, or epidemic outbreak (Pizam & Fleischer, 2002; Chen & Chou, 2008; Jiang et al., 2019). Many hotels, resorts, and tourist destinations largely depend on tour operators for their promotion by word of mouth, visibility, and services (Gonzales-Torres et al., 2021). Tour operators are often associated with other tourism activities, such as controlling carriers and retailers along with controlling various important activities in the tourism and hospitality industry, including contracts related to payments, guarantees and release conditions. Therefore, the coordination-intensive nature of the hospitality industry presents inherent risks due to this high dependence on external partners. A disruption in any part of the supply chain can trigger cascading effects throughout the entire system (Folinas et al., 2004; Zhang et al., 2009), amplifying the sector's vulnerability to crises.

The study illustrates that the resilience of the hotel sector during the COVID-19 pandemic, and potentially in other crises, is intricately linked to the dynamics of the local labor market. Despite previous assertions linking high unemployment to reduced regional resilience (Soufi et al., 2022), our study reveals a nuanced landscape in which hotels in regions with elevated unemployment demonstrate greater adaptability. This observation contradicts traditional expectations and highlights the specificity of the hotel industry, which not only relies heavily on a low-skilled workforce (Baum et al., 2020) but also exhibits unique crisis response mechanisms distinct from other tourism sectors (Cellini & Cuccia, 2019; Ozdemir et al., 2021). Labor market accessibility emerges as a key regional attribute that afforded hotels greater flexibility in responding to the challenges posed by the pandemic (Yang & Cai, 2016). Furthermore, this study draws attention to the migration trend of hotel employees to other industries, particularly in economically prosperous regions, identified as Cluster 1 (Lee et al., 2018). Such regions offer a wide array of career opportunities, facilitating this labor shift. While this migration trend, is indicative of individual economic mobility, it raises pertinent questions about the long-term implications for the hotel sector and the broader regional economy. In particular, it highlights concerns regarding the sustainability of the sector's labor model and the quality of its contribution to regional economic externalities. Given these dynamics, it becomes clear that the relationship between unemployment and the resilience of the hotel sector is not linear, but is mediated by several factors, including the skill level of the workforce, the adaptability of hotels to crisis conditions, and the broader economic context of the region. This nuanced understanding suggests that policies aimed at strengthening the resilience of hotel sector should consider not only labor market conditions but also the need for skill development, technological innovation, and economic diversification strategies. Such policies could enhance the sector's ability to respond to crises, while addressing the challenges posed by reliance on low-skilled labor and mitigating the adverse effects of high unemployment on regional economic health.

Furthermore, the effectiveness of government interventions to support the hotel industry during the pandemic highlights the often overlooked vulnerability of the sector and its reluctance to implement crisis management principles (Brown et al., 2017). Despite general efforts to provide assistance against COVID, hotels were at a distinct disadvantage, underscoring a systemic pattern of inadequate support during crises. This situation reflects the broader challenge of tailoring government aid to the specific needs of the hotel industry, a challenge that has historically been evident in responses to other crises, such as terrorist attacks or financial downturns (Kubickova et al., 2019). The contrast in aid efficacy is particularly notable when comparing different regional policies, as seen in China, where targeted measures in eastern regions offered tax reductions and financial incentives, while central regions focused more on tourist safety and inspections (Shao et al., 2020). These varied approaches suggest that a more nuanced, regionally adapted policy framework could better support the hotel industry, increase its resilience, and contribute to a more sustainable recovery from the crisis.

CONCLUSIONS

Following this study's focus, we confirmed that the resilience of the hotel industry in Poland does not necessarily correspond to its level of development across regions. Based on the identified variations in resilience responses and in the regional conditions that shaped these responses to the COVID-19 pandemic, we verified the research hypotheses and formulated several important implications for theory and practice. The COVID-19 pandemic, while a profound crisis in its own right, served primarily as a lens that magnified and exacerbated pre-existing challenges within the broader tourism sector, particularly the hotel industry. Our findings suggest that the pandemic should not be seen as an isolated event but rather as a catalyst that has highlighted and brought into sharp focus long-standing issues that had been inadequately addressed in previous crises.This finding prompts a reassessment of resilience strategies and highlights the need for a more nuanced understanding of the factors contributing to the sustainability and development of the sector.

The implications drawn from our study underscore the urgent need for more resilient crisis management strategies applicable to the tourism sector as a whole. Our findings argue for a deeper understanding of human resource management, particularly given the high capital intensity and seasonal nature of the industry. With a significant proportion of small and medium-sized enterprises and a notable presence of the informal economy within the tourism sector (e.g., unrecorded income leading to difficulties in obtaining government support), unique challenges emerge, exacerbating issues for both employees and enterprises during crises and exposing systemic weaknesses in industrial relations and working capital maintenance. From a broader perspective, a nuanced understanding of agglomeration externalities, both during and beyond crisis periods, becomes paramount for strategic decision-making. The precarious status of workers, who are often among the lowest paid across various sectors, emphasizes the urgency of more secure labor relations and sustainable employment practices in the sector.

The collaboration among hotels, industry associations, and educational institutions is critical to developing more comprehensive, resilience-focused analyses of operational flexibility that go beyond human resource management. Such strategies should encompass effective supply chain management and a robust framework for labor security while addressing the need for skills development, technological innovation, and economic diversification. By adopting such approaches, the sector can build resilience to withstand multiple crises while addressing the challenges posed by reliance on low-skilled labor and mitigating the adverse effects of high unemployment on regional economic health.

Our findings also highlight the disparate impact of the pandemic on different segments of the hotel industry. While hotels in less densely populated areas were able to adapt to local demand and become safe havens, luxury and chain hotels, often reliant on international tourism and corporate bookings, faced harsher realities. This dichotomy stresses the urgent need for adaptable business models capable of navigating changing market conditions and crises. In addition, hotels should actively participate in the sustainable development of their communities, which is integral to their success (e.g., urban revitalization projects, green recreational spaces). This approach suggests the need for regional authorities to adopt more inclusive and open strategies in developing sustainable regional development policies.

In addition, the misalignment of government support during the pandemic provides an opportunity for regional multi-stakeholder discussions to develop appropriate policies. Firstly, policy makers should prioritize the development of regionally tailored support mechanisms to address the diverse challenges faced by hotels across different areas. This could include the introduction of financial incentives, tax reductions or targeted support programmes are tailored to the specific needs and characteristics of each region. Secondly, fostering greater collaboration between government agencies, industry associations, and hotel stakeholders is essential to ensure that support measures effectively address the sector's vulnerabilities. By working together, stakeholders can design and implement more targeted and effective interventions, thereby maximizing the efficacy of support measures.

Furthermore, policy makers need to consider the broader context of crisis management within the hotel industry. Given the sector's reluctance to implement crisis management principles, there is an urgent need for capacity-building initiatives. Providing training and resources to help hotels develop robust crisis management plans and strategies can significantly improve their preparedness and resilience in the face of future crises. Finally, ongoing monitoring and evaluation of government support programs are essential to assess their effectiveness and identify areas for improvement. By continuously refining and adapting support measures based on evaluation outcomes, policymakers can ensure that the hotel industry receives the support it needs to manage crises effectively.

These policies, which address both development and resilience, can then effectively influence and shape central policy-making with greater legitimacy and relevance. This understanding informs decisions on the location of hotel investments, the development of innovative value propositions and the diversification of business models.

Our research contributes to the development of resilience theory in the management field from an industry perspective, thus broadening the scope of the discussion beyond an individual business (Sharma et al., 2021; Di Tommaso et al., 2023). As such, the results obtained provide valuable insights into the complexity of regionally shaped antecedents of resilience (Xiao et al., 2018; Cellini & Cuccia, 2019). Importantly, the research included an integrated perspective that encompassed both the industry characteristics and economic conditions of specific regions (Di Tommaso et al., 2023), providing a strong, comprehensive basis for the arguments generated. The study revealed clear tensions between development and resilience impacts and confirmed that not all factors supporting hotel industry development in a particular region are equally conducive to its resilience (Holm & Østergaard, 2015). The study elucidates the existing trade-offs and thus strengthens the argument calling for a conceptual decoupling of resilience and development (Holm & Østergaard, 2015; Hilmann & Guenther, 2021) , as it assumes that their generally synergistic relationship is obsolete. It contributes to the ongoing discourse on the relevance of resilience as a distinct concept (Hilmann & Guenther, 2021) in the management field. Shifting attention to trade-off tensions advances both conceptual validity and application potential. The results obtained indicated that the differentiation of impacts applies to both groups of factors, i.e. industry characteristics and the regionally shaped economic conditions, provide a solid and promising starting point for further in-depth analyses of the relationship between development and resilience and, consequently, for the development of a conceptually coherent and distinct theory of resilience.

While we used data from institutional databases to derive implications for the industry as a whole, this approach lacked the insider perspective of hotel managers and employees. This points in the direction of future research, where official statistical data can be complemented by managerial insights. Moreover, the study period serves as a reliable material for comparative analysis in future timeframes, especially when using a similar study approach. While this study was tailored to the specific circumstances of the hotel industry, its approach can be replicated across various industries that are integral components of the supply and value chains of the tourism market. These industries, like hotels, are particularly vulnerable to crises. Examples include the transport industry, including airlines, bus, and rail services (Ritchie et al., 2010; Gössling et al., 2021) and tourism operators (Hall, 2009; Do et al., 2022). Furthermore, extending our research to other industries within the supply chain of the tourism market and its value chain could facilitate the exploration of building a resilience chain in the tourism sector. Such efforts could improve our understanding of how different sectors are interconnected and contribute to overall resilience within the tourism industry. Similarly, while this study was tailored to the specific circumstances of the country, its findings may be applicable to other Central and Eastern European (CEE) countries, thus creating potential for comparative studies across the region. Additionally, the approach developed, which takes into account regional differences in industry structure and economic conditions, offers a promising basis for conducting studies in other regions that exhibit similar variations.

References

Adam, I., & Amuquandoh, F. E. (2014). Hotel characteristics and location decisions in Kumasi Metropolis, Ghana. *Tourism Geographies*, *16*(4), 653–668. https://doi.org/10.1080/14616688.2012.762689

Aguiar-Quintana, T., Nguyen, H., Araujo-Cabrera, Y., & Sanabria-Díaz, J. M. (2021). Do job insecurity, anxiety and depression caused by the COVID-19 pandemic influence hotel employees' self-rated task performance? The moderating role of employee resilience. *International Journal of Hospitality Management*, *94*(January). https://doi.org/10.1016/j.ijhm.2021.102868

Assaf, A. G., & Josiassen, A. (2012). Identifying and ranking the determinants of tourism performance: A global investigation. *Journal of Travel Research*, 51, 388-399. https://doi.org/10.1177/0047287511426337

Assaf, A. G., Josiassen, A., & Agbola, F. W. (2015). Attracting international hotels: Locational factors that matter most. *Tourism Management*, *47*, 329-340. https://doi.org/10.1016/j.tourman.2014.10.005

Assaf, A. G., Josiassen, A., Woo, L., Agbola, F. W., & Tsionas, M. (2017). Destination characteristics that drive hotel performance: A state-of-the-art global analysis. *Tourism Management*, 60, 270-279. https://doi.org/10.1016/j.tourman.2016.12.010

Bangwayo-Skeete, P. F., & Skeete, R. W. (2021). Modelling tourism resilience in small island states: A tale of two countries. *Tourism Geographies*, *23*(3), 436–457. https://doi.org/10.1080/14616688.2020.1750684

Barbhuiya, M. R., & Chatterjee, D. (2020). Vulnerability and resilience of the tourism sector in India: Effects of natural disasters and internal conflict. *Tourism Management Perspectives*, *33*(November 2019), 100616. https://doi.org/10.1016/j.tmp.2019.100616

Batista e Silva, F., Barranco, R., Proietti, P., Pigaiani, C., & Lavalle, C. (2021). A new European regional tourism typology based on hotel location patterns and geographical criteria. *Annals of Tourism Research*, *89*, 103077. https://doi.org/10.1016/j.annals.2020.103077

Baum, T., Mooney, S. K. K., Robinson, R. N. S., & Solnet, D. (2020). COVID-19's impact on the hospitality workforce – new crisis or amplification of the norm? *International Journal of Contemporary Hospitality Management*, *32*(9), 2813–2829. https://doi.org/10.1108/IJCHM-04-2020-0314

Bhaskara, G. I., Filimonau, V., Wijaya, N. M. S., & Suryasih, I. A. (2023). Innovation and creativity in a time of crisis: A perspective of small tourism enterprises from an emerging destination. *Tourism Management Perspectives*, *46*. https://doi.org/10.1016/j.tmp.2023.101093

Biggs, D., Hall, C. M., & Stoeckl, N. (2012). The resilience of formal and informal tourism enterprises to disasters: Reef tourism in Phuket, Thailand. *Journal of Sustainable Tourism*, *20*(5), 645–665. https://doi.org/10.1080/09669582.2011.630080

Boschma, R. (2015). Towards an evolutionary perspective on regional resilience. *Regional Studies*, *49*(5), 733–751. https://doi.org/10.1080/00343404.2014.959481

Brakman, S., Garretsen, H., & van Marrewijk, C. (2015). Regional resilience across Europe: On urbanisation and the initial impact of the Great Recession. *Cambridge Journal of Regions, Economy and Society*, *8*(2), 225–240. https://doi.org/10.1093/cjres/rsv005

Brown, N. A., Feldmann-Jensen, S., Rovins, J. E., Orchiston, C., & Johnston, D. (2021). Exploring disaster resilience within the hotel sector: A case study of Wellington and Hawke's Bay New Zealand. *International Journal of Disaster Risk Reduction*, *55*(January), 102080. https://doi.org/10.1016/j.ijdrr.2021.102080

Brown, N. A., Rovins, J. E., Feldmann-Jensen, S., Orchiston, C., & Johnston, D. (2017). Exploring disaster resilience within the hotel sector: A systematic review of literature. *International Journal of Disaster Risk Reduction*, *22*, 362–370. https://doi.org/10.1016/j.ijdrr.2017.02.005

Buhalis, D. (2000). Marketing the competitive destination of the future. *Tourism management*, *21*(1), 97-116. https://doi.org/10.1016/S0261-5177(99)00095-3

Butler, R. W., & Dodds, R. (2022). Overcoming overtourism: a review of failure. *Tourism Review*, *77*(1), 35-53. https://doi.org/10.1108/TR-04-2021-0215

Calgaro, E., Lloyd, K., & Dominey-Howes, D. (2014). From vulnerability to transformation: A framework for assessing the vulnerability and resilience of tourism destinations. *Journal of Sustainable Tourism*, *22*(3), 341–360. https://doi.org/10.1080/09669582.2013.826229

Canina, L., Enz, C. A., & Harrison, J. S. (2005). Agglomeration efects and strategic orientations: evidence from the U.S. lodging industry. *Academy of Management Journal*, *48*(4), 565–581. https://doi.org/10.5465/amj.2005.17843938

Carvell, S. A., Canina, L., & Sturman, M. C. (2016). A comparison of the performance of brand-affiliated and unaffiliated hotel properties. *Cornell Hospitality Quarterly*, 57(2), 193–201. doi:10.1177/1938965516631014

Cavaco, N. M., & Machado, V. C. (2015). Sustainable competitiveness based on resilience and innovation–an alternative approach. *International Journal of Management Science and Engineering Management*, *10*(2), 155–164. https://doi.org/10.1080/17509653.2014.975165

Cellini, R., & Cuccia, T. (2019). Do behaviours in cultural markets affect economic resilience? An analysis of Italian regions. *European Planning Studies*, *27*(4), 1–18. https://doi.org/10.1080/09654313.2019.1568397

Chen, H. K., & Chou, H. W. (2008). Supply chain network equilibrium problem with capacity constraints. *Papers in Regional Science*, *87*(4), 605–621. https://doi.org/10.1111/j.1435-5957.2008.00174.x

Chen, M. H. (2010). The economy, tourism growth and corporate performance in the Taiwanese hotel industry. *Tourism Management, 31*(5), 665–675. https://doi.org/10.1016/j.tourman.2009.07.011

Chen, M. H. (2016). A quantile regression analysis of tourism market growth effect on the hotel industry. *International Journal of Hospitality Management*, *52*, 117-120. https://doi.org/10.1016/j.ijhm.2015.10.001

Chen, M.-H. (2011). The response of hotel performance to international tourism development and crisis events. *International Journal of Hospitality Management*, *30*(1), 200–212. https://doi.org/10.1016/j.ijhm.2010.06.005

Chen, M.-H., Jang, S, & Kim, W. G. (2007). The impact of the SARS outbreak on Taiwanese hotel stock performance: An event-study approach. *International Journal of Hospitality Management*, *26*(1), 200–212. https://doi.org/10.1016/j.ijhm.2005.11.004

Chi, L., Chan, W. K. (Victor), Seow, G., & Tam, K. (2009). Transplanting social capital to the online world: Insights from two experimental studies. *Journal of Organizational Computing and Electronic Commerce*, *19*(3), 214–236. https://doi.org/10.1080/10919390903041931

Chowdhury, M., Prayag, G., Orchiston, C., & Spector, S. (2019). Postdisaster social capital, adaptive resilience and business performance of tourism organizations in Christchurch, New Zealand. *Journal of Travel Research*, *58*(7), 1209–1226. https://doi.org/10.1177/0047287518794319

Clark, T. N. (2011). Urban amenities: Lakes, opera, and juice bars – Do they drive development? In *The city as an entertainment machine* (pp. 97–134). Lexington. https://doi.org/10.1016/S1479-3520(03)09003-2

Crescenzi, R., Luca, D., & Milio, S. (2016). The geography of the economic crisis in Europe: National macroeconomic conditions, regional structural factors and short-term economic performance. *Cambridge Journal of Regions, Economy and Society*, *9*(1), 13–32. https://doi.org/10.1093/cjres/rsv031

Di Tommaso, M. R., Prodi, E., Pollio, C., & Barbieri, E. (2023). Conceptualizing and measuring "industry resilience": Composite indicators for postshock industrial policy decision-making. *Socio-Economic Planning Sciences*, *85*, 101448. https://doi.org/10.1016/j.seps.2022.101448

Do, B., Nguyen, N., D'Souza, C., Bui, H. D., & Nguyen, T. N. H. (2022). Strategic responses to COVID-19: The case of tour operators in Vietnam. *Tourism and Hospitality Research*, *22*(1), 5-17. https://doi.org/10.1177/1467358421993902

Dogru, T., & Bulut, U. (2018). Is tourism an engine for economic recovery? Theory and empirical evidence. *Tourism Management*, *67*, 425–434. https://doi.org/10.1016/j.tourman.2017.06.014

Duarte Alonso, A., Kok, S. K., Bressan, A., O'Shea, M., Sakellarios, N., Koresis, A., Buitrago Solis, M. A., & Santoni, L. J. (2020). COVID-19, aftermath, impacts, and hospitality firms: An international perspective. *International Journal of Hospitality Management*, *91*(June), 102654. https://doi.org/10.1016/j.ijhm.2020.102654

Duchek, S. (2020). *Organizational resilience : A capability-based conceptualization*. Retrieved from https://link.springer.com/content/pdf/10.1007/s40685-019-0085-7.pdf

Fang, L., Xie, Y., Yao, S., & Liu, T. (2021). Agglomeration and/or differentiation at regional scale? Geographic spatial thinking of hotel distribution – a case study of Guangdong, China. *Current Issues in Tourism*, *24*(10). https://doi.org/10.1080/13683500.2020.1792852

Farmaki, A., Miguel, C., Drotarova, M. H., Aleksić, A., Časni, A. Č., & Efthymiadou, F. (2020). Impacts of Covid-19 on peer-to-peer accommodation platforms: Host perceptions and responses. *International Journal of Hospitality Management*, *91*(June). https://doi.org/10.1016/j.ijhm.2020.102663

Ferreira, S. L., & Boshoff, A. (2014). Post-2010 FIFA Soccer World Cup: Oversupply and location of luxury hotel rooms in Cape Town. *Current Issues in Tourism*, *17*(2), 180-198. https://doi.org/10.1080/13683500.2013.776524

Filimonau, V., & De Coteau, D. A. (2019). Food waste management in hospitality operations: A critical review. *Tourism Management*, *71*(April 2018), 234–245. https://doi.org/10.1016/j.tourman.2018.10.009

Filimonau, V., Derqui, B., & Matute, J. (2020). The COVID-19 pandemic and organisational commitment of senior hotel managers. *International Journal of Hospitality Management*, *91*(August), 102659. https://doi.org/10.1016/j.ijhm.2020.102659

Filingeri, V., Eason, K., Waterson, P., & Haslam, R. (2017). Factors influencing experience in crowds–the participant perspective. *Applied Ergonomics*, *59*, 431-441. https://doi.org/10.1016/j.apergo.2017.10.013

Folinas, D., Manthou, V., & Sigala, M. (2004). Evolution of a supply chain: Cases and best practices. *Internet Research*, *14*(4), 274–283. https://doi.org/10.1108/10662240410555298

Gao, B., Li, X., Liu, S., & Fang, D. (2018). How power distance affects online hotel ratings: The positive moderating roles of hotel chain and reviewers' travel experience. *Tourism Management*, 65, 176–186. doi:10.1016/j.tourman.2017.10.007

Giannakis, E., & Bruggeman, A. (2017). Determinants of regional resilience to economic crisis: A European perspective. *European Planning Studies*, *25*(8), 1394–1415. https://doi.org/10.1080/09654313.2017.1319464

Gilboa, S., Jaffe, E. D., Vianelli, D., Pastore, A., & Herstein, R. (2015). A summated rating scale for measuring city image. *Cities*, *44*(June 2016), 50–59. https://doi.org/10.1016/j.cities.2015.01.002

Giousmpasoglou, C., Marinakou, E., & Zopiatis, A. (2021). Hospitality managers in turbulent times: The COVID-19 crisis. *International Journal of Contemporary Hospitality Management*, *33*(4), 1297–1318. https://doi.org/10.1108/IJCHM-07-2020-0741

Gong, H., Hassink, R., Tan, J., & Huang, D. (2020). Regional resilience in times of a pandemic crisis: the case of Covid-19 in China. *Special Issue:The Geography of the COVID-19 Pandemic, 111*(3), 497–512. https://doi.org/10.1111/tesg.12447

González-Torres, T., Rodríguéz-Sánchez, J. L., & Pelechano-Barahona, E. (2021). Managing relationships in the Tourism Supply Chain to overcome epidemic outbreaks: The case of COVID-19 and the hospitality industry in Spain. *International Journal of Hospitality Management*, *92*. https://doi.org/10.1016/j.ijhm.2020.102733

Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism*, *29*(1), 1–20. https://doi.org/10.1080/09669582.2020.1758708

Hall, C. M. (2010). Crisis events in tourism: Subjects of crisis in tourism. *Current Issues in Tourism*, *13*(5), 401-417. https://doi.org/10.1080/13683500.2010.491900

Hao, F., Xiao, Q., & Chon, K. (2020). COVID-19 and China's hotel industry: Impacts, a disaster management framework, and post-pandemic agenda. *International Journal of Hospitality Management*, *90*(June), 102636. https://doi.org/10.1016/j.ijhm.2020.102636

Henseler, M., Maisonnave, H., & Maskaeva, A. (2022). Economic impacts of COVID-19 on the tourism sector in Tanzania. *Annals of Tourism Research Empirical Insights*, *3*(1), 100042. https://doi.org/10.1016/j.annale.2022.100042

Hernández-Mogollón, J. M., Duarte, P. A., & Folgado-Fernández, J. A. (2018). The contribution of cultural events to the formation of the cognitive and affective images of a tourist destination. *Journal of Destination Marketing & Management*, *8*, 170–178. https://doi.org/10.1016/j.jdmm.2017.03.004

Hillmann, J., & Guenther, E. (2021). Organizational resilience: A valuable construct for management research? *International Journal of Management Reviews*, *23*(1), 7–44. https://doi.org/10.1111/ijmr.12239

Holm, J. R., & Østergaard, C. R. (2015). Regional employment growth, shocks and regional industrial resilience: A quantitative analysis of the Danish ICT Sector. *Regional Studies*, *49*(1), 95–112. https://doi.org/10.1080/00343404.2013.787159

Jain, A., Shanker, S., & Barve, A. (2022). Resilience against the COVID-19 pandemic: Is the hotel and tourism supply chain on the right path? *Benchmarking: An International Journal*, *29*(10), 3194–3225. https://doi.org/10.1108/BIJ-05-2021-0249

Japutra, A., & Situmorang, R. (2021). The repercussions and challenges of COVID-19 in the hotel industry: Potential strategies from a case study of Indonesia. *International Journal of Hospitality Management*, *95*(February), 102890. https://doi.org/10.1016/j.ijhm.2021.102890

Jiang, W. (2019). An intelligent supply chain information collaboration model based on internet of things and big data. *IEEE Access*, *7*(c), 58324–58335. https://doi.org/10.1109/ACCESS.2019.2913192

Jollant, F., Blanc-Brisset, I., Cellier, M., Ambar Akkaoui, M., Tran, V. C., Hamel, J. F., Piot, M. A., Nourredine, M., Nisse, P., Hawton, K., Descatha, A., & Vodovar, D. (2022). Temporal trends in calls for suicide attempts to poison control centers in France during the COVID-19 pandemic: A nationwide study. *European Journal of Epidemiology*, *37*(9), 901–913. https://doi.org/10.1007/s10654-022-00907-z

Journal of Laws of 2017, item 236. Ustawa o usługach hotelarskich oraz usługach pilotów wycieczek i przewodników turystycznych, (2017). Retrieved from http://bip.rbip.wzp.pl/sites/bip.wzp.pl/files/articles/rozporzadzeniewsprawieobiektowhotelarskich.tekstujednolicony.pdf

Kalnins, A., & Chung, W. (2004). Resource-seeking agglomeration: A study of market entry in the lodging industry. *Strategic Management Journal*, *25*(7), 689–699. https://doi.org/10.1002/smj.403

Kantur, D., & İşeri-Say, A. (2012). Organizational resilience: A conceptual integrative framework. *Journal of Management & Organization*, *6*(18), 762–773. https://doi.org/10.5172/jmo.2012.18.6.762
Khan, A., Bibi, S., Lyu, J., Latif, A., & Lorenzo, A. (2021). COVID-19 and sectoral employment trends: assessing resilience in the US leisure and hospitality industry. *Current Issues in Tourism*, *24*(7), 952–969. https://doi.org/10.1080/13683500.2020.1850653
Kim, H. J., Chen, M. H., & Jang, S. C. S. (2006). Tourism expansion and economic development: The case of Taiwan. *Tourism Management*, *27*(5), 925–933. https://doi.org/10.1016/j.tourman.2005.05.011
Kosová, R., & Enz, C. A. (2012). The Terrorist Attacks of 9/11 and the Financial Crisis of 2008. *Cornell Hospitality Quarterly*, *53*(4), 308–325. https://doi.org/10.1177/1938965512457021
Krishnan, V., Mann, R., Seitzman, N., & Wittkamp, N. (2020). *Hospitality and COVID-19: How long until 'no vacancy' for US hotels?* Retrieved from https://www.mckinsey.com/industries/travel-logistics-and-infrastructure/our-insights/hospitality-and-covid-19-how-long-until-no-vacancy-for-us-hotels
Kubickova, M., Kirimhan, D., & Li, H. (2019). The impact of crises on hotel rooms' demand in developing economies: The case of terrorist attacks of 9/11 and the global financial crisis of 2008. *Journal of Hospitality and Tourism Management*, *38*, 27–38. https://doi.org/10.1016/j.jhtm.2018.10.002
Kurth, M. H., Keenan, J. M., Sasani, M., & Linkov, I. (2019). Defining resilience for the US building industry. *Building Research & Information*, *47*(4), 480–492. https://doi.org/10.1080/09613218.2018.1452489
Lado-Sestayo, R., Vivel-Búa, M., & Otero-González, L. (2020). Connection between hotel location and profitability drivers: An analysis of location-specific effects. *Current Issues in Tourism*, *23*(4), 452–469. https://doi.org/10.1080/13683500.2018.1538203
Le, D., & Phi, G. (2021). Strategic responses of the hotel sector to COVID-19: Toward a refined pandemic crisis management framework. *International Journal of Hospitality Management*, *94*(December 2020), 102808. https://doi.org/10.1016/j.ijhm.2020.102808
Lee, C. F. (2015). An investigation of factors determining industrial tourism attractiveness. *Tourism and Hospitality Research*, *16*(2), 184–197. https://doi.org/10.1177/1467358415600217
Lee, K. H., Kang, S., Terry, W. C., & Schuett, M. A. (2018). A spatial relationship between the distribution patterns of hotels and amenities in the United States. *Cogent Social Sciences*, *4*(1). https://doi.org/10.1080/23311886.2018.1444918
Lee, S. K. (2015). Quality differentiation and conditional spatial price competition among hotels. *Tourism Management*, *46*, 114-122. https://doi.org/10.1016/j.tourman.2014.06.019
Lee, S., Xiao, Q., & Kang, K. H. (2011). An examination of US hotel Segment strategy: Diversified, concentrated or balanced? *Tourism Economics*, *17*(6), 1257–1274. https://doi.org/10.5367/te.2011.0086
Lengnick-Hall, C. A., Beck, T. E., & Lengnick-Hall, M. L. (2011). Developing a capacity for organizational resilience through strategic human resource management. *Human Resource Management Review*, *21*(3), 243–255. https://doi.org/10.1016/j.hrmr.2010.07.001
Li, Y., & Du, T. (2018). Assessing the Impact of Location on Hotel Development: An Analysis of Manhattan Hotels, 1822–2012. *Papers in Applied Geography*, *4*(1), 21–33. https://doi.org/10.1080/23754931.2017.1366356
Liu, K.-N., & Hu, C. (2022). Critical success factors of green hotel investment in Taiwan. *International Journal of Contemporary Hospitality Management*, *34*(3), 951–971. https://doi.org/10.1108/IJCHM-03-2021-0368
Liu, X., & Wang, X. (2002). Supply of hotel in China. *Economic Geography*, 4, 509-512.
Local Data Bank. (2021). Retrieved from https://bdl.stat.gov.pl/bdl/start
Luo, H., Yang, Y., & Law, R. (2014). How to achieve a high efficiency level of the hotel industry?. *International Journal of Contemporary Hospitality Management*, *26*(8), 1140-1161. https://doi.org/10.1108/IJCHM-01-2013-0050
Mafrolla, E., & D'Amico, E. (2016). Does public spending improve citizens' quality of life? An analysis of municipalities' leisure supply. *Local Government Studies*, *42*(2), 332–350. https://doi.org/10.1080/03003930.2015.1127224
Majewska, J. (2015). Inter-regional agglomeration effects in tourism in Poland. *Tourism Geographies*, *17*(3), 408–436. https://doi.org/10.1080/14616688.2014.997279
Martin, R., & Sunley, P. (2015). On the notion of regional economic resilience: Conceptualization and explanation. *Journal of Economic Geography*, *15*(1), 1–42. https://doi.org/https://doi.org/10.1093/jeg/lbu015
Masik, G. (2018). An agency perspective of resilience: The case of Pomorskie region. *European Planning Studies*, *26*(5), 1060–1077. https://doi.org/10.1080/09654313.2018.1436700
Matteucci, X., Nawijn, J., & von Zumbusch, J. (2022). A new materialist governance paradigm for tourism destinations. *Journal of Sustainable Tourism*, *30*(1), 169–184. https://doi.org/10.1080/09669582.2021.1924180
Melián-Alzola, L., Fernández-Monroy, M., & Hidalgo-Peñate, M. (2020). Hotels in contexts of uncertainty: Measuring organisational resilience. *Tourism Management Perspectives*, *36*(June), 100747. https://doi.org/10.1016/j.tmp.2020.100747
Mitchell, J., Font, X., & Li, S. (2015). What is the impact of hotels on local economic development? Applying value chain analysis to individual businesses. *Anatolia*, *26*(3), 347–358. https://doi.org/10.1080/13032917.2014.947299
MOMR. (2020). *Malopolskie Region 2020 (Województwo Małopolskie 2020) - Marshal Office of the Malopolskie Region*. Retrieved from www.malopolska.pl
Najda-Janoszka, M. (2016). *Dynamic capability-based approach to value appropriation*. Krakow: Jagiellonian University Press.
Neuburger, L. & Egger, R. (2021) Travel risk perception and travel behaviour during the COVID-19 pandemic 2020: A case study of the DACH region. *Current Issues in Tourism,* 24(7),1003-1016, https://doi.org/10.1080/13683500.2020.1803807
Niewiadomski, P. (2015). International hotel groups and regional development in Central and Eastern Europe. *Tourism Geographies*, *17*(2), 173–191. https://doi.org/10.1080/14616688.2014.997278
Nikolskaya, E. Y., Pasko, O. V., Anikina, E. N., Pekhtyar, G. M., & Lebepev, K. A. E. (2018). The hotel sector as an important component of regional economic infrastructure. *Journal of Environmental Management & Tourism*, *9*(6), 1178–1182. https://doi.org/10.14505/jemt.v9.6(30).06
Ntounis, N., Parker, C., Skinner, H., Steadman, C., & Warnaby, G. (2022). Tourism and hospitality industry resilience during the Covid-19 pandemic: Evidence from England. *Current Issues in Tourism*, *25*(1), 46–59. https://doi.org/10.1080/13683500.2021.1883556
Ohmann, S., Jones, I., & Wilkes, K. (2006). The perceived social impacts of the 2006 Football World Cup on Munich residents. *Journal of Sport & Tourism*, *11*(2), 129–152. https://doi.org/10.1080/14775080601155167
Orchiston, C., Prayag, G. & Brown, C. (2015). Organisational resilience in the tourism sector. *Annals of Tourism Research*, http://dx.doi.org/10.1016/j.annals.2015.11.002

Ozdemir, O., Dogru, T., Kizildag, M., Mody, M., & Suess, C. (2021). Quantifying the economic impact of COVID-19 on the U.S. hotel industry: Examination of hotel segments and operational structures. *Tourism Management Perspectives*, *39*(November 2020), 100864. https://doi.org/10.1016/j.tmp.2021.100864
Pappas, N. (2018). Hotel decision-making during multiple crises: A chaordic perspective. *Tourism Management*, *68*(April), 450–464. https://doi.org/10.1016/j.tourman.2018.04.009
Peco-Torres, F., Polo-Peña, A. I., & Frías-Jamilena, D. M. (2021). The effect of COVID-19 on tourists' intention to resume hotel consumption: The role of resilience. *International Journal of Hospitality Management*, *99*, 103075. https://doi.org/10.1016/j.ijhm.2021.103075
Perles-Ribes, J. F., Ramón-Rodríguez, A. B., Sevilla-Jiménez, M., & Rubia, A. (2016). The effects of economic crises on tourism success: An integrated model. *Tourism Economics*, *22*(2), 417–447. https://doi.org/10.5367/te.2014.0428
Pinto, H., Healy, A., & Cruz, A. R. (2019). Varieties of capitalism and resilience clusters: An exploratory approach to European regions. *Regional Science Policy and Practice*, *11*(6), 913–933. https://doi.org/10.1111/rsp3.12183
Pizam, A., & Fleischer, A., (2002) Tourism constraints among Israeli seniors. *Annals of Tourism Research*, 29, 106-123. http://dx.doi.org/10.1016/S0160-7383(01)00026-3
Polish Development Fund. (2021). *Polish Development Fund*. Retrieved from www.pfr.pl
Potthoff, R. F., & Roy, S. N. (1964). A generalized multivariate analysis of variance model useful especially for growth curve problems. *Biometrika*, *51*(3/4), 313. https://doi.org/10.2307/2334137
Prayag, G., Hosany, S., Muskat, B., & Del Chiappa, G. (2017). Understanding the relationships between tourists' emotional experiences, perceived overall image, satisfaction, and intention to recommend. *Journal of Travel Research*, *56*(1), 41–54. https://doi.org/10.1177/0047287515620567
Psycharis, Y., Panori, A., & Athanasopoulos, D. (2022). Public investment and regional resilience: Empirical evidance from the Greek regions. *Tijdschrift Voor Economische En Sociale Geografie, 113*(1), 57–79. https://doi.org/10.1111/tesg.12499
Ribaudo, G., Moccia, S., Orero-Blat, M., & Palacios-Marqués, D. (2020). Comparing chains versus independent hotels based on international sales: An exploratory study. *Economic Research-Ekonomska Istrazivanja*, *33*(1), 2286–2304. https://doi.org/10.1080/1331677X.2019.1710719
Richard, B. (2017). Hotel chains: survival strategies for a dynamic future. *Journal of Tourism Futures*, 3(1), 56–65. https://doi.org/10.1108/JTF-06-2016-0018.
Richard, B., & Cleveland, S. (2016). The future of hotel chains: Branded marketplaces driven by the sharing economy. *Journal of Vacation Marketing*, 22(3), 239–248. https://doi.org/10.1177/135676671562382
Rigall-I-Torrent, R., & Fluvià, M. (2011). Managing tourism products and destinations embedding public good components: A hedonic approach. *Tourism Management*, *32*(2), 244–255. https://doi.org/10.1016/j.tourman.2009.12.009
Ritchie, J. B., Amaya Molinar, C. M., & Frechtling, D. C. (2010). Impacts of the world recession and economic crisis on tourism: North America. *Journal of Travel Research*, *49*(1), 5-15. https://doi.org/10.1177/004728750935319
Rivera, M. A. (2017). The synergies between human development, economic growth, and tourism within a developing country: An empirical model for Ecuador. *Journal of Destination Marketing & Management*, *6*(3), 221–232. https://doi.org/10.1016/j.jdmm.2016.04.002
Romão, J., & Nijkamp, P. (2016). Editorial. *Tourism Economics*, *22*(4), 681–684. https://doi.org/10.1177/1354816616654241
Sahlins, E. (2013). *HVS hotel development cost survey 2012/13*. Retrieved from http://www.hvs.com/article/6201/hvs-hotel-development-cost-survey-2012-13/
Salem, I. E., Elbaz, A. M., Elkhwesky, Z., & Ghazi, K. M. (2021). The COVID-19 pandemic: The mitigating role of government and hotel support of hotel employees in Egypt. *Tourism Management*, *85*(February), 104305. https://doi.org/10.1016/j.tourman.2021.104305
Sellers-Rubio, R., & Casado-Díaz, A. B. (2018). Analyzing hotel efficiency from a regional perspective: The role of environmental determinants. *International Journal of Hospitality Management*, *75*, 75–85. https://doi.org/10.1016/j.ijhm.2018.03.015
Shao, Y., Hu, Z., Luo, M., Huo, T., & Zhao, Q. (2020). What is the policy focus for tourism recovery after the outbreak of COVID-19? A co-word analysis. *Current Issues in Tourism*, 1–6. https://doi.org/10.1080/13683500.2020.180679
Sharma, A., Shin, H., Santa-María, M. J., & Nicolau, J. L. (2021). Hotels' COVID-19 innovation and performance. *Annals of Tourism Research*, *88*, 103180. https://doi.org/10.1016/j.annals.2021.103180
Sharma, G. D., Thomas, A., & Paul, J. (2021). Reviving tourism industry post-COVID-19: A resilience-based framework. *Tourism Management Perspectives*, *37*(100786). https://doi.org/10.1016/j.tmp.2020.100786
Sharpley, R. (2005). The tsunami and tourism: A comment. *Current Issues in Tourism*, *8*(4), 344–349. https://doi.org/10.1080/13683500508668222
Singal, M. (2015). How is the hospitality and tourism industry different? An empirical test of some structural characteristics. *International Journal of Hospitality Management*, *47*, 116–119. https://doi.org/10.1016/j.ijhm.2015.03.006
Soufi, H. R., Esfahanipour, A., & Akbarpour Shirazi, M. (2022). A quantitative approach for analysis of macroeconomic resilience due to socio-economic shocks. *Socio-Economic Planning Sciences*, *79*(350), 101101. https://doi.org/10.1016/j.seps.2021.101101
Statistics Poland. (2021). *Statistics Poland*. Retrieved from https://stat.gov.pl/en/
Szydłowska, K. (2013). Europejskie i Polskie hotelarstwo w dobie kryzysu europejskiego. *Management Sciences*, *3*(16), 119–132.
Tari, J. J., & Pereira-Moliner, J. (2012). Quality and performance. An analysis of the Q certificate in hotel chains. *Universia Business Review*, *34*(34), 52-67.
Tasnim, Z., Shareef, M. A., Dwivedi, Y. K., Kumar, U., Kumar, V., Malik, F. T., & Raman, R. (2023). Tourism sustainability during COVID-19: Developing value chain resilience. *Operations Management Research*, *16*(1), 391-407. https://doi.org/10.1007/s12063-021-00250-8
Ubeda-García, M., Marco-Lajara, B., Sabater-Sempere, V., & García-Lillo, F. (2013). Does training influence organisational performance?: Analysis of the Spanish hotel sector. *European Journal of Training and Development, 37*(4). https://doi.org/10.1108/03090591311319780
Valenzuela-Ortiz, A., Chica-Olmo, J., & Castañeda, J.-A. (2022). Location factors and agglomeration economies in the hotel industry: The case of Spain. *European Journal of Management and Business Economics*. https://doi.org/10.1108/EJMBE-10-2021-0273
Wang, S., Hung, K., & Huang, W.-J. (2019). Motivations for entrepreneurship in the tourism and hospitality sector: A social cognitive theory perspective. *International Journal of Hospitality Management*, *78*, 78–88. https://doi.org/10.1016/j.ijhm.2018.11.018
Wójcik, D., & Cojoianu, T. F. (2018). Resilience of the US securities industry to the global financial crisis. *Geoforum*, *91*, 182–194. https://doi.org/10.1016/j.geoforum.2018.02.035, https://doi.org/10.1016/j.ijhm.2019.102323
Xiao, J., Boschma, R., & Andersson, M. (2018). Industrial diversification in Europe: The differentiated role of relatedness. *Economic Geography*, *94*(5), 514–549. https://doi.org/10.1080/00130095.2018.1444989
Yang, Y., Chen, M. H., Su, C. H. J., & Lin, Y. X. (2020). Asymmetric effects of tourist arrivals on the hospitality industry. *International Journal of Hospitality Management*, *84*, 102323

Yang, Y., H. Luo, & R. Law. (2014). Theoretical, empirical, and operational models in hotel location research. *International Journal of Hospitality Management,* 36, 209–20. https://doi.org/10.1016/j.ijhm.2013.09.004
Yang, Y., K. K. F. Wong, and T. Wang. (2012). How do hotels choose their location? Evidence from hotels in Beijing. *International Journal of Hospitality Management,* 31, 675–85. https://doi.org/10.1016/j.ijhm.2011.09.003
Yang, Z., & Cai, J. (2016). Do regional factors matter? Determinants of hotel industry performance in China. *Tourism Management*, *52*(January 2014), 242–253. https://doi.org/10.1016/j.tourman.2015.06.024
Yu, J., & Egger, R. (2021). Tourist experiences at overcrowded attractions: A text analytics approach. In *Information and Communication Technologies in Tourism 2021: Proceedings of the ENTER 2021 eTourism Conference, January 19–22, 2021* (pp. 231-243). Cham: Springer International Publishing.
Zhang, H. Q., Guillet, B. D., & Gao, W. (2012). What determines multinational hotel groups' locational investment choice in China? *International Journal of Hospitality Management*, *31*(2), 350–359. https://doi.org/10.1016/j.ijhm.2011.05.008
Zhang, X., Song, H., & Huang, G. Q. (2009). Tourism supply chain management: A new research agenda. *Tourism Management*, *30*(3), 345–358. https://doi.org/10.1016/j.tourman.2008.12.010
Zuo, Y., Chen, H., Pan, J., Si, Y., Law, R., & Zhang, M. (2021). Spatial distribution pattern and influencing factors of sports tourism resources in China. *ISPRS International Journal of Geo-Information*, *10*(7). https://doi.org/10.3390/ijgi10070428

Appendix 1. Covid 19 calendar

	Date	Restrictions introduced for the tourism and catering industries
1st lockdown	March 13, 2020	Restriction on restaurants to serve takeaway meals only. Closing gyms and swimming pools. Ban on organizing meetings and parties
	March 23, 2020	Restriction on movement outside of living, health and professional purposes.
	March 31, 2020	Suspension of operations of hotel facilities and short-term rental places. Staying on beaches and green areas is prohibited.
	April 16, 2020	Restrictions on movement other than for living, health and professional purposes have been abolished. The ban on staying on beaches and green areas has been lifted.
	April 2020	**Resilience indicators reach bottom values**
	May 4, 2020	Resumption of hotel operations, except for recreational spaces such as swimming pools and fitness centers.
	May 18, 2020	The order to serve meals only for takeaway has been lifted, and service in the premises while maintaining sanitary strictness.
	May 30, 2020	Lifting the ban on organizing meetings and receptions up to max. 150 people. Resumption of operations of swimming pools, saunas and fitness centers.
	August 2020	**Resilience indicators reach peak values**
2nd lockdown	August 8, 2020	Introduction of division of counties into green zones (without additional restrictions), yellow zones (with partial additional restrictions) and red zones (with strong additional restrictions); In yellow zones, the number of people at special events is limited to 100, in red zones to 50. In yellow and red zones, restrictions on the operation of restaurants and bars until 21 and limiting the operation of swimming pools and fitness centers.
	October 23, 2020	The whole of Poland is declared a red zone. Ban on organizing special events. Suspension of stationary restaurant operations
	November 7, 2020	Hotel services available only to people on business trips.
	December 17, 2020	Further restriction of the availability of hotel services only to people on the list of permitted business trips.
	January 2021	**Resilience indicators reach bottom values**
	February 12, 2021	Opening of hotels to all guests (while maintaining the sanitary regime). Opening of swimming pools. Gyms and restaurants remain unchanged.
	February 2021	**Resilience indicators reach peak values**
3rd lockdown	March 20, 2021	Limiting hotel operations to providing accommodation only to people on the list of permitted business trips. Closure of swimming pools.
	April 2021	**Resilience indicators reach bottom values**
	May 3, 2021	Opening hotels to all guests (while maintaining the sanitary regime, limiting the facility's occupancy to 50%, restaurants and wellness zones closed).

	Date	Restrictions introduced for the tourism and catering industries
	May 15, 2021	Allowing restaurant guests to be served outside (e.g., restaurant gardens) and maintaining the sanitary regime. Possibility of organizing special events outside, max. for 25 people.
	May 29, 2021	Allowing restaurant guests to be served inside while maintaining the sanitary regime. Possibility of organizing special events inside, max. for 50 people.
	June 6, 2021	Possibility to organize special events for max. 150 people. Fully vaccinated people do not count towards the limit
	June 26, 2021	Increasing the occupancy limit for hotels and restaurants to 75%. occupied rooms, the limit does not apply to organized groups of children and adolescents under 12 years of age. Fully vaccinated people are not included in the limits
	August 2021	**Resilience indicators reach peak values**
4th lockdown	December 15, 2021	Restaurants, bars and hotels – max. 30 percent occupancy by unvaccinated people. Fully vaccinated people are not included in the limits
	March 1, 2022	Lifting the limits, hotels can make 100% of their beds available again
	May 16, 2022, the end of the epidemic in Poland	

Appendix 2. Correlation matrix of the variables used for clustering and Kruskal-Wallis tests

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Foreign tourists%	1.000													
2. No. of hotels	0.273**	1.000												
3. Occ%	0.288**	0.385**	1.000											
4. ProLux	0.071	0.248**	0.298**	1.000										
5. ProMid	0.043	-0.011	-0.085	-0.278**	1.000									
6. ProEco	-0.060	-0.111*	-0.049	-0.306**	-0.725**	1.000								
7. PROCHAIN	0.218**	0.190**	0.223**	0.230**	-0.081	-0.039	1.000							
8. SALARY	0.055	-0.016	0.007	-0.023	-0.020	0.025	-0.028	1.000						
9. UNEMPLOYMENT	-0.280**	-0.170**	-0.142**	-0.132*	-0.031	0.104*	-0.148**	0.030	1.000					
10. INCOME	0.432**	0.371**	0.245**	0.172**	0.024	-0.123*	0.370**	-0.052	-0.298**	1.000				
11. INVESTMENT	0.060	0.099	0.017	-0.030	-0.016	0.013	0.028	0.439*	-0.001	-0.017	1.000			
12. SUPPCOMP	0.352**	0.696**	0.263**	0.183**	-0.005	-0.086	0.194**	-0.032	-0.268**	0.533**	-0.025	1.000		
13. SHIELDPERCOMP	0.232**	0.191**	0.125*	0.101	0.073	-0.100	0.136*	0.023	-0.377*	0.372**	-0.019	0.339*	1.000	
14. PROTECTED_AREAS	-0.289**	0.037	0.015	0.050	-0.009	0.011	-0.117*	0.033	0.115*	-0.265*	-0.073	-0.097	-0.167*	1.000

Note: *p<0.05; **p<0.01.

Biographical notes

Ewa Wszendybył-Skulska is an Associate Profiessor Eng. in Economic Sciences in Management at Jagiellonian University in Krakow, Poland. Her main areas of research interest are orientation on human resources management, quality management, innovation, and modern management in hotel and tourism enterprises. Author and co-author of research works published in journal articles, books, and book chapters. A member of several professional bodies. Repeatedly awarded for scientific achievements and actively engaged in professional consultancy for hotel entities.

Marta Najda-Janoszka is an Associate Professor of Strategic Management at Jagiellonian University in Krakow, Poland. Her research is focused on the intersection of strategic management and entrepreneurship, with the competitive dynamics of business ecosystems being the most studied domain. Participated in international and national level research projects as a principal investigator, coordinator, and co-investigator. Author and co-author of research works published as journal articles (IF, Scopus/Web of Science), books, and book chapters. A member of several professional bodies and acted a Panel Head, Track Chair, and Key Note Speaker at international conferences. Repeatedly awarded for scientific achievements.

Adam Jezierski is a PhD student in the field of Management and Quality Studies at Jagiellonian University. His research areas of interest are mainly connected with tourism and hotel management, with a special focus on reputation management in online environment. He also has practical experience working and managing hotel properties in Europe and Asia.

Szczepan Kościółek is an Assistant Professor at the Institute of Entrepreneurship of Jagiellonian University in Poland. His research focuses on sectoral policies, competitiveness, and consumer behavior in the sports and tourism sectors.

Aleksander Panasiuk is a Professor at the Jagiellonian University in Krakow. Director of the Institute of Entrepreneurship, head of the Chair of Tourism and Sport Management. Main areas of scientific interest: tourism management, tourism economics, service marketing, socio-economic policy, regional policy, and quality management. Member of the Presidium of the National Board of the Polish Economic Society in Warsaw. Member of the Scientific Council of the Institute of Communications in Warsaw - National Research Institute. Founding member of the Euro-Asia Tourism Studies Association (EATSA).

Author Contributions

Ewa Wszendybył-Skulska: Conceptualization, Formal Analysis, Writing – Original Draft, Visualization, Project Administration. **Marta Najda-Janoszka:** Conceptualization, Formal Analysis, Writing – Original Draft, Writing – Reviewing & Editing. **Adam Jezierski:** Conceptualization, Formal Analysis, Writing – Original Draft, Data Curation, Methodology. **Szczepan Kościółek:** Data Curation, Methodology, Visualization. **Aleksander Panasiuk:** Writing – Original Draft, Supervision.

Conflicts of interest

The authors declare no conflict of interest.

Citation

Wszendybył-Skulska, E., Najda-Janoszka, M., Jezierski, A., Kościółek, S., & Panasiuk, A. (2024). Exploring resilience of the hotel industry using the example of Polish regions. The case of COVID-19 pandemic. *Journal of Entrepreneurship, Management and Innovation*, *20*(3), 25-45. https://doi.org/10.7341/20242032

Journal of Entrepreneurship, Management and Innovation (2024)
Volume 20 Issue 3: 46-61

DOI: https://doi.org/10.7341/20242033
JEL Codes: L83, Z32, Q56

Assessing sustainable practices and managerial approaches in the hotel industry: A comparative case study

Jitka Vávrová[1], Lenka Červová[2], Blanka Brandová[3], Jorge Pacheco[4]

Abstract

PURPOSE: *The study is comparative, comparing sustainable practices and approaches in two hotels to better understand different management approaches. The study's design provides valuable insights into the topic of sustainability practices in the hotel industry, and the results are analyzed and discussed in the context of existing academic knowledge on the issue.* ***METHODOLOGY:*** *The goal of the selection process was to find information-rich cases. After conducting initial online research, two four-star hotels in the same regional capital city in the Czech Republic were intentionally chosen. These hotels are direct competitors and have very similar target customers. To collect data, the authors conducted two separate semi-structured, in-depth interviews with the CEOs of both hotels, as well as observations in both establishments and additional interviews with staff. The interview protocol, which is innovative and newly assembled, was added to ensure the case study's reliability and enable future comparisons. A comprehensive criterion table methodically presents the research outcomes.* ***FINDINGS:*** *Besides the list of sustainability practices applied in the hotels under study, the authors described two distinct management approaches. The first approach takes a broad perspective, considering all aspects of sustainability and incorporating it as a fundamental part of the company's vision. In contrast, the second approach focuses narrowly on cost savings and profit generation. The form of business is the critical factor responsible for the difference in managerial approach. Interestingly, the study suggested that hotels belonging to large chains (and stock companies) may be more compelled to adopt sustainability practices and may have more established sustainability programs than independent hotels.* ***IMPLICATIONS:*** *In light of previous literature, the findings of this case study provide valuable theoretical contributions to managerial approaches to sustainability programmes, sustainability reporting, transparency, and more. Additionally, the newly assembled interview protocol is an innovative and important foundation for future research. The study also uncovers significant new barriers to the adoption of sustainability practices. From a managerial perspective, this study offers a comprehensive overview of hotels' sustainability practices and serves as a practical list of potential sustainable practices for hotels to consider. Finally, the conclusion provides suggestions for future research that can further advance sustainable practices in the hotel industry.* ***ORIGINALITY AND VALUE:*** *The study's significance stems from a thorough analysis of prior literature and conducting additional research in a new setting, providing a unique perspective on the topic of hotel sustainability within a specific area. The case study approach allowed for an in-depth examination of the selected cases, with attention to detail. The methodology and public interview protocol offer the potential for comparable studies in other regions to be conducted and compared in the future.*

Keywords: *sustainability, sustainable development, practices, hotel industry, hospitality industry, tourism, management*

1 Jitka Vávrová, Ing. Ph.D., Assistant Professor, Technical University of Liberec, Faculty of Economics, Studentská 1402/2, Liberec 1, 461 17, Czech Republic, e-mail: jitka.vavrova@tul.cz (ORCID: https:/orcid.org/0000-0003-4427-5543), corresponding author.

2 Lenka Červová, Ing, Ph.D., Assistant Professor, Technical University of Liberec, Faculty of Economics, Studentská 1402/2, Liberec 1, 461 17, Czech Republic, e-mail: lenka.cervova@tul.cz (ORCID: https:/orcid.org/0000-0001-7025-7045).

3 Blanka Brandová, Ing, Ph.D., Assistant Professor, Technical University of Liberec, Faculty of Economics, Studentská 1402/2, Liberec 1, 461 17, Czech Republic, e-mail: blanka.brandova@tul.cz (ORCID: https:/orcid.org/0000-0002-2894-7955).

4 Jorge Pacheco, Ph.D., Assistant Professor, Institute of Accounting and Administration of Porto (ISCAP), R. Jaime Lopes Amorim s/n, São Mamede de Infesta, 4465-004, Portugal, e-mail: jpacheco@iscap.ipp.pt (ORCID: https:/orcid.org/0000-0003-2742-2871).

Received 25 September 2023; Revised 28 November 2023; Accepted 15 January 2024.

INTRODUCTION

In recent years, tourism has emerged as a vital contributor to the global economy, accounting for an estimated 10.5% of the world's GDP (Travel W.T.T.C., 2018). The industry's sustained growth and commitment to sustainable practices can enhance a country's economic and social well-being, as noted by Robin et al. (2017). While the COVID-19 pandemic has profoundly impacted the sector, leading to a decline in tourist arrivals, there are encouraging signs of a gradual recovery in the post-pandemic era (Oxenswärdh, 2022).

Given the growing concern for the environmental impact of hotels (Adams et al., 2022), it is crucial to explore this issue further. Hotels, with their continuous operation, significantly contribute to the release of greenhouse gases, resulting in harmful effects on the atmosphere and environment (Al-Juboori et al., 2020). According to the United Nations World Tourism Organization (2012), tourism generates over 35 million tons of solid waste annually (World Tourism Organization, 2012.). The tourism industry places pressure on land and water resources, emits greenhouse gases, disrupts wildlife, and poses challenges to biodiversity (Hall, 2010).

In their insightful and comprehensive work on sustainability research within the hotel industry, Kim, Barber, and Kim (2019) highlighted the critical need to analyze sustainable development practices of hotels in future research. A total of 35 articles emphasized this particular need.

The sustainability of a hotel is strongly linked to its organizational stability. In 2002, Min, Min, and Chung argued that various factors, such as tourism policies implemented by governments, the state of the global economy, and even weather conditions, can consistently impact the stability of the hotel industry. The hotel industry is highly dynamic, so numerous internal and external factors can significantly influence its operations. Additionally, since the hotel industry strongly emphasizes customer satisfaction and consumes a significant amount of resources, it is highly responsive to both anticipated and unanticipated shifts in the market and environmental conditions (Lu & Nepal, 2009). Therefore, to achieve maximum sustainability, it is crucial to analyze and further develop this concept in the hotel industry, monitor new technologies and practices, and identify proven managerial concepts.

The primary objective of this paper is to evaluate the adoption of sustainable practices in two particular hotels, comparing their management strategies with existing academic research in the field. This aim is entirely in accordance with the purpose of this research – to deeply explore realistic situations of one or two cases (hotels) in the industry and, therefore, gain exact knowledge about sustainability practices adoption. The study itself is exploratory in nature, so no hypotheses were formulated; instead, three research questions were posed. To facilitate data comparison, we intentionally selected two direct competitors, both four-star hotels situated in a regional capital city in the Czech Republic, both of which actively engage in sustainable practices but hold differing views on the matter. The chosen research framework and its rationale are discussed in greater detail in the literature review, which also outlines research gaps that this study aims to address. Finally, the methodology section describes the research approach and how data was collected. The results section presents an overview of the sustainable practices implemented by both hotels in a comprehensive table, followed by a detailed discussion of the most significant practices and interesting findings. These findings are then analyzed in the context of existing academic knowledge in this area.

LITERATURE REVIEW

The literature review deals with the origin and essence of the sustainability concept. Building upon this theoretical foundation, it expounds on scientifically substantiated environmental, economic, and social practices within the hotel industry. Towards the end of this chapter, we identify challenges that require further research, which in turn, serve as a foundation for our research questions outlined in the concluding section of this chapter.

Sustainability concept

Sustainable development, as defined by the United Nations Brundtland Commission in 1987, aims to fulfill the needs of the present generation without compromising the ability of future generations to meet their own needs. While this basic definition is widely accepted, other perspectives exist on what constitutes sustainable development. Roper (2012) views it as an approach that prioritizes the natural environment and society over economic concerns. Another perspective is the stakeholder theory, which posits that organizations must satisfy the demands of multiple stakeholders to achieve strong sustainability and avoid damage to their sustainability (Garvare & Johansson, 2010). These stakeholders may include employees, suppliers, local communities, shareholders, customers, and others (Harrison, Phillips & Freeman, 2020). In the hotel industry, stakeholders have expressed concerns about hotels' social, economic, and environmental impacts on society, regions, and overall well-being, both locally and globally (Barakagira & Paapa, 2023).

There are ongoing efforts to establish a sustainability evaluation system, with the Global Reporting Initiatives (GRI) setting global standards for sustainability reporting. GRI identifies three dimensions of sustainability – economic, social, and environmental. The economic dimension focuses on a company's impact on the economic needs of its stakeholders and on economic systems at local, national, and global levels, with attention paid to economic performance, market presence, indirect economic impacts, taxes, anti-corruption, anti-competitive behavior, and procurement practices. The social dimension considers a company's effects on the social systems in which it operates, while the environmental dimension looks at the effects of a company's activities on natural systems. The Global Sustainable Tourism Council (GSTC, 2023) has also created criteria for tourism sustainability, with four pillars – sustainable management, socioeconomic impacts, cultural impacts, and environmental impacts – used to certify businesses and destinations that meet these standards.

The concept of sustainability in the hotel industry involves implementing practices that consider economic, social, and environmental impacts. The goal is to minimize any negative effect on the environment and society while maintaining economic viability (Boronat-Navarro & Pérez-Aranda, 2020). Sustainable hotels also prioritize corporate social responsibility and strive to achieve Sustainable Development Goals (Choy et al., 2021). Research on sustainability practices in the hotel industry has found that not only do these practices help cut costs and boost profitability, but they can also lead to increased revenue thanks to the positive reputation they earn among customers (Yenidogan et al., 2021).

Sustainability practices in the hotel industry: Environmental pillar

Environmental practices are a critical concern for many authors. Academic literature outlines various methods, including purchasing eco-friendly products, using environmentally safe cleaning agents, conserving energy and water, and managing solid waste selectively (Modica et al., 2020). Previous research on renewable energy innovations in hotels indicates that adoption rates are low, though present (Silva, 2022). However, it is worth noting that Silva's study only examined hotels in Portugal, so the applicability of the findings beyond that region may be limited. According to Kasim et al. (2014), several factors impact a hotel's water consumption, such as the age, efficiency, and configuration of the infrastructure, the number of water usage devices, and guest and employee practices. Overnight stays sold, meals served, and laundry washed internally are additional contributing factors. Hotel activities like garden maintenance, room cleaning, laundry, pool maintenance, kitchen operations, and excessive guest water usage can all lead to higher water consumption. Hotels can install low-consumption taps and showers throughout the facility to conserve water and address existing water leaks.

Hotels are known to be among the most energy-intensive organizations, as they operate 24 hours daily. The literature shows that cooling systems, lighting, and water heating are the main factors influencing hotel energy consumption. Since energy consumption is closely tied to greenhouse gas emissions, implementing energy-efficient strategies during hotel operations can not only reduce costs but also significantly decrease greenhouse gas emissions (Huang et al., 2015). Furthermore, it has been demonstrated that hotels that adopt sustainable practices in water, energy, and waste management tend to have better profitability scores than others (Zaki & Qoura, 2019). However, it is worth noting that this hypothesis was only tested on Egyptian hotels.

Sustainability practices in the hotel industry: Economic pillar

According to a study by Bartoluci et al. (2014) on tourism development in Croatia, achieving economic sustainability is crucial. Choi and Sirakaya (2006) also emphasized the importance of economic feasibility and sustainability in tourism, which involves carefully managing the pace of development while respecting the destination's environmental limits. Leakage calculation is another way to measure economic sustainability in the hotel industry, as shown in the example of Garrigós-Simón et al. (2015), which analyses the revenue generated by tourists that does not remain in the destination economy.

Sustainability practices in the hotel industry: Social pillar

Bogren and Sörensson's (2021) study highlights the lack of attention paid to the social aspect of sustainability. However, it is essential to note that their research was qualitative and limited to Sweden, thus causal statements cannot be made.

The authors suggest that companies are improving employee well-being through internal investments, which aligns with recent research in the tourism industry, demonstrating the positive impact of employee care on loyalty, performance, and economic growth (Abdelazimahmed et al., 2022). Hotels can also engage in various social sustainability practices, such as promoting diversity, providing a work–life balance, offering training and development, upholding human rights, ensuring customer safety, connecting with local communities, and making charitable donations, as outlined by Jones et al. (2014).

Challenges for additional research

Several authors have identified the need for further research on hotels' sustainability practices, including their approaches and practical managerial implementation. Pereira et al. (2021) recommend exploring sustainability practices in other hotels to compare results and collect data from different regions. Duric and Topler (2021) suggest researching barriers to sustainability, such as a lack of environmental awareness, finances, and incentives, and investigating hotel sustainability reporting. Then, Floričić (2020) highlights the need for more information on the costs and barriers to implementing technical solutions that improve a hotel's environmental sustainability. Dos Santos et al. (2017) emphasise the importance of developing a management framework that considers all sustainability dimensions, stakeholder interests, and community engagement. Finally, Abdou et al. (2020) call for addressing the obstacles and difficulties that small and medium-sized hotel properties may face in pursuing sustainable development.

As noted by Oxenswärdh (2022), the efforts towards sustainability in the hotel industry have fallen short of expectations. This is primarily due to a lack of understanding, green-washing, poor engagement, and pandemic-induced financial setbacks. To improve upon this, it is crucial for managers to have a thorough grasp of sustainability practices and the ability to communicate and implement them within their hotels effectively. Moving forward, we hope this study's findings will prove valuable to future hotel managers operating within a Middle-European context, specifically in the Czech Republic.

Despite the challenges of high initial costs and slow returns, implementing sustainable practices is crucial for achieving complete adoption of sustainability. Interestingly, research shows that hotels that incorporate sustainable measures into their operations tend to have lower operational expenses than those that do not (Adams et al., 2022). The industry can benefit significantly from academic research that helps answer important questions and address existing research gaps: (1) what does sustainability look like in hotels, particularly in unexplored regions? (2) how are hotel managers implementing sustainability programs? (3) what components and procedures comprise these systems? (4) what challenges do managers encounter in achieving sustainability, and how can these obstacles be overcome? Our study aims to provide insights into these inquiries through a defined set of research questions outlined in the methodology section.

This paper aims to evaluate the adoption of sustainable practices in two selected hotels, analyze their management strategies in relation to this concept, and find existing barriers to adopting sustainability practices. By reviewing and interpreting the results in the context of earlier studies, this research brings valuable theoretical insights. Therefore, three research questions (RQs) were settled:

RQ1: What are the current and future sustainable practices adopted by the selected hotels?
RQ2: What is the management approach in these hotels towards the sustainability pillar?
RQ3: What barriers do these managers encounter while striving to establish sustainable businesses?

METHODOLOGY

A qualitative research design is utilized in this empirical investigation, employing a case study methodology. Using case studies enables a deep engagement with the context and offers extensive insights into a phenomenon (Rashid et al., 2019). As such, it is an appropriate methodological principle for various disciplines, including social science research, environmental issues, and business studies. Franklin and Blyton (2011) even recommend utilizing a case study methodology for research on sustainability topics. Therefore, it is an appropriate methodology for sustainability practices in the hotel industry. The case study was chosen as the most appropriate research method since, despite the availability of data on implemented sustainability measures on publicly available sources such as hotel websites and Booking.com, their practical implementation often lags behind, being either insufficient or completely absent. The case study will enable an assessment of the actual extent of implemented sustainable practices.

The authors acknowledge that case studies have limitations in capturing the complete reality of the world, but they can provide valuable insights into it, acting like a window. Perry (1998) suggests that such insights can be further compared to other case studies. For instance, Pereira et al. (2021) conducted a case study that shares similarities with the research design of this paper, allowing for potential comparisons and discussions. As an exploratory case study, the authors refrain from making quantitative causal statements, as advised by Lindgreen et al. (2021).

Cases selection

The objective of the selection process was to identify hotels that offer rich information for the study. To achieve this, we employed a purposive sampling technique, which involved conducting online research to pre-select two four-star hotels in one regional capital city in the Czech Republic. These hotels were specifically chosen due to their evident commitment to sustainability and because they are direct competitors with similar target customers. We can provide a fair and unbiased comparison of their business practices by anonymizing them. This approach allows for valuable insights into various approaches to sustainable business management.

The Czech Republic, located in central Europe, is a beloved destination for travelers seeking to immerse themselves in rich history, stunning architecture, charming towns, and cultural treasures. Over the years, tourism in the Czech Republic has grown steadily, with an increasing number of foreign visitors coming to the country each year. In 2019, the country welcomed around 10.9 million international arrivals. However, due to the pandemic, this number has dropped significantly to 2.8 million in 2020 and 2.6 million in 2021. Most tourists visiting the Czech Republic come from neighboring European countries, such as Germany, Slovakia, Poland, and Austria (Statista, 2023). Thanks to its well-developed tourism infrastructure, the Czech Republic offers visitors a range of accommodation options, transportation networks, and tourist services, including luxurious hotels, budget-friendly accommodations, and traditional guesthouses.

From 2014 to 2019, the Czech economy experienced an average steady growth rate of 3.6% per year. However, the COVID-19 pandemic caused a decline in GDP (-5.5%) in 2020, which had a negative impact on the Czech economy. Despite the government's efforts to provide subsidies for businesses and launch programs to maintain employment, implementing COVID-19-related restrictions and closures in some sectors resulted in decreased economic growth and increased unemployment. Nevertheless, economic growth is expected to resume and has been ongoing since 2021. The Czech economy relies on critical sectors such as automotive, electronics, engineering, information technology, and services. The Czech Republic has relatively low unemployment rates compared to other EU countries due to its stable economic situation. As such, it serves as an appropriate example for case studies.

The hotels that have been chosen are situated in a region that is known for its economic development. The primary industries in this area are machinery and electrical engineering, which manufacture a wide range of machines, equipment, and electronic components for various sectors. Nonetheless, tourism also plays a significant role in the region's economy. The mountains and surrounding countryside attract visitors who enjoy active recreation, skiing, or sightseeing.

The authors carefully chose hotels that directly compete with each other and cater to a similar group of customers – business travelers. These hotels are located in a regional capital city that is known for being a popular business destination. As the selected hotels share the same target customers, the authors assumed that their sustainability strategies would likely be similar in a traditional business environment. However, the authors acknowledge that there may be differences in their approaches. The interview questions aim to uncover and describe the subtle nuances in sustainability strategies to address these potential differences. This approach enhances the depth of analysis and interpretation.

Data collection techniques

To gain a comprehensive understanding of sustainability practices in both hotels, the authors conducted individual semi-structured, in-depth interviews with the CEOs. The CEOs were intentionally selected as the key decision-makers in each hotel. These interviews were conducted on May 16, 2023, and lasted approximately 2 hours each. One researcher recorded the responses, while the second cross-checked the recordings for accuracy.

To complement these interviews, the authors also conducted direct observations in the hotels and random interviews with staff. These random interviews were conducted during direct observation in various areas of the hotels, such as the reception hall, restaurant, conference hall, and guest rooms. These interviews had no predetermined structure and were conducted to provide additional unclear or missing information. Additionally, the authors searched hotel websites and public registers for information to capture multiple perspectives on sustainability practices. The staff interviews provided valuable insights into practices, while the direct observations allowed seeking actual behaviors and practices in action. By using this multi-method approach, the authors were able to increase the validity and reliability of their findings and gain a more comprehensive understanding of sustainability practices in the hotel industry.

Instruments and protocols

According to Lindgreen et al. (2021), conducting face-to-face interviews is the most effective method for gathering data for case studies. The CEO interview protocol was carefully prepared based on current literature, similar case studies, and preliminary discussions with hotel managers to ensure that the CEO interview protocol captures relevant information.

The protocol consists of six parts:

1) Management attitudes towards hotel sustainability and the whole process.
2) Current barriers to sustainability practices implementation.
3) Future development in reaching sustainability.
4) Economic pillar practices.
5) Social pillar practices.
6) Environmental pillar practices: (a) Energy consumption, (b) Waste management, (c) Water consumption, (d) Building and heating, (e) Laundry and washing, cleaning, (f) Plastics.

To ensure accuracy and avoid misinterpretation of information, both managers were given an opportunity to provide feedback, which has been incorporated into the final findings. The interview protocol has been included in the Appendix to enhance the reliability of the case study and enable comparison with others. During direct observations, random interviews with staff were conducted without established protocols. Authors asked operationally-based questions to clarify or supplement the information obtained from the CEO or during observation.

Data analysis and interpretation

The data analysis process required manual procedures, including the transcription and summarization of interviews and direct observations. This was followed by the categorization and thematic analysis of the data using inductive codes. Using inductive coding, patterns and themes were identified directly from the data, which aligned with the study's exploratory nature. This method facilitated the identification of critical themes and relevant aspects pertaining to the research objective. The manual analysis using inductive codes is a common practice in case studies and enables the interpretation of results.

RESULTS

Management attitudes to the sustainability concept

While there are some similarities between Hotel X and Hotel Y, there are notable differences in their approaches to sustainability. Hotel X places a strong emphasis on the responsible use of resources such as water, energy, and human capital, while Hotel Y prioritises sustainable economic growth and cost savings. While both hotels tackle all pillars of sustainability, only Hotel X recognizes the interconnectedness of these pillars. The authors suggest that these differences may be attributed to the hotels' business structures and personal opinions about sustainability. Hotel X's CEO, for example, is influenced by the chain managers and their comprehensive policy on sustainability, which allows for a broader perspective on the topic. Furthermore, Hotel X is more efficient in sustainability reporting due to its chain's policies, although both hotels are still developing in this area. Interestingly, neither manager was aware of the GSTC Criteria, indicating a potential opportunity for future integration of sustainability reporting into the accounting information system (Al-Wattar et al., 2019). The authors propose that such an integration could lead to improved transparency, better stakeholder satisfaction, and enhanced financial performance.

Our study indicates that being a part of a large hotel chain has several advantages, including the opportunity to work towards future sustainability goals. Hotel X is motivated to actively pursue sustainability as set by the chain. The authors believe that being a stock company creates a pushing effect toward achieving a higher level of sustainability and caring for more stakeholders in the future. The manager of Hotel X reported that the entire hotel chain has a common sustainability program they must follow. However, it is essential to note that the manager's approach towards sustainability also influences the hotel's attitude. According to the manager of Hotel X, the team believes that sustainability makes sense, and it is an idea they want to follow.

From Hotel Y, a distinct view emerged. As the establishment is privately owned, the approach to sustainability is limited to a singular perspective. The hotel's relationships with stakeholders are not extensively developed, and sustainability is viewed primarily as a means of achieving long-term cost savings and stable economic growth. Nevertheless, during the interview, it was apparent that the manager of Hotel Y is passionate about the hotel's green management and its commitment to the environmental pillar.

Economic pillar

Within the economic pillar, transparency proved to be the defining factor that distinguished the hotels. Being a publicly traded company, Hotel X has a noteworthy commitment to financial transparency, with readily accessible reports and a willingness to share data. Hotel Y exhibited a notable lack of financial transparency, with an unclear ownership structure and a refusal to publish financial statements in accordance with Czech Republic law. According to the manager, this intentional secrecy prevents competitors from accessing sensitive information.

In terms of economic sustainability, both hotels share similar managerial approaches. Both prioritize local suppliers, including farms, organic vegetables, and bio-meats. Hotel X further promotes sustainability by addressing suppliers' attitudes towards green concepts and packaging-free trade. Meanwhile, Hotel Y selects food suppliers based solely on quality requirements.

Social pillar

Both hotels prioritize sustainability efforts, particularly in the social pillar. They invest heavily in their employees, offering education, training, and many benefits. Notably, both hotels have a diverse workforce, with women comprising at least fifty percent of managerial positions. Additionally, both hotels make an effort to employ disadvantaged groups, such as seniors, refugees, and people with disabilities. However, a gap was identified in both hotels' code of ethics implementation. Furthermore, the managers of Hotel X and Hotel Y differ in their approach to staff turnover. While the manager of Hotel X values and invests in long-term employees, the manager of Hotel Y views high turnover as an industry norm and does not prioritize improving it.

Both hotels are actively engaged in philanthropy and supporting their local communities. Their efforts include donations towards causes such as "sad fates" and children's sports clubs. Moreover, Hotel X has created a platform for local artists to showcase their work through art exhibitions. Both hotels also extend their support to cultural artists and theatre actors. Given the long-term perspective of these activities, it is evident that the social pillar of both hotels is thriving and successful.

Environmental pillar

One of the biggest obstacles to achieving optimal environmental sustainability in the hotels is the limitations posed by the buildings themselves. Both hotels are situated in historical structures, with Hotel X being a protected monument under local authorities. Consequently, the insulation within both hotels is somewhat restricted. However, as Hotel Y has undergone renovation more recently than Hotel X, it boasts better insulation and employs more advanced energy-saving technologies.

Both hotels have implemented effective strategies for conserving electricity. Guest rooms are equipped with energy-saving measures that only activate when the room is occupied. Additionally, both hotels offer charging stations for electric cars and have tried to transition their company vehicles to electric models. While Hotel Y encountered challenges in this endeavor, Hotel X is successfully converting their fleet. Both hotels prioritise energy conservation, but only Hotel X has a comprehensive carbon footprint reduction programme due to their hotel chain policy.

Regarding waste management, both hotels employ a similar strategy. Waste sorting bins are conveniently placed in each floor's lobby and communal areas. However, the challenge arises in waste sorting within hotel rooms. Guests cannot sort their waste in their rooms; instead, they rely on housekeeping workers to sort the trash. The authors suggest that this practice may lead to potential errors in waste sorting and recommend exploring methods to enhance this process in the future.

Both hotels are responsible for managing their water consumption but face a challenge in implementing rainwater usage due to limitations posed by historical buildings. While they try to minimize laundry volume by reducing towel and bed sheet changes, the hotels still cater to guests who expect daily towel changes and cleaning as part of their four-star experience, impacting water and energy consumption on a larger scale.

Another benefit of prioritizing environmental protection is that the hotels have eliminated using small plastic bottles for guests' bathroom amenities. Instead, they have successfully implemented large dispensers. Furthermore, both hotels have opted for organic and eco-friendly cosmetic products. Hotel X goes a step further by sourcing these products from a national supplier.

A more complex scenario arises when considering using eco-friendly detergents in laundry washing, as both hotels have partially outsourced their laundry management. This makes it difficult to exercise full control over the detergents used. Hotel Y has previously attempted to switch to environmentally friendly alternatives but encountered issues with washing failure resulting in clothes not being cleaned properly. Currently, both hotels are working to find a solution to this problem.

During the interview and observation process, it was discovered that the attitude and demands of hotel guests could be a significant factor in achieving sustainability. The managers noted that guests at four-star hotels are not accustomed to conserving resources during their stay. Due to specific requests, such as daily room cleaning or towel replacement, hotel staff must work harder to meet their needs. Despite these challenges, both hotels are encouraging behaviour change among guests. For instance, they provide cards displaying the amount of water used during a 15-minute shower. However, it remains unclear whether these stimulus measures impact guests' behavior.

Based on a literature review and interviews, we developed criteria for hotels and compared their different approaches in Table 1.

Table 1. Comparison of sustainability practices

Criteria	Hotel X****	Hotel Y****
Business form	Part of a large hotel chain (stock company)	Part of a small independent hotel chain (5 hotels, one owner, limited liability company)
Management attitudes to the sustainability concept		
The reached level of sustainability	Middle (corporate sustainability program launched in 2020)	Middle (focus on single practices, not a complete concept)
Communication of sustainability practices	Internal (staff magazine), external (online); direct verbal and non-verbal communication towards customers, but only separate activities	None; the manager does not see any reason why to communicate or report
Motivational values for sustainability practice implementation	Saved sources, satisfied employees, and customers coming back; The competitive advantage rather towards business partners than towards customers	Economic growth and savings in energy, gas, and water consumption
Sustainability reporting	Just environmental measures (focus on savings)	Only for internal needs (focus on savings)
Future goals	By 2024: use only electricity from renewable sources; By 2030: reduce the company's greenhouse gas emissions by 32.4%, water consumption by 10%	Partial objectives (bio cosmetics, refills, 100% recyclable packaging)
Certification	Planned: ISO 50001 and ISO 14001	None (due to economic irreversibility)
Limitations	Historical building limits environmental measures	Historical building partially limits environmental measures
Economic pillar		
Governance programme	None	None
Fair economic competition	Yes, not aware of any violation (not even by competitors)	Yes
Integrity principal	High	Medium
The level of transparency	High (part of a hotel group, impossible non-transparency)	Very low (not even compulsory financial reporting, unclear ownership structure)

Criteria	Hotel X****	Hotel Y****
Management attitudes to the sustainability concept		
Purchasing policy	The preference of local suppliers and suppliers with a sustainable policy	The preference of local/national suppliers with quality products focuses on product quality, not the supplier's sustainability policy
Social pillar		
Benefits for employees	Yes (internal system – sports and leisure activities, insurance contribution, stays at a reduced price even at partner hotels)	Yes (internal system – sports and leisure activities, stays at a reduced price even at partner hotels)
Diversity attitude	Open (employment of seniors, minorities, disabled people, both genders, support of working mothers)	Open (employment of seniors, minorities, disabled people, both genders, support of working mothers)
Staff education	Yes (own educational academy, other courses, first aid courses)	Yes (own educational academy)
Staff turnover	Low (due to satisfied employees)	High (manager sees it as a fact in the hotel industry)
Ethical code	Not available	Not available
Local community support	Yes (e.g., support of local artists, festivals, donation of young sportspeople)	Yes (support of musicians and theatre artists in the form of a free stay in the hotel)
Local companies support	Yes (e.g., cooperation with cultural and other leisure entities – promotion, ticket, sales, etc.)	Yes (e.g., support of local cultural facilities and their performers)
Charity, donations	Yes	Yes
Environmental Pillar		
I. Energy		
Energy mix	100% electricity from the regular network, no individual renewable sources of electricity now, but planning solar panels in the future if the historical building allows it	100% electricity from the regular network, no individual renewable sources of electricity now
Reducing energy consumption	Card system in rooms, LED	Smart systems in rooms based on motion sensors
The type of company cars	CNG-powered cars, new cars, only electric cars	Diesel cars with low consumption, in the past, there was an unsuccessful attempt to have electric cars (issues with arrival reach)
Charging station for electric cars	Yes	Yes
Internal energy-saving programme	Yes	None
II. Waste management		
General principles of waste management	The elimination of unnecessary printouts (only electronic if possible)	Efforts to maximize waste sorting, elimination of unnecessary printouts
Recycling or upcycling programs	Developed and used	Developed and used
The availability of bins for sorted waste	Lobby and each floor, not in the rooms	Lobby and each floor, not in the rooms
III. Water consumption		
The quality of water	Water supply line, excellent quality of local water	Water supply line, great quality of local water
Rainwater use	None (impossible due to the building construction)	None (impossible due to the building construction)
Water-saving taps, showers, and toilets	Yes	Yes
The change of towels	On request	Once every three days or on request
Tap water in restaurants	Yes	Yes
IV. Building and heating		
Heat recovery system	None	Yes

Criteria	Hotel X****	Hotel Y****
Management attitudes to the sustainability concept		
Building insulation	None (impossible due to the historical building construction, only double windows; planned roof insulation)	Yes
Heating sources	Gas heating	Combined (gas heating + electricity)
V. Laundry and washing, cleaning		
Room cleaning	After every second night	Once every three days or on request
Laundry management	External company	External company and partly internal laundry
Soaps and shampoos in rooms	Large dispensers	Large dispensers
Environmentally friendly washing and cleaning products	No	No (due to low effect in quality)
VI. Plastics		
The occurrence of disposable plastics	No	Plastic bottles in-room minibars (the usage of glass bottles would destroy the furniture)

Identified barriers to sustainability practices implementation

In conclusion, we have identified several barriers to implementing sustainability practices:

- economic irreversibility, particularly if a hotel sees sustainability as solely a cost-saving or economic growth tool;
- historical buildings can hinder environmental advancements such as improving heat insulation and collecting rainwater;
- lack of arrival reach for electric company cars, which both hotels have yet to adopt despite not being limited by financial reasons;
- providing high-quality laundry washing with environmentally friendly detergents is a challenge;
- finally, the expectation of high-level services by four-star hotel guests presents a barrier to omitting daily room cleaning and towel changes as part of sustainability efforts.

DISCUSSION

This comparative case study has provided valuable insights into the sustainability practices adopted by hotels, their managerial approach towards sustainability pillars, and the barriers they face while pursuing sustainable business practices. The authors have identified two distinct managerial approaches based on their research: (1) a comprehensive outlook that encompasses all three pillars, forming an integral part of the vision and (2) a narrow focus on cost-cutting and financial growth alone.

In order to secure a sustainable future, it is essential that society adopts a first approach that emphasizes the incorporation of sustainability into every facet of business. This is particularly crucial for current and future managers, who must prioritize learning about and implementing sustainable practices. Within the hospitality industry, this approach must be further developed in order to address the sustainability of tourism. By prioritizing this approach, businesses are better equipped to handle unexpected situations such as the pandemic. Additionally, this approach fosters stronger relationships between companies and their stakeholders.

Our findings and identification of managerial approaches align with the study conducted by Rode et al. (2021). According to Rode et al. (2021), two discourse types can be used to motivate business actors to adopt more sustainable practices. The first type involves urging them to take ‚responsibility' for the well-being of society and the planet's future, while the second type involves presenting a ‚business case' for sustainability. The business case perspective emphasizes how sustainable practices can improve financial performance within the business. Their research shows that professionals believe the business case argument is more effective in inspiring businesses to embrace sustainability compared to the responsibility argument. However, when these professionals were exposed to the business case reasoning in their experiment, it did not result in a more significant expression of their motivation or intention to actively support sustainability within their organization. Furthermore, compared to the responsibility-based argument, presenting a business case rationale resulted in less support for making pro-environmental investments, especially when potential improvements in reputation could not justify these investments. Effective strategies to enhance corporate environmental performance might only sometimes result in situations where all parties benefit. Their results raise concerns regarding the effectiveness of relying solely on the business case approach to motivate companies to adopt sustainable practices. Our paper confirms that a similar premise exists also in the hotel industry. This confirmation is an important theoretical implication and one of the essential added values of our paper.

From the authors' perspective, the form of the business appears to be the critical factor that leads to a difference in managerial approach. This case study provided valuable insights indicating that hotels that form part of larger hotel chains (and stock companies) are more likely to adopt sustainable practices and have more established sustainability programs than independent hotels. This unique premise requires further verification through future research. This suggestion has significant implications for theory and future research design.

The study has uncovered significant concerns regarding transparency and sustainability reporting within the hospitality industry. These findings support the views of Pommier and Engel (2021), who argue that many companies in this sector have yet to fully grasp the importance of disclosing information about their sustainability practices. To address this issue, the authors suggest that local authorities should exert greater pressure on hotels, particularly in terms of financial transparency, and impose sanctions for non-disclosure of financial statements. Additionally, hotels should be made aware of the GSTC Criteria (GSTC, 2023) and encouraged to engage in sustainability reporting by local authorities. Our research, which focused on two case studies, further confirmed these assertions.

Our study indicates that selected hotels are not reporting their sustainability practices sufficiently. This finding is consistent with the research conducted by Vlašić and Poldrugovac (2022). Their study revealed that hotel companies generally disclose appropriate non-financial information on waste management, recycling, energy usage, and water consumption. However, there is scope for improving the quality of information provided for other non-financial aspects.

According to Jia et al. (2023), hotels can inspire conscientious and sustainable behavior among consumers by adopting sustainable marketing techniques and actively participating in corporate social responsibility initiatives. To achieve this goal, effectively communicating the hotel's sustainability efforts to all stakeholders, including customers, is imperative. This finding is closely related to Pereira et al. (2021), who emphasize employees' role in communicating sustainability to customers.

In addition to the sustainability practices documented in the literature review, this study identified several new practices, including the use of electric company cars, the installation of charging stations for electric cars, providing tap water for guests in restaurants, and implementing heat recovery systems.

It was observed that both hotels that were examined are highly involved in the social pillar of sustainability. This result contradicts the claim made by Bogren and Sörensson (2021) that the social aspect of sustainability is not given enough attention. It is possible that the different cultural contexts in which the hotels operate might have contributed to this conflict.

CONCLUSION

This paper answered its specific research questions. The findings chapter thoroughly outlines the sustainability practices observed in the analyzed hotels, the managerial approaches utilized to support those initiatives, and the barriers managers face in implementing sustainable practices. The chosen methodology enabled the authors to assess the selected cases in relation to both published academic literature and the two hotels in the study.

This article contributes to the academic literature by identifying new sustainability practices of hotels and highlighting significant barriers to their implementation. The discussion section challenges the findings of several studies, confirming or questioning their results. Additionally, this study provides a foundation for future research, suggesting unique ideas that can be further tested through quantitative analysis. The chosen methodology and public interview protocol make it possible to conduct similar studies in different regions and compare their results in the future.

The new generations present in the market, namely Generation Z and Alpha, are generations integrated into a world involved in the Internet of Things through products like electric cars (e.g., Tesla), but also engaged with sustainable causes, sometimes being the reasons for choosing one brand over another (Kotler, Kartajaya, & Setiawan, 2021). The hospitality industry will need to pay attention to these behaviors of the new generations as they will be the most significant market segments in the near future (Thach, Riewe, & Camillo, 2020), and as such, the industry should pay closer attention to its sustainability policy.

It is important to note that this study has certain research limitations that should be taken into consideration. For instance, we did not delve into legislation within the hotel industry and how it may affect managers' perspectives on sustainable practices and their implementation. This particular factor could significantly influence sustainability strategies in the hospitality sector. Moreover, the chosen comparative case study methodology may not provide conclusive results on a quantitative level.

Acknowledgments

This work was supported by The Faculty of Economics, Technical University of Liberec, under an internal grant. The authors would like to express great appreciation to all parties that provided us with their support.

References

Abdelazimahmed, T., Kassemo, A., Alajloni, A., Alomran, A., Ragab, A., & Shaker, E. (2022). Effect of internal corporate social responsibility activities on tourism and hospitality employees' normative commitment during COVID-19. *Tourism & Management Studies*, *18*(3), 21–35. https://doi.org/10.18089/tms.2022.1803

Abdou, A. H., Hassan, T. H., & El Dief, M. M. (2020). A description of green hotel practices and their role in achieving sustainable development. *Sustainability*, *12*(22), 9624. https://doi.org/10.3390/su12229624

Adams, S., Kageyama, Y., & Barreda, A. A. (2022). Sustainability efforts in the hotel industry: a systematic literature review. *Journal of Tourism Management Research*, *9*(1), 9–23. https://doi.org/10.18488/31.v9i1.2921

Al-Juboori, O., Sher, F., Hazafa, A., Khan, M. K., & Chen, G. Z. (2020). The effect of variable operating parameters for hydrocarbon fuel formation from CO2 by molten salts electrolysis. *Journal of CO2 Utilization*, *40*, 101193. https://doi.org/10.1016/j.jcou.2020.101193

Al-Wattar, Y. M. A., Almagtome, A. H., & AL-Shafeay, K. M. (2019). The role of integrating hotel sustainability reporting practices into an accounting information system to enhance hotel financial performance: evidence from Iraq. *African Journal of Hospitality, Tourism and Leisure*, *8*(5), 1-16.

Barakagira, A., & Paapa, C. (2023). Green practices implementation for environmental sustainability by five-star hotels in Kampala, Uganda. *Environment, Development and Sustainability*. https://doi.org/10.1007/s10668-023-03101-7

Bartoluci, M., Kesar, O. & Hendija, Z. (2014). Critical analysis of economic sustainability of tourism development in continental Croatia. *An Enterprise Odyssey*. In International Conference Proceedings (pp. 1281–1298). Retrieved from https://www.proquest.com/docview/1566187226

Bogren, M., & Sörensson, A. (2021). Tourism companies' sustainability communication – creating legitimacy and value. *Scandinavian Journal of Hospitality and Tourism*, *21*(5), 475–493. https://doi.org/10.1080/15022250.2021.1974542

Boronat-Navarro, M., & Pérez-Aranda, J. A. (2020). Analyzing willingness to pay more to stay in a sustainable hotel. *Sustainability*, *12*(9), 3730. https://doi.org/10.3390/su12093730

Choi, H. C., & Sirakaya, E. (2006). Sustainability indicators for managing community tourism. *Tourism Management*, *27*(6), 1274–1289. https://doi.org/10.1016/j.tourman.2005.05.018

Choy, M. W., Cheng, J., & Yu, K. O. A. (2021). Evaluating the environmental sustainability strategies of the housekeeping department: The case of an international hotel chain in Hong Kong, China. *Tourism Critiques: Practice and Theory*, *2*(1), 115-132. https://doi.org/10.1108/trc-01-2021-0001

Duric, Z., & Potočnik Topler, J. (2021). The role of performance and environmental sustainability indicators in hotel competitiveness. *Sustainability*, *13*(12), 6574. https://doi.org/10.3390/su13126574

Dos Santos, R. A., Méxas, M. P., & Meiriño, M. J. (2017). Sustainability and hotel business: Criteria for holistic, integrated and participative development. *Journal of Cleaner Production*, *142*, 217–224. https://doi.org/10.1016/j.jclepro.2016.04.098

Floričić, T. (2020). Sustainable solutions in the hospitality industry and competitiveness context of "green hotels." *Civil Engineering Journal*, *6*(6), 1104–1113. https://doi.org/10.28991/cej-2020-03091532

Franklin, A., & Blyton, P. (2011). *Researching Sustainability: A Guide to Social Science Methods, Practice and Engagement*. London: Earthscan.

Garrigós-Simón, F. J., Galdón-Salvador, J. L., & Gil-Pechuán, I. (2015). The economic sustainability of tourism growth through leakage calculation. *Tourism Economics*, *21*(4), 721–739. https://doi.org/10.5367/te.2014.0372

Garvare, R., & Johansson, P. (2010). Management for sustainability – a stakeholder theory. *Total Quality Management & Business Excellence*, *21*(7), 737–744. https://doi.org/10.1080/14783363.2010.483095

GSTC. (2023). *GSTC Criteria*. Retrieved from https://www.gstcouncil.org/gstc-criteria/

Hall, C. M. (2010). Tourism and biodiversity: More significant than climate change? *Journal of Heritage Tourism*, *5*(4), 253–266. https://doi.org/10.1080/1743873X.2010.517843

Harrison, J. S., Phillips, R. A., & Freeman, R. E. (2020). On the 2019 business roundtable "Statement on the purpose of a corporation." *Journal of Management*, *46*(7), 1223–1237. https://doi.org/10.1177/0149206319892669

Huang, K.-T., Wang, J. C., & Wang, Y.C. (2015). Analysis and benchmarking of greenhouse gas emissions of luxury hotels. *International Journal of Hospitality Management*, *51*, 56–66. https://doi.org/10.1016/j.ijhm.2015.08.014

Jia, T., Iqbal, S., Ayub, A., Fatima, T., & Rasool, Z. (2023). Promoting responsible sustainable consumer behavior through sustainability marketing: the boundary effects of corporate social responsibility and brand image. *Sustainability*, *15*(7), 6092. https://doi.org/10.3390/su15076092

Jones, P., Hillier, D., & Comfort, D. (2014). Sustainability in the global hotel industry. *International Journal of Contemporary Hospitality Management*, *26*(1), 5–17. https://doi.org/10.1108/IJCHM-10-2012-0180

Kasim, A., Gursoy, D., Okumus, F., & Wong, A. (2014). The importance of water management in hotels: A framework for sustainability through innovation. *Journal of Sustainable Tourism*, *22*(7), 1090–1107. https://doi.org/10.1080/09669582.2013.873444
Kim, Y. H., Barber, N., & Kim, D. K. (2019). Sustainability research in the hotel industry: Past, present, and future. *Journal of Hospitality Marketing & Management*, *28*(5), 576–620. https://doi.org/10.1080/19368623.2019.1533907
Kotler, P., Kartajaya, H., & Setiawan, I. (2021). *Marketing 5.0: Technology for Humanity*. Hoboken, New Jersey: John Wiley & Sons.
Lindgreen, A., Di Benedetto, C. A., & Beverland, M. B. (2021). How to write up case-study methodology sections. *Industrial Marketing Management*, *96*, A7–A10. https://doi.org/10.1016/j.indmarman.2020.04.012
Lu, J., & Nepal, S. K. (2009). Sustainable tourism research: An analysis of papers published in the journal of sustainable tourism. *Journal of Sustainable Tourism*, *17*(1), 5–16. https://doi.org/10.1080/09669580802582480
Min, H., Min, H., & Chung, K. (2002). Dynamic benchmarking of hotel service quality. *Journal of Services Marketing*, *16*(4), 302–321. https://doi.org/10.1108/08876040210433211
Modica, P. D., Altinay, L., Farmaki, A., Gursoy, D., & Zenga, M. (2020). Consumer perceptions towards sustainable supply chain practices in the hospitality industry. *Current Issues in Tourism*, *23*(3), 358–375. https://doi.org/10.1080/13683500.2018.1526258
Oxenswärdh, A. (2022). Sustainability efforts in practice in european hotels: A tricky business? *Quality Innovation Prosperity*, *26*(3), 1–21. https://doi.org/10.12776/qip.v26i3.1773
Pereira, V., Silva, G. M., & Dias, Á. (2021). Sustainability practices in hospitality: Case study of a luxury hotel in Arrábida Natural Park. *Sustainability*, *13*(6), 3164. https://doi.org/10.3390/su13063164
Perry, C. (1998). Processes of a case study methodology for postgraduate research in marketing. *European Journal of Marketing*, *32*(9/10), 785–802. https://doi.org/10.1108/03090569810232237
Pommier, B., & Engel, A. M. (2021). Sustainability reporting in the hospitality industry. *Research in Hospitality Management*, *11*(3), 173–175. https://doi.org/10.1080/22243534.2021.2006937
Rashid, Y., Rashid, A., Warraich, M. A., Sabir, S. S., & Waseem, A. (2019). Case study method: A step-by-step guide for business researchers. *International Journal of Qualitative Methods*, 18. https://doi.org/10.1177/1609406919862424
United Nations Brundtland Commission. (1987). *Report of the World Commission on Environment and Development: Our Common Future*. Retrieved from http://www.un-documents.net/our-common-future.pdf
Rode, J., Heinz, N., Cornelissen, G., & Le Menestrel, M. (2021). How to encourage business professionals to adopt sustainable practices? Experimental evidence that the 'business case' discourse can backfire. *Journal of Cleaner Production*, 283, 124618. https://doi.org/10.1016/j.jclepro.2020.124618
Roper, J. (2012). Environmental risk, sustainability discourses, and public relations. *Public Relations Inquiry*, *1*(1), 69–87. https://doi.org/10.1177/2046147X11422147
Silva, L. (2022). Adoption of renewable energy innovations among hoteliers in Portugal. *Tourism & Management Studies*, *18*(4), 17–26. https://doi.org/10.18089/tms.2022.1804
Statista (2023). *Travel and Tourism in Czechia*. Retrieved from https://www.statista.com/study/29933/tourism-in-the-czech-republic-statista-dossier/
Thach, L., Riewe, S., & Camillo, A. (2020). Generational cohort theory and wine: Analyzing how gen Z differs from other American wine consuming generations. *International Journal of Wine Business Research*. https://doi.org/10.1108/IJWBR-12-2019-0061
Vlašić, D., & Poldrugovac, K. (2022). Non-financial information in hotel companies. *Sustainability*, *14*(16), 10009. https://doi.org/10.3390/su141610009
World Tourism Organization, (ed. 2012). *Tourism in the Green Economy: Background Report*. Madrid: World Tourism Organization. Retrieved from https://www.diva-portal.org/smash/get/diva2:1314598/FULLTEXT01.pdf
Yenidogan, A., Gurcaylilar-Yenidogan, T., & Tetik, N. (2021). Environmental management and hotel profitability: operating performance matters. *Tourism & Management Studies*, *17*(3), 7–19. https://doi.org/10.18089/tms.2021.1703
Zaki, K., & Qoura, O. (2019). Profitability in Egyptian hotels: Business model and sustainability impact. *Research in Hospitality Management*, *9*(2), 89–98. https://doi.org/10.1080/22243534.2019.1689698

Appendix: Interview protocol

Identification and ownership data
Name
Form of business
Establishment of the company (date)
Ownership changes (ownership history, franchises)
Number of employees
Employee structure, types of employees, demographics

Vision and mission of the hotel
Involvement in projects
Beneficiary of grants
Target customer group
Guidelines
Does the hotel comply with the standards and regulations?
Does the hotel follow any directive?
Attitudes towards sustainability
How do you define sustainability?

Which of the three pillars of sustainability is most important for a hotel?
How do you perceive whether following sustainable principles gives you a competitive advantage?
What is your view of sustainability in the tourism industry?
How autonomous is your hotel's decision-making on sustainable principles vis-à-vis the franchisor?
Is sustainability reflected in your corporate strategies and plans?
How do you monitor and report on the hotel's sustainable practices? How often?
Are you ready for the new ESG non-financial reporting obligation?
Why don't you publish the hotel's financial statements?
What are the benefits of sustainable hotel management, in your opinion?
Are you monitoring whether your competitors are implementing sustainable practices?
How long have you been addressing sustainability in your hotel?
In what ways do you think your hotel lags behind in sustainable principles?
What are the biggest sustainability challenges you currently face?
What do you want to achieve in sustainability in the short term?
What do you want to achieve in sustainability in the long term?

Economic pillar
Do you have a governance agenda? How do you ensure compliance with all legal and internal regulations?
Can you give examples of internal regulations that are set above the legal framework?
Do you ensure compliance with fair competition rules?
How do you check compliance with tax regulations?
How often do you have an internal or external audit?
Do you apply the integrity principle in practice?
Are your financial transactions sufficiently transparent?

Purchase
Do you pay attention to the origin of your food when choosing ingredients for your restaurant?
How far (km) do you shop for food?
Can guests at your hotel order food with special requirements? (vegan, vegetarian, children's diet...)
Do you buy meat from an organic farm or from an organic farm?
Do your purchases support economically local businesses?
Do you have any sustainability criteria when choosing your suppliers?

Environmental pillar
Energy
What energy sources does your hotel use? (energy mix)
How do you reduce electricity consumption?
Do you have energy efficient light bulbs? How many %?
Does your hotel use automatic lights or motion sensor lighting to save energy?
What plans do you have for energy reduction in the future?
Does your hotel have plans to install solar panels or alternative energy sources?
How do you reduce energy consumption in hotel rooms?
Are your company cars gasoline/diesel/electric?
Do you have a charging station for electric cars?
Do you have a program to reduce your carbon footprint?

Waste
What waste management policies does your hotel have in place?
What recycling programs does your hotel participate in?
What strategies does your hotel have in place to process food scraps?
How does your hotel manage hazardous waste?
What policies does your hotel have in place to reduce paper waste?
How does your hotel manage e-waste?
How does your hotel dispose of hazardous waste such as batteries, fluorescent lamps?
How does your hotel manage medical waste?
Do you have bins in your rooms for separated waste?

Bins – on the floor/in the room/in the lobby only

Water
How do you take care of the water quality in the hotel?
Are you thinking about using rainwater for flushing?
Do your toilets have two-phase flushing?
Do you use water-saving taps in your bathrooms?
How often do you change guests' towels?
Does your restaurant serve tap or bottled water?

Heating/construction/noise
Does your hotel have a heat recovery system to save heat?
Is the building fully insulated?
What heat sources does the hotel use for heating?
Do you have at least double-glazed windows?
Laundry and washing/housekeeping/drugstore
Do you do your laundry in the hotel, or do you use outside services?
Is the laundry in your hotel washed in natural detergents?
Are the soaps offered in the rooms of natural origin?
Do you use eco-friendly products for washing dishes?
Can guests refuse daily housekeeping? Do you communicate this option to them?

Plastics
Do you use disposable plastic mini bottles of shampoo, conditioner, and shower gel?
Do you use plastic drink stirrers?
Do you use disposable plastic straws?
Do you provide water in disposable plastic bottles?
Do you provide drinks in disposable plastic bottles?
Do you provide disposable plastic cups?
Do you provide disposable plastic crockery and cutlery?

Social pillar
What benefits do you provide to your employees?
What is your wage policy?
What is your approach to diversity?
What % of men and women are in management positions?
Do women and men have equal pay in the hotel?
Is religion or gender a criterion for you when selecting employees?
Can people with disabilities work for you? Do they work?
Do you employ senior citizens?
How do you take care of employee training and development?
Do you have a code of ethics?
Do you have a formal equality and diversity policy?
How do you take care of employee safety?
Do you create programs for the children and families of your employees?
How do you motivate your employees for sustainability? Do they respect it?
What is the average turnover rate of employees in different positions?
Would you be reluctant to accept an African student for an internship at the hotel?
What commuting distance are your employees from?
What are your activities to promote employee health?
What social goals do you have set for your employees?
Supporting the local community and cultural heritage
How does the hotel support local culture and traditions?
Does your hotel have any philanthropic activities? What are they?
Does your hotel support a traffic reduction program?
Do you offer tours and activities provided by local guides and businesses?

Are local artists allowed to exhibit their work in your hotel?
Does the accommodation provide guests with information about local ecosystems, cultural heritage and visitor behavior requirements?

Certification and reporting/communication
Is your future goal to obtain any certification in sustainability or ecology?
How are you preparing for mandatory ESG reporting?
How do you communicate the sustainability of your hotel? Are you reporting?
How do you „educate" your customers on sustainable practices? How do you inform them?

Biographical notes

Jitka Vávrová, Assistant Professor at the Faculty of Economics, Technical University of Liberec, Czech Republic, Department of Marketing and Trade. She teaches and publishes original articles on the topics of marketing, tourism, CSR, and sustainability.

Lenka Červová, Assistant Professor at the Faculty of Economics, Technical University of Liberec, Czech Republic, Department of Marketing and Trade. She teaches courses in tourism and marketing and serves as the tourism study specialization guarantor. Her research interests in the field of tourism include sustainability and customer-based brand equity.

Blanka Brandová, Assistant Professor at the Faculty of Economics, Technical University of Liberec, Czech Republic, Department of Economics. She teaches courses in economic theory (microeconomics and macroeconomics). Her current research interests include sustainability and local economics.

Jorge Pacheco, Assistant Professor at the Institute of Accounting and Administration of Porto (ISCAP), Portugal, Department of Management. Professor of communication and digital marketing in the field of tourism. His current research interests include tourism, sustainability, communication, and digital marketing.

Authorship contribution statement

Jitka Vávrová: Introduction, Literature Review, Research Concept. **Lenka Červová:** Data Gathering, Performing Interviews, Content Analysis. **Blanka Brandová:** Discussion and Conclusion, Data Gathering, Performing Observation. **Jorge Pacheco:** Review and Editing, Validation.

Conflicts of interest

The authors declare no conflict of interest.

Citation (APA Style)

Vávrová, J., Červová, L., Brandová, B., & Pacheco, J. (2024). Assessing sustainable practices and managerial approaches in the hotel industry: A comparative case study. *Journal of Entrepreneurship, Management and Innovation 20*(3), 46-61. https://doi.org/10.7341/20242033

Journal of Entrepreneurship, Management and Innovation (2024)
Volume 20 Issue 3: 62-77

DOI: https://doi.org/10.7341/20242034
JEL Codes: M12, O31

Linking employee voice to service recovery performance in the hotel sector: The mediating role of tacit knowledge sharing and employee innovation

***Sultan Alzyoud*[1], *Waed Ensour*[2], *Ayman Harb*[3]**

Abstract

***PURPOSE**: In reality, service failures are inevitable. However, poor service recovery can decrease customer trust and exacerbate customer dissatisfaction. Previous studies have focused on service failure types, reasons for failure, and successful recovery actions from the customers' perspective. Accordingly, this study aims to present a different view by investigating the factors that could improve hotel recovery performance from the employees' perspective. Therefore, a model was developed to study the influence of employees' voice, tacit knowledge sharing, and employee innovation on service recovery performance. **METHODOLOGY:** This quantitative study used an online survey to gather data from employees in the hotel industry in Jordan. A total of 214 valid responses were obtained. Participants were targeted randomly, mainly through Facebook groups for hotel employees. PLS-SEM (Partial Least Squares Structural Equation Modeling) was employed in this research to analyze the data using Smart PLS 3 software. **FINDINGS:** The results indicated that employee voice is positively associated with tacit knowledge sharing. Furthermore, it was found that tacit knowledge sharing is positively related to employee innovation. The findings demonstrated that tacit knowledge plays a partial mediating role in the association between employee voice and employee innovation. Additionally, it was discovered that employee innovation has a positive association with service recovery performance. Finally, the results indicate that employee innovation partially mediates the relationship between tacit knowledge and service recovery performance. **IMPLICATIONS:** Hoteliers are suggested to create a supportive work climate where employees can express their thoughts, ideas, and concerns without fear of retribution. Furthermore, hotel managers are advised to establish clear expectations for employees regarding the significance of their opinions and insights, and recognize and reward innovative ideas that can hopefully enhance hotels' performance. **ORIGINALITY AND VALUE:** This research provides new insights and contributes to the understanding of the role of employee voice, tacit knowledge sharing, and employee innovation in enhancing service recovery performance, particularly in a context that has received little attention from researchers, which is the hotel sector, and in a developing country, Jordan. Compared to past studies, this study offers a model that demonstrates how to leverage service recovery efforts in hotels by illustrating structured relationships between employee voice and service recovery performance through the mediation of tacit knowledge sharing and employee innovation.*

***Keywords:** employee voice, service recovery performance, employee innovation, tacit knowledge sharing, hotels, Jordan, hotel sector, quantitative research, Structural Equation Modeling*

1 Sultan Alzyoud, Assistant Professor, Department of Business Administration, Business School, The Hashemite University, Zarqa, 453J+5C5, Damascus Hwy, Zarqa, Jordan, e-mail: s.alzyoud@hu.edu.jo (ORCID: https://orcid.org/0000-0003-1901-7489).

2 Waed Ensour, Associate Professor, Department of Business Administration, Business School, The Hashemite University, Zarqa, 453J+5C5, Damascus Hwy, Zarqa, Jordan, e-mail: waed@hu.edu.jo (ORCID: https://orcid.org/0000-0003-4180-6724).

3 Ayman Harb, Associate Professor, Department of Hotel Management, School of Tourism and Hospitality, The University of Jordan /Aqaba Branch, Aqaba, H2MF+PHC, Aqaba, Jordan, e-mail: a.harb@ju.edu.jo (ORCID: https://orcid.org/0000-0003-1725-5707).

Received 20 July 2023; Revised 25 October 2023, 16 November 2023; Accepted 20 November 2023.

INTRODUCTION

Service failure is inevitable (Ahmad, Liu, Asif, Ashfaq, & Irfan, 2022). It is challenging for organizations, especially hotels, to eliminate all service failures and achieve a service encounter with no defects (Alzyoud & Abuzaid, 2023). Service recovery actions are necessary to rectify mistakes and assist organizations in altering negative customer attitudes toward their services whenever a service failure occurs (Alzyoud & Abuzaid, 2023).

Studies have shown that dissatisfied customers may share their negative experiences with 10-20 people (Mattila, 2001). However, effective service recovery can eliminate negative word-of-mouth publicity (Liao, 2007; Vázquez-Casielles, Iglesias, & Varela-Neira, 2017). According to Ashill, Carruthers, and Krisjanous (2005), successful recovery can transform a dissatisfied customer into a satisfied one. Furthermore, according to Vázquez-Casielles et al. (2017), service recovery enhances customers' word-of-mouth recommendations, repurchase intentions, and overall satisfaction with the service. According to Liao (2007), previous studies suggest the existence of a 'service recovery paradox,' wherein customers who are pleased with the recovery efforts have higher levels of customer satisfaction and support intentions than those who are not. On the contrary, poor service recovery can decrease customer trust and exacerbate customer dissatisfaction, resulting in a 'double deviation' effect.

Service recovery performance is directly related to the competencies and behaviors of workers in identifying and resolving service failures (Ahmad et al., 2022). Recognizing complexities and developing ideas or remedies begin with human innovation (Ahmad et al., 2022). They added that the workers' ability to innovate may affect customers' reactions to service recovery. Sharing knowledge is one of the factors that enhance employees' innovation, which can improve service performance recovery. In this context, Montani and Staglianò (2022) propose that employees can enlarge their knowledge base and improve their innovative potential through knowledge sharing.

Yener and Arslan (2017) argue that tacit knowledge is perhaps the most crucial type of knowledge among various types of knowledge. Polanyi (1966) argues that all types of knowledge are either tacit or based on tacit knowledge, making tacit knowledge an essential component of all knowledge. Tacit knowledge, which refers to practical know-how (Koskinen & Vanharanta, 2002), is widely recognized as a crucial element of innovation (Koskinen & Vanharanta, 2002; Seidler-de Alwis, Hartmann, & Gemünden, 2004). Indeed, tacit knowledge is essential at every stage of the innovation process (Seidler-de Alwis et al., 2004). Furthermore, tacit knowledge, also known as 'know-how,' plays a significant role in decision-making during the innovation process. However, according to Blackman and Sadler-Smith (2009), it is possible for people and organizations to have knowledge that cannot be fully expressed in words or other symbolic representations and that also cannot be foreseen or consciously known in advance. This implies that an organization's social setting may contain latent or tacit knowledge that is only waiting to be expressed and transformed. Herein lies the importance of employees' voices in this process.

On the contrary, preventing employees from expressing their opinions hinders communication, limits opportunities to modify routines, and restricts knowledge sharing (Gambarotto & Cammozzo, 2010). The innovation deficit may result from silence, as new ideas, capabilities, and the sharing of knowledge require a conducive environment (Gambarotto & Cammozzo, 2010). Therefore, employees' voices should enhance knowledge sharing, leading to improved innovation, which, in turn, should promote better service recovery performance. However, these relationships have not received adequate attention, especially in the hotel industry.

Furthermore, although several studies have examined service recovery performance, most of these studies have focused on customers' perspectives or specific recovery actions made by organizations (Guchait, Paşamehmetoğlu, & Dawson, 2014). Previous studies have examined various types of service failures, the reasons for them, and the methods used to recover from them (Guchait et al., 2014). In a similar context, Lin (2007) claims that little research has been done on investigating service failures and recoveries from the viewpoint of organizations or employees. This starkly contrasts the vast majority of earlier literature, which has focused on the customers' perspectives. Koc (2019) conducted a literature review and found that service failures and recovery research have predominantly focused on customer satisfaction, service quality, culture, justice, empowerment, and attribution. While there is steady development in studies related to justice theory, the field is primarily saturated with a concentration on customer satisfaction, repeat purchase intentions, and complaint behavior. Notably, research on empowerment exhibits similarities in its association with customer satisfaction. Furthermore, justice studies have primarily explored this concept from the customer's perspective. Therefore, Koc (2019) proposes enhancing service recovery studies by integrating organizational theories and concepts. Similarly, Lin (2010) concluded that most of the existing literature has predominantly concentrated on examining amendments and responses related to service recovery, primarily from the vantage point of consumers, while limited research was conducted to investigate internal organizational action to prevent service failure and enhance recovery. Thus, service recovery studies have primarily focused on different types of service failures, reasons for these failures, and actions taken by organizations to recover from service failures from customers' perspective, indicating a gap in the literature regarding the organizational and employee perspectives on service failures and recoveries.

Furthermore, the hotel industry has not given much attention to the factors that improve service recovery performance, employee innovation, tacit knowledge sharing, and employee voice from the viewpoint of the employees. Several researchers have called for more studies to investigate these crucial concepts (e.g., Alzyoud, Abuzaid, & Hamdan, 2023; Alzyoud, Partington, Mitchell, & Dieck, 2017). Overall, this study aims to examine the associations among employees' expression of opinion, tacit knowledge, innovation, and service recovery performance from the perspective of employees.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Employee voice and tacit knowledge sharing

Tacit knowledge is knowledge derived from personal experience and is often challenging to express directly in words (Anand, Muskat, Creed, Zutshi, & Csepregi, 2021). Instead, they are often conveyed through metaphors and other forms of expression that do not rely on formal language. Research indicates hidden value in tacit knowledge, with Blackman and Sadler-Smith (2009) considering tacit knowledge as an untapped reserve of valuable skills and knowledge, often residing in personal experiences. Similarly, Puusa and Eerikäinen (2010) emphasize that a significant portion of overall knowledge is hidden in people's experiences and is often challenging to access and share due to its personal and abstract nature. Accordingly, tacit knowledge is highly personal and abstract, making it difficult to make visible. Boiral (2002) claims that, as tacit knowledge is difficult to codify and is personal, having channels for the employee voice has the potential to provide a mechanism for employees to express and communicate their tacit knowledge.

To release the potential of tacit knowledge, Blackman and Sadler-Smith (2009) recommend that companies should manage ways to access, leverage, and utilize this valuable source through systematic activities fostering dialogue, encouraging diverse perspectives, and promoting individual and collective learning. Boiral (2002) stresses the need for employee voice to serve as a mechanism for employees to express and communicate their tacit knowledge, bridging the gap between hidden knowledge and its dissemination. Seidler-de Alwis et al. (2004) highlight the importance of personal connections in making tacit knowledge accessible and call for fostering a culture of commitment and a safe, open atmosphere for knowledge sharing within organizations. Alzyoud et al. (2023) emphasize that 'employee voice,' which involves employees voicing issues and sharing experiences, is crucial for promoting tacit knowledge sharing within organizations. Gambarotto and Cammozzo (2010) stress the importance of effective governance, innovation, and the space to allow employees to build their identity within the organization through their voices. Based on the above, it is proposed that:

H1: Employee voice is positively associated with tacit knowledge sharing.

Tacit knowledge sharing and employee innovation

The sharing of tacit knowledge has been suggested as a means to enhance organizations' innovative capabilities (Ganguly, Talukdar, & Chatterjee, 2019) and promote various types of innovation (Islam, Zahra, Rehman, & Jamil, 2022). Employees are a vital source of innovative ideas in the workplace and play an essential role in implementing innovative solutions. Employee innovation can be defined as the efforts made by employees to develop creative and innovative notions that can positively affect a hotel and its operations (Alzyoud, 2019). Several studies have confirmed the association between knowledge sharing and increased potential for employee innovation (e.g., Ahmad et al., 2022; Berraies, Hamza, & Chtioui, 2021; Montani & Staglianò, 2022). Regarding tacit knowledge, Seidler-de Alwis et al. (2004) claim that tacit knowledge enhances the perception of ideas, thereby encouraging creativity and positively influencing business activities. Furthermore, Koskinen and Vanharanta (2002) stated that having a diverse range of knowledge and in-depth expertise is particularly crucial in resolving complex problems. Seidler-de Alwis et al. (2004) argued that during the initial stages of the innovation process, particularly in the phase of 'idea discovery and generation,' the intangibility is high. Therefore, it is assumed that the significance of tacit knowledge sharing plays a more vital role in this phase. However, they added that success in innovation is often achieved when a crisis is overcome at any stage of the innovation process, either through accelerating the process or preventing interruptions. It is evident that effective management of tacit knowledge enables flexible problem solving, and sharing tacit knowledge is crucial for innovation success in all stages of the process. Furthermore, Kucharska (2021) has concluded that the innovation process is significantly accelerated by tacit knowledge, leading to successful innovation outcomes. Accordingly, it is proposed that:

H2: Tacit knowledge sharing is positively associated with employee innovation.

Employee voice, tacit knowledge sharing, and employee innovation

As previously mentioned, employees' voices are perceived to activate the sharing of tacit knowledge (e.g., Alzyoud et al., 2023; Gambarotto & Cammozzo, 2010; Koskinen & Vanharanta, 2002; Seidler-de Alwis et al., 2004; Yener & Arslan, 2017). On the other hand, tacit knowledge is perceived to promote employee innovation (e.g., Koskinen & Vanharanta, 2002; Seidler-de Alwis et al., 2004).

According to Gambarotto and Cammozzo (2010), there is a relationship between three constructs: voice, knowledge, and innovation. They argue that voice is a strategy for transferring knowledge from the lower, individual level to the higher, organizational level. Therefore, when individuals engage in voice behavior, such as participation, they become more competent and qualified. Additionally, the organization benefits from learning and becoming more innovative. Seidler-de Alwis et al. (2004) suggested, based on related literature, that a prerequisite for activating tacit knowledge in the process of innovation is to detect appropriate tacit knowledge within an organization through knowledge sharing. This involves critiquing ideas and perspectives while still respecting individuals. This requires a safe space for individuals to express their voices. Furthermore, Koskinen and Vanharanta (2002) argued that the innovation process requires not only the processing of objective information but also the presence of personal attitudes, opinions, and insights. Moreover, according to Gambarotto and Cammozzo (2010), for the voice to become an effective tool, it requires innovative governance and space to establish its identity within the organization.

In a similar context, Cox and Evans (2020) stated that in order to share knowledge, organizations should create a trusting environment and establish effective means for open communication where everyone has an equal voice. Seidler-de Alwis et al. (2004) added that diverse perspectives foster creativity, including tacit knowledge, in a well-managed process. The intellectual conflict between these viewpoints produces energy that can be channeled into generating new ideas. Tacit knowledge becomes visible when it is shared and applied and can then be utilized in the innovation process. Tacit knowledge can be activated through the process of generating new scientific knowledge, also known as 'learning to learn.' Alzyoud et al. (2023) summarized this relationship as follows: when employees feel safe to express their opinions and believe that their voices are heard, they are more likely to share their experiences at the workplace, propose novel ideas, or suggest different ways to complete tasks. This can serve as a motivation for employees to contribute to the organization's growth and development. This, in turn, is vital to inspire employees to participate in innovative acts, as knowledge is the basis for innovation. Gambarotto and Cammozzo (2010) emphasized the significance of employees' voices in sharing tacit knowledge and suggested that vocal behavior enhances individuals' competence and qualifications. Furthermore, utilizing voice enables organizations to learn and foster innovation. Therefore, employees' voices are crucial for fostering innovation. However, without the proper knowledge to unleash their hidden potential, their voices would be of no use in this equation. Therefore, it is logical to propose that:

H3: Tacit knowledge sharing mediates the relationship between employee voice and employee innovation.

Employee innovation and service recovery performance

Given the significant role of human collaboration in the hotel sector, service failures are inevitable (Alzyoud & Abuzaid, 2023; Susskind, 2002). Furthermore, Lin (2010) stated that service failures and service recovery performances have been extensively studied in the hospitality sector due to the frequent interactions between customers and employees. Furthermore, after a failure has occurred, it is essential to implement a recovery strategy to minimize the negative impact on customers' experiences.

Service recovery refers to 'doing things very right the second time' (Yadav & Dhar, 2021). Boshoff and Allen (2000), as well as Liao (2007), have described service recovery performance as the actions taken by the employees who are responsible for handling customer complaints directly, in order to restore customer satisfaction and loyalty following service failures. Furthermore, research suggests that an employee's ability to recover from a service failure is more crucial than providing error-free service (Liao, 2007; Lin, 2010). This study adhered to the definition of service recovery performance provided by Boshoff and Allen (2000) and Liao (2007).

Innovation is essential for the success of hotels. Alzyoud et al. (2023) explain that the hotel industry heavily relies on the performance and competencies of its employees. Therefore, employees' innovative ideas are vital to enhancing service recovery performance, which, in turn, can influence customers' satisfaction and loyalty. In a similar context, Ahmad et al. (2022) have stated that the performance of service recovery is directly related to the competencies and behaviors of workers in identifying and resolving service failures. They explained that human innovation begins with recognizing complexities and developing ideas or remedies. Therefore, the workers' ability to innovate can impact customer response to service recovery. Ahmad et al. (2022) claim that, in service recovery cases, if individuals are not allowed to utilize their full potential or they are unable to handle service recovery encounters effectively, it can result in customer dissatisfaction and can decrease overall performance. As such, the following is proposed:

H4: Employee innovation is positively associated with service recovery performance.

Tacit knowledge sharing, employee innovation and service recovery performance

As previously mentioned, several studies have confirmed the role of tacit knowledge in enhancing employees' innovation (e.g., Alzyoud et al., 2023; Koskinen & Vanharanta, 2002). In this context, Seidler-de Alwis et al. (2004) found that tacit knowledge has a crucial impact on driving and facilitating innovation. It has been claimed that innovation plays a positive role in enhancing service recovery performance (Ahmad et al., 2022; Alzyoud et al., 2023). Alzyoud et al. (2023) argue that there is a positive relationship between knowledge sharing, employee innovation, and service recovery performance. Specifically, they suggest that knowledge sharing can improve employees' innovative behavior, which, in turn, can enhance service recovery performance. This could happen by providing innovative ideas and/or solutions. Therefore, hotel management must ensure staff members believe their opinions and efforts are wanted and respected. This will inspire them to express themselves, exchange knowledge, and develop inventive ideas that can accelerate recovery efforts (Alzyoud et al., 2023). Overall, tacit knowledge, which encompasses employees' practical 'know-how', should enhance their ability to generate creative and novel ideas, suggestions, and solutions when a service failure occurs. This, in turn, can improve service recovery performance. Based on the above, we propose the following hypothesis:

H5: Employee innovation mediates the relationship between tacit knowledge sharing and service recovery performance.

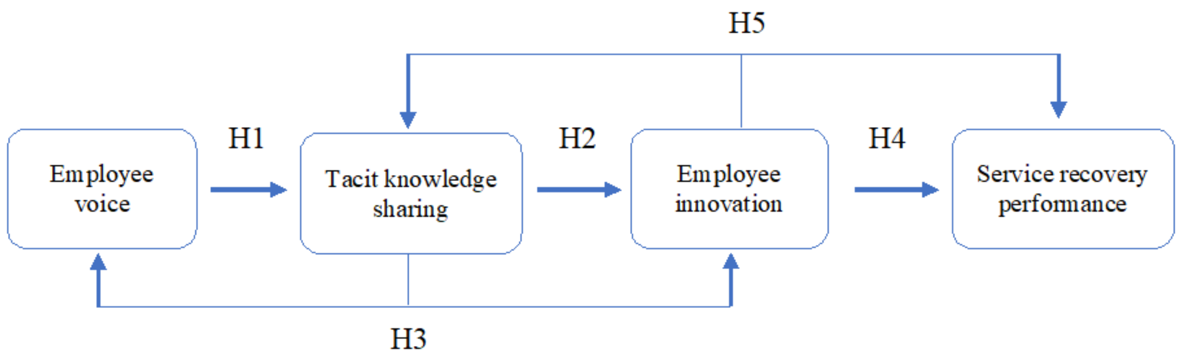


Figure 1. The research model

RESEARCH METHODS

Participants

This is a quantitative study in nature, where an online self-administered questionnaire was developed to test the study model presented in Figure 1. The target population was employees in the hotel industry in Jordan. According to the Ministry of Tourism and Antiquities in Jordan (2023), there are 21,835 employees in the hotel sector in Jordan (2,364 of them are women) working in 607 different hotels in the country. A total of 214 valid responses were received, representing about 1% of the total population. Facebook groups for hotel employees in Jordan were targeted to reach the target population. The researchers visited those Facebook groups and randomly screened the members' profiles and then contacted them explaining the aim of the study and asking them to participate in the study and share the questionnaire link with their friends and colleagues working in the hotel industry. Most of the people whom the researcher contacted were working in operations. The researchers provided a brief description of the study's purpose and assured the responders' anonymity to encourage them to provide honest answers. As the first question, a filtering question was used to ask employees if they are currently working in hotels or not to ensure that all the participants are working in hotels.

Instrument

An online self-administered survey was developed using Microsoft Forms to gather data from the target population. The questionnaire consists of 25 questions, seven of which were demographic questions. Moreover, the questionnaire consists of six sections: the first is an introduction to the study's aims and an assessment of the anonymity of the participants. The second section included four questions about employee voice. The third section consisted of three questions related to tacit knowledge sharing. The fourth section involved six questions about employee innovation. The fifth section had five questions regarding service recovery performance. The last section consisted of seven questions about participants' demographic information.

This study used a self-administered survey where the participants filled out the questionnaire at a single point in time. However, this may raise concerns regarding the Common Methods Bias (CMB) issue. As such, the remedies of Podsakoff, MacKenzie, and Podsakoff (2012) to mitigate CMB were considered in this study, such as using clear and straightforward questions and avoiding jargon and ambiguous questions, assuring the anonymity of the respondents and explaining the study aims to motivate them to provide honest responses; and informing the participants that their participation in the study is voluntary and they can withdraw at any time. Furthermore, the study performed the test of Harman's single-factor to assess CMB, as recommended by Podsakoff, MacKenzie, Lee, and Podsakoff (2003). The outputs revealed that the measurement items accounted for 39.12% of the variance, which is less than the cut-off value of 50% that is proposed by Podsakoff et al. (2003). This indicates that CMB is not a factor of concern in this research.

Measures

The measurement items were adopted from different sources, and all of them were originally written in English. As English is an essential language in the hotel sector, the questionnaire items were written in English, and a translation for Arabic was provided underneath each question, in case the respondent had doubts regarding the meaning of the question. The translation was written by a bilingual academic staff member and reviewed by another two academic staff. All measurement items were constructed on a 5-point Likert scale with responses anchored from 1 = strongly disagree to 5 = strongly agree.

Employee voice was measured using four items that were adopted from Van Dyne and LePine (1998). These items were found valid and reliable in past studies in the hospitality industry, such as in the work of Detert and Burris (2007). Sample items included "In this hotel, I can speak up with ideas for new projects or changes in procedures" and "In this hotel, I can communicate my opinions about work issues to others even if my opinions are different and others disagree with me". Cronbach alpha for this measure was 0.86.

Tacit knowledge was measured through three items from Bock, Zmud, Kim, and Lee (2005). Sample items are "I share my experience or know-how from work with other hotel members more frequently" and "I share my expertise from my education or training with other hotel members in a more effective way." Alpha reliability for this measure was 0.86.

Employee innovation was measured through a 6-item scale that was adopted from Scott and Bruce (1994). This scale was found to be valid and reliable in past studies in the hotel industry (e.g., Alzyoud, 2019). Samples of the scale items included "I generate creative ideas at work" and "I promote and champion ideas to others." Alpha reliability for this measure was 0.83.

Service recovery performance was measured through a 5-item scale that was developed by Boshoff and Allen (2000). Examples of the scale items were "Resolving a complaint for a customer is a great thrill for me" and "Considering all the things I do, I handle dissatisfied customers very well." The alpha reliability for this measure was 0.84.

Data analysis

PLS-SEM (Partial Least Squares Structural Equation Modeling) was employed in this research to analyze the data using Smart PLS 3 software due to its sophisticated estimate and popularity in the social sciences (Harb, Khliefat, Alazaizeh, & Eyoun, 2023; Rasoolimanesh & Ali, 2018). When employing the structural model, the PLS-SEM is a powerful tool for topic analysis to specify and analyze the variables (Janib, Rasdi, & Zaremohzzabieh, 2022). Janib et al. (2022) assert that data analysis can be effectively conducted using the PLS-SEM approach, which involves utilizing the structural model to define and analyze variables. The study examined the data in two steps, as advised by the PLS-SEM literature (Siyal, Ding, & Siyal, 2019). As indicated in Table (2), the initial PLS-SEM phase of the approach began with an examination of the measurement model to examine the inter-item reliability, internal consistency, and convergent validity of the scale measurements. The second phase assesses the structural model to examine research hypotheses (Schuberth, Rademaker, & Henseler, 2023).

RESULTS

The online survey garnered a total of 214 responses in the period from August to October 2022. Table 1 shows that about 78.5% of the respondents were males, whereas only 21.5% were females. Around 50% of the respondents were 25 years old and below. About 61% hold a bachelor's degree, and 64% of the respondents have less than 5 years of experience. The majority of the respondents work in five-star hotels (60%). Furthermore, half of the respondents (50%) were employees, and the rest were from supervisory and managerial positions. Finally, just over 60% of the participants were from the front office and food and beverage departments.

Table 1. Profile of respondents (N = 214)

Characteristics	Frequency (n)	Percentage (%)
Gender		
Male	168	78.5%
Female	46	21.5%
Age (Year)		
25 and below	108	50.5%
26-30	44	20.5%
31-35	23	11%
36-40	15	7%
41 and above	24	11%
Education Level		
High school and below	35	16.5%
Diploma	40	19%
Bachelor	131	61%
Masters	5	2%
PhD	3	1.5%
Hotel Stars		
5-Star	129	60%
4-Star	30	14%
3, 2 and 1-star	38	18%
Other	17	8%

Characteristics	Frequency (n)	Percentage (%)
Experience		
1 year and less	66	31%
More than 1 year to less than 5 years	71	33%
5 years to 10 years	37	17%
11 years and more	40	19%
Position		
Employee	107	50%
Supervisor	37	17%
Assistant Manager	20	9%
Manager	42	20%
Other	8	4%
Department		
Front Office	63	29.5%
Housekeeping	14	6.5%
Food and Beverage	71	33%
Sales and Marketing	15	7%
Human resources	10	5%
Finance and accounting department	11	5%
Other departments	30	14%

Evaluation of measurement model

To determine the convergent validity of the measurement model, the following have been examined by the researchers: (1) the composite reliability (CR), which should exceed 0.70 as recommended by Chin (1998); (2) the average variance extracted (AVE) should be more than 0.50 as stated by Fornell and Larcker (1981); and (3) the item loadings, should be larger than 0.70 as mentioned by Fornell and Larcker (1981) and Chin (1998). Table (2) illustrates the mean, standard deviation, composite reliability, extracted average variance, and item loading of the research model's construct measures. Table 2 shows that all convergent validity criteria were met, the composite reliability varied from 0.83 to 0.86, and the AVEs ranged from 0.55 to 0.78. All of the item loadings had maturities greater than 0.7.

Table 2. Mean scores and the reliability statistics of the measurement model

Indicators and factors	Mean (SD)	CR	AVE	Loadings
F1: Employee Innovation	**4.01 (0.81)**	**0.88**	**0.55**	
EInn1	4.00 (0.86)			0.753
EInn2	3.99 (0.79)			0.788
EInn3	3.97 (0.79)			0.767
EInn4	3.85 (0.89)			0.717
EInn5	3.95 (0.81)			0.801
EInn6	4.27 (0.74)			0.710
F2: Employee Voice	**4.02 (0.86)**	**0.90**	**0.70**	
EV1	4.07 (0.86)			0.824
EV2	4.06 (0.82)			0.858
EV3	3.81 (0.95)			0.793
EV4	4.14 (0.81)			0.865
F3: Service Recovery	**4.37 (0.68)**	**0.89**	**0.62**	
SR1	4.41 (0.60)			0.838
SR2	4.35 (0.69)			0.722
SR3	4.44 (0.67)			0.764
SR4	4.23 (0.78)			0.774
SR5	4.42 (0.66)			0.830
F4: Tacit Knowledge	**4.42 (0.69)**	**0.91**	**0.78**	
TK1	4.31 (0.71)			0.892
TK2	4.49 (0.67)			0.845
TK3	4.46 (0.68)			0.910

The criteria proposed by Gefen and Straub (2005) for measuring discriminant validity were used in this study, and to meet discriminant validity in this criteria, the square root of the average variance extracted (AVE) for a construct should exceed its correlation with other constructs in the model. Table (3) shows the square root of the AVE for each construct, with the AVE being compared to the highest variance that each construct has with the other constructs in the model. The results highlighted low correlations between the measure of interest and the measures of other dimensions.

Table 3. Fornell-Larcker criterion

Factor	Einn	EV	SR	TK
EInn	**0.739**			
EV	0.650	**0.836**		
SR	0.586	0.605	**0.787**	
TK	0.436	0.361	0.580	**0.883**

The discriminant validity was further evaluated using the Heterotrait-Monotrait (HTMT) criteria. HTMT is defined as the average item correlations across constructs compared to the average correlations among items measuring the same construct (Hair, Sarstedt, & Ringle, 2019). Table 4 represents the findings of the HTMT. The results show that all values in Table 4 are less than 0.85, indicating no discriminant validity issues based on the HTMT criteria (Henseler, Ringle, & Sarstedt, 2015).

Table 4. HTMT results

Factor	Einn	EV	SR
EInn			
EV	0.763		
SR	0.693	0.701	
TK	0.499	0.410	0.679

These results show that the study measures have strong convergent and discriminant validity. In conclusion, the measurement model findings are adequate, indicating that the structural model assessment is acceptable to proceed. The discriminant validity was also evaluated using the cross-loading method, and this indicates that each item's outer loading on the construct with which it is related should be greater than the item's loading on other constructs (Chin, 1998). Table 5 represents the findings of cross-loadings. The results show that the outer loading of each item on its associated construct is greater than the loading of the item on other constructs (Chin, 1998).

Table 5. Cross loadings

	EInn	EV	SR	TK
EInn1	0.753	0.491	0.456	0.330
EInn2	0.788	0.407	0.396	0.317
EInn3	0.767	0.417	0.439	0.334
EInn4	0.617	0.376	0.378	0.216
EInn5	0.801	0.520	0.459	0.322
EInn6	0.690	0.360	0.455	0.387
EV1	0.408	0.824	0.476	0.274
EV2	0.402	0.858	0.538	0.353
EV3	0.479	0.793	0.472	0.252
EV4	0.567	0.865	0.526	0.312
SR1	0.533	0.458	0.838	0.461
SR2	0.418	0.362	0.722	0.389
SR3	0.437	0.409	0.764	0.477
SR4	0.413	0.477	0.774	0.429
SR5	0.489	0.449	0.830	0.432

	EInn	EV	SR	TK
TK1	0.432	0.340	0.413	0.892
TK2	0.288	0.266	0.473	0.845
TK3	0.411	0.339	0.544	0.910

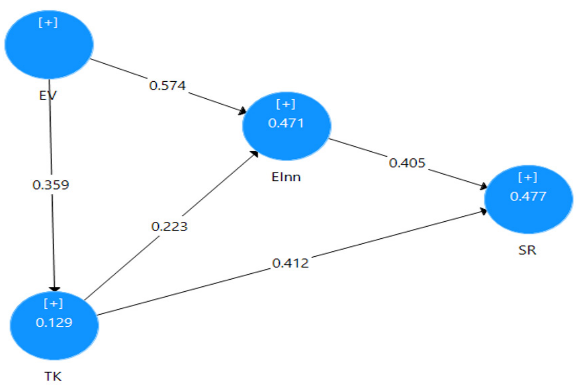
To evaluate multicollinearity, the variance inflation factor (VIF) of each indicator should be less than 5 and above 0.20 (Hair, Ringle, & Sarstedt, 2011). Table 6 represents the findings of VIF. The results show that all VIF values are less than 5 and above 0.20.

Table 6. VIF values

Item	VIF
EInn1	1.761
EInn2	2.269
EInn3	2.043
EInn4	1.380
EInn5	2.022
EInn6	1.406
EV1	1.949
EV2	1.980
EV3	1.833
EV4	2.230
SR1	2.036
SR2	1.520
SR3	1.677
SR4	1.805
SR5	2.083
TK1	2.090
TK2	2.082
TK3	2.480

Structural model results

As indicated in Figure 2, the study model was evaluated through testing hypotheses, which include path coefficient estimation, the variance explained (R^2 value), and statistical significance. The factor loadings vary from 0.707 to 0.948, indicating that the constructs are well formed.



Note: EV=Employee voice; TK=Tacit knowledge sharing; EInn=Employee innovation; SR=Service recovery performance.

Figure 2. The final structural model with standardized parameter estimates

The results of the hypothesized structural model are presented in Table 7, displaying various measures such as estimated path coefficients, R^2, CI, adjusted bias CI, F square, t-values, and p-value. Based on the model performance statistics, the proposed model has a good fit for the data. Bootstrapping was employed to assess the significance of each path. The model accounts for 13% of the variance in employee tacit knowledge, 20% of the variance in employee innovation, and 35% of the variance in service recovery. All F-Square values are above 0.02, which indicates that the predictor variable has a substantial influence (Cohen, 1988). Furthermore, confidence intervals that do not include a zero suggest statistical significance (Hair & Alamer, 2022), which are illustrated in Table 7.

Employee voice and tacit knowledge sharing

Hypothesis 1 proposes that employee voice is positively associated with tacit knowledge sharing. The path coefficient was 0.361. This supports the first hypothesis that employees' free expression of their voice, which embraces their experience, perceptions, and ideas, is a useful way to express and share their tacit knowledge.

Tacit knowledge sharing and employee innovation

Hypothesis 2 proposes that tacit knowledge sharing is positively associated with employee innovation. The path coefficient was 0.436. This provides support for the second hypothesis, indicating that when employees are encouraged to share tacit knowledge, this can enhance employees' innovation capabilities.

Employee voice, tacit knowledge sharing, and employee innovation

Hypothesis 3 proposes that tacit knowledge sharing mediates the relationship between employee voice and employee innovation. The result revealed that tacit knowledge partially mediates the relationship between employee voice and innovation with a path coefficient of 0.256. This means that when employees are free to express what they know, their prior experiences, and perceptions, it will likely improve the innovative process by bringing fresh viewpoints, original ideas, new techniques, and divergent approaches to handling and solving problems. The fact that employees' tacit knowledge partially mediates this relationship suggests that other types of knowledge could also play a role.

Employee innovation and service recovery performance

According to Hypothesis 4, it is proposed that employee innovation is positively associated with service recovery performance. The path coefficient was 0.586. This provides support for the fourth hypothesis. Thus, a more effective response to errors and improved means of resolving customers' failure experiences would result from employees' capacity to offer and implement unique ideas as well as new problem-solving techniques, which would improve service recovery performance.

Tacit knowledge sharing, employee innovation, and service recovery performance

The mediation results have also revealed that employee innovation partially mediates the relationship between tacit knowledge and service recovery performance with a path coefficient of 0.158, providing partial support for Hypothesis 5. Thus, although tacit knowledge sharing was positively associated with innovation, and innovation was positively and directly associated with recovery performance, innovation partially mediates the relationship between the two variables, indicating that other factors could play such a role.

Table 7. Results of Partial Least Square-Structural Equation Modeling (PLS-SEM)

	Original Sample (O)	CI	CI Bias Corrected	F Square	T Statistics (|O/STDEV|)	P-Value
EV -> TK	0.361	0.361	0.013	0.150	5.463	0.000
TK ->EInn	0.436	0.436	0.008	0.235	8.035	0.000
EV -> TK ->EInn	0.158	0.158	0.011	-	3.585	0.000
EInn -> SR	0.586	0.586	0.007	0.524	13.533	0.000
TK ->EInn -> SR	0.256	0.256	0.009	-	5.849	0.000

Note: *->: relationship link between two constructs.

DISCUSSION

This research investigates the complex and interrelated relationships among employee voice, tacit knowledge sharing, employee innovation, and service recovery performance. Tacit knowledge represents an intangible dimension of human capital that is concealed within individuals' minds. This kind of knowledge results from individuals' accumulated experience, knowledge, and skills. However, this valuable untapped capital is often difficult to express directly in words, which, in turn, hinders its sharing. Useful knowledge cannot be fully utilized unless it is shared and disseminated effectively. Allowing employees to freely express their thoughts, experiences, perceptions, and ideas is a valuable means of sharing their tacit knowledge. This result is consistent with Gambarotto and Cammozzo's (2010) recognition of the importance of employee voice in sharing and utilizing tacit knowledge.

Sharing tacit knowledge was found to have a positive association with employee innovation. This outcome is consistent with previous studies (e.g., Ahmad et al., 2022; Bari, Ghaffar, & Ahmad, 2020; Montani & Staglianò, 2022). The innovative capability of employees is rooted in their knowledge, expertise, and experience, even if this knowledge is only tacit and resides solely in their minds. In a similar context, Seidler-de Alwis et al. (2004) explained that tacit knowledge enhances the perception of ideas, thereby stimulating creativity. Kucharska (2021) has concluded that tacit knowledge can significantly accelerate the innovation process, leading to successful innovation outcomes. The findings presented here are consistent with previous studies that suggest tacit knowledge sharing can foster employee innovation.

Furthermore, it has been found that sharing tacit knowledge partially mediates the relationship between employee voice and employee innovation. When employees are given the opportunity to share their knowledge, thoughts, past experiences, and perceptions about future demands or specific problems, it can enhance the innovation process. This allows for new perspectives, novel ideas, and innovative techniques to emerge, as well as divergent approaches to problem solving. This relationship is partially mediated by employees' tacit knowledge, which is hidden in their minds. This suggests that other types of knowledge may also play a role in mediating this relationship. This result supports Alzyoud et al.'s (2023) theoretical proposition that tacit knowledge sharing mediates the influence of employee voice on employee innovation in the hotel industry.

The results also indicate that employee innovation is positively associated with service recovery performance. Employees' capacity to introduce and implement innovative ideas and utilize new problem-solving techniques can lead to an effective response to mistakes and improved methods for resolving customers' negative experiences, ultimately enhancing service recovery performance. This result confirms the claim made by Ahmad et al. (2022) that service recovery performance is directly related to the competencies and behaviors of the workers. Ahmad et al. (2022) argue that recognizing complexities and developing remedies for them begins with human innovation. They further argue that if individuals are constrained from using their potential skills or are unable to manage service recovery encounters, it can lead to customer disappointment and decrease overall performance. The results support the argument that employees' innovative endeavors, such as proposing creative solutions or trying new work methods to satisfy customers, can accelerate service recovery efforts in hotels.

The findings from this work indicate that employee innovation partially mediates the association between tacit knowledge sharing and service recovery performance. This indicates that the competencies, hidden knowledge, and accumulated experience of employees from their practical proficiency can assist in improving the approach to dealing with complex service failures and increase the likelihood of successfully repairing any damages. Moreover, sharing tacit knowledge with colleagues can promote employee innovation, ultimately expediting their efforts to recover services. Although employee innovation was revealed to influence service recovery performance directly, it only partially contributes to the relationship between tacit knowledge and service recovery performance.

Table 8. Summary of the results

Hypotheses	Results
H1: Employee voice is positively associated with tacit knowledge sharing.	Supported
H2: Tacit knowledge sharing is positively associated with employee innovation.	Supported
H3: Tacit knowledge sharing mediates the relationship between employee voice and employee innovation.	Supported
H4: Employee innovation is positively associated with service recovery performance.	Supported
H5: Employee innovation mediates the relationship between tacit knowledge sharing and service recovery performance.	Supported

Table 8 presents a summary of the research hypotheses and indicates whether they were supported or not. It can be clearly seen that all the proposed hypotheses were confirmed. For instance, the study proposed a positive association between employee voice and tacit knowledge sharing, and this proposition was confirmed. In addition, it has been hypothesized that tacit knowledge sharing is positively related to employee innovation, and this hypothesis was supported. Moreover, tacit knowledge sharing was suggested to mediate the relationship between employee voice and employee innovation, and this claim was also confirmed. Employee innovation was proposed to affect service recovery performance positively; the findings supported this hypothesis. Finally, it has been proposed that employee innovation mediates the relationship between tacit knowledge sharing and service recovery performance, and the results confirmed this proposition.

Practical implications

This study shed light on how hotel management could accelerate service recovery efforts in their hotels by focusing on the vital role of employee voice, tacit knowledge sharing, and employee innovation, which contributes substantially to the practitioners in the hotel sector if this opportunity is to be exploited. The study's findings suggest several practical implications for hoteliers:

1) Encouraging employee voice: Hoteliers should foster a supportive work climate that promotes knowledge sharing and learning. They can achieve this by organizing regular meetings or sessions where employees can express their thoughts, ideas, and concerns without fear of retribution. An open-door policy or an anonymous suggestion box can facilitate this. In addition, hoteliers should create a safe and supportive environment where employees feel comfortable sharing their opinions.
2) Setting clear expectations: Hoteliers must establish clear expectations for employees regarding the significance of their opinions and insights. Leaders should model the behavior they wish to see in their employees, such as actively seeking and valuing employee input. They should also offer feedback and recognition to employees who contribute their ideas and insights.
3) Rewarding and appreciating knowledge-sharing behaviors: Hoteliers can incentivize knowledge-sharing behaviors by rewarding and recognizing employees who contribute to the quantity and quality of innovation. They can accomplish this through bonuses, promotions, or other forms of recognition. Hoteliers can also provide opportunities for employees to showcase their ideas and insights through presentations, workshops, or other events.

Limitations and future research directions

This section discusses several limitations and directions for future research. First, this cross-sectional study eliminates the possibility of proposing cause-and-effect relationships between the study's variables. Therefore, a longitudinal study is recommended to examine the causality amongst employee voice, tacit knowledge sharing, employee innovation, and service recovery performance. Second, a self-administered questionnaire was employed to gather the primary data, which may raise the issue of biased responses. For instance, participants may provide biased responses when they are asked about their voice, innovative acts, knowledge-sharing attitudes, or service recovery behaviors. However, the suggestions of Podsakoff et al. (2003) and Podsakoff et al. (2012) were followed to tackle this issue, such as using clear, simple, and unambiguous questions; avoiding jargon and double-barreled questions; ensuring the anonymity of the participants to motivate them to give honest responses; and other remedies that were discussed earlier in this article. Nevertheless, future studies are recommended to gather data from both employees and their supervisors to overcome potential biases. Finally, the data of this study was collected mainly from the hotel sector in Jordan, which may make the results of this study not transferable to other sectors because of the variances in the job-related characteristics of the respondents. Therefore, the conclusion of this study needs to be tested in other countries and in different sectors to evaluate whether it could be replicable.

CONCLUSION

This study sought to contribute to the growing research interest in service recovery performance in the hotel sector. As such, this study examined the relationships between employee voice, tacit knowledge sharing, employee innovation, and service recovery performance. Various findings were revealed by collecting 214 valid responses from different hotels in Jordan using an online survey. For example, employee voice was found to be positively associated with tacit knowledge sharing, and the latter was found to be positively related to employee innovation. Tacit knowledge sharing was found to be partially mediating the relationship between employee voice and employee innovation. Furthermore, employee innovation was shown to influence service recovery performance. Finally, employee innovation was revealed to partially mediate the relationship between tacit knowledge sharing and service recovery performance. To conclude, making employees feel safe to speak up at work (employee voice) can encourage the sharing of tacit knowledge amongst employees, which may promote their innovativeness, which, in turn, can enhance service recovery performance in hotels.

References

Ahmad, B., Liu, D., Asif, M. H., Ashfaq, M., & Irfan, M. (2022). Ambidextrous leadership and service recovery performance under B2B selling context: An examination through service innovation capability. *SAGE Open, 12*(2), https://doi.org/10.1177/21582440221096454

Alzyoud, S. (2019). *Psychological safety and employee innovation in four-and five-star hotels in the UK* (Doctoral dissertation, Manchester Metropolitan University, Manchester, UK). Retrieved from https://e-space.mmu.ac.uk/623723/

Alzyoud, S., & Abuzaid, R. (2023). The influence of leader inclusiveness on learning from failure in the hotel industry. *Development and Learning in Organizations*. https://doi.org/10.1108/DLO-03-2023-0082

Alzyoud, S., Abuzaid, R., & Hamdan, H. (2023). Recovering in the post-pandemic era: The role of employee voice, knowledge sharing, employee innovation, and service recovery performance in the hotel industry. *Development and Learning in Organizations*, *37*(6), 15-18. https://doi.org/10.1108/DLO-08-2022-0170

Alzyoud, S., Partington, S. N., Mitchell, C., & Tom Dieck, D. (2017, May 16-19). Employee innovation in the hospitality industry: The mediating role of psychological safety. *Proceedings of the 17th Conference of the Council for Hospitality Management Education (CHME'17),* Aalborg, Denmark. Retrieved from https://e-space.mmu.ac.uk/id/eprint/619017

Anand, A., Muskat, B., Creed, A., Zutshi, A., & Csepregi, A. (2021). Knowledge sharing, knowledge transfer and SMEs: Evolution, antecedents, outcomes and directions. *Personnel Review, 50*(9), 1873-1893. https://doi.org/10.1108/PR-05-2020-0372

Ashill, N. J., Carruthers, J., & Krisjanous, J. (2005). Antecedents and outcomes of service recovery performance in a public health-care environment. *Journal of Services Marketing, 19*(5), 293-308. https://doi.org/10.1108/08876040510609916

Bari, M. W., Ghaffar, M., & Ahmad, B. (2020). Knowledge-hiding behaviors and employees' silence: Mediating role of psychological contract breach. *Journal of Knowledge Management, 24*(9), 2171-2194. https://doi.org/10.1108/JKM-02-2020-0149

Berraies, S., Hamza, K. A., & Chtioui, R. (2021). Distributed leadership and exploratory and exploitative innovations: Mediating roles of tacit and explicit knowledge sharing and organizational trust. *Journal of Knowledge Management, 25*(5), 1287-1318. https://doi.org/10.1108/JKM-04-2020-0311

Blackman, D., & Sadler-Smith, E. (2009). The silent and the silenced in organizational knowing and learning. *Management Learning, 40*(5), 569-585. https://doi.org/10.1177/1350507609340809

Bock, G.-W., Zmud, R. W., Kim, Y.-G., & Lee, J.-N. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Quarterly*, 87-111. https://doi.org/10.2307/25148669

Boiral, O. (2002). Tacit knowledge and environmental management. *Long Range Planning*, *35*(3), 291-317. https://doi.org/10.1016/S0024-6301(02)00047-X

Boshoff, C., & Allen, J. (2000). The influence of selected antecedents on frontline staff's perceptions of service recovery performance. *International Journal of Service Industry Management, 11*(1), 63-90. https://doi.org/10.1108/09564230010310295

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. Marcoulides (Ed.), *Modern Methods for Business Research* (1st ed., pp. 295-336). New York, USA: Psychology Press.

Cohen, J. (1988). Set correlation and contingency tables. *Applied Psychological Measurement, 12*(4), 425-434. https://doi.org/10.1177/014662168801200410

Cox, S., & Evans, D. (2020). Removing barriers to share knowledge in digital transformation with LEGO® serious play®. Paper presented at the ECKM 2020 21st European Conference on Knowledge Management (pp.133). London, UK.

Detert, J. R., & Burris, E. R. (2007). Leadership behavior and employee voice: Is the door really open? *Academy of Management Journal, 50*(4), 869-884. https://doi.org/10.5465/amj.2007.26279183

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18 (3), 328-388. https://doi.org/10.1177/002224378101800313

Gambarotto, F., & Cammozzo, A. (2010). Dreams of silence: Employee voice and innovation in a public sector community of practice. *Innovation, 12*(2), 166-179. https://doi.org/10.5172/impp.12.2.166

Ganguly, A., Talukdar, A., & Chatterjee, D. (2019). Evaluating the role of social capital, tacit knowledge sharing, knowledge quality and reciprocity in determining innovation capability of an organization. *Journal of Knowledge Management, 23*(6), 1105-1135. https://doi.org/10.1108/JKM-03-2018-0190

Gefen, D., & Straub, D. (2005). A practical guide to factorial validity using PLS-Graph: Tutorial and annotated example. *Communications of the Association for Information Systems, 16*(1), 5. https://doi.org/10.17705/1CAIS.01605

Guchait, P., Paşamehmetoğlu, A., & Dawson, M. (2014). Perceived supervisor and co-worker support for error management: Impact on perceived psychological safety and service recovery performance. *International Journal of Hospitality Management, 41*, 28-37. https://doi.org/10.1016/j.ijhm.2014.04.009

Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*, *1*(3), 100027. https://doi.org/10.1016/j.rmal.2022.100027

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice, 19*(2), 139-152. https://doi.org/10.2753/MTP1069-6679190202

Hair, J. F., Sarstedt, M., & Ringle, C. M. (2019). Rethinking some of the rethinking of partial least squares. *European Journal of Marketing, 53*(4), 566-584. https://doi.org/10.1108/EJM-10-2018-0665

Harb, A., Khliefat, A., Alazaizeh, M. M., & Eyoun, K. (2023). Do personality traits predict students' interest and intentions toward working in the tourism and hospitality industry? Evidence from a developing country. *Journal of Hospitality & Tourism Education*, 1-17. https://doi.org/10.1080/10963758.2023.2175690
Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of The Academy of Marketing Science, 43*, 115-135. https://doi.org/10.1007/s11747-014-0403-8
Islam, T., Zahra, I., Rehman, S. U., & Jamil, S. (2022). How knowledge sharing encourages innovative work behavior through occupational self-efficacy? The moderating role of entrepreneurial leadership. *Global Knowledge, Memory and Communication*, *73*(1/2), 67-83. https://doi.org/10.1108/GKMC-02-2022-0041
Janib, J., Rasdi, R. M., & Zaremohzzabieh, Z. (2022). The influence of career commitment and workload on academics' job satisfaction: The moderating role of a supportive environment. *International Journal of Learning, Teaching and Educational Research, 21*(1), 1-17. https://doi.org/10.26803/ijlter.21.1.1
Koc, E. (2019). Service failures and recovery in hospitality and tourism: A review of literature and recommendations for future research. *Journal of Hospitality Marketing & Management, 28*(5), 513-537. https://doi.org/10.1080/19368623.2019.1537139
Koskinen, K. U., & Vanharanta, H. (2002). The role of tacit knowledge in innovation processes of small technology companies. *International Journal of Production Economics, 80*(1), 57-64. https://doi.org/10.1016/S0925-5273(02)00243-8
Kucharska, W. (2021). Do mistakes acceptance foster innovation? Polish and US cross-country study of tacit knowledge sharing in IT. *Journal of Knowledge Management, 25*(11), 105-128. https://doi.org/10.1108/JKM-12-2020-0922
Liao, H. (2007). Do it right this time: The role of employee service recovery performance in customer-perceived justice and customer loyalty after service failures. *Journal of Applied Psychology, 92*(2), 475. https://doi.org/10.1037/0021-9010.92.2.475
Lin, W.-B. (2007). An empirical of service quality model from the viewpoint of management. *Expert Systems with Applications, 32*(2), 364-375. https://doi.org/10.1016/j.eswa.2005.11.033
Lin, W.-B. (2010). Relevant factors that affect service recovery performance. *The Service Industries Journal, 30*(6), 891-910. https://doi.org/10.1080/02642060801935739
Mattila, A. S. (2001). The impact of relationship type on customer loyalty in a context of service failures. *Journal of Service Research, 4*(2), 91-101. https://doi.org/10.1177/109467050142002
Ministry of Tourism and Antiquities in Jordan. (2023). Tourist establishments and employees for the year 2022. Retrieved from https://www.mota.gov.jo/AR/List/ar_statisiics
Montani, F., & Staglianò, R. (2022). Innovation in times of pandemic: The moderating effect of knowledge sharing on the relationship between COVID-19-induced job stress and employee innovation. *R&D Management, 52*(2), 193-205. https://doi.org/10.1111/radm.12457
Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879. https://doi.org/10.1037/0021-9010.88.5.879
Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology, 63*, 539-569. https://doi.org/10.1146/annurev-psych-120710-100452
Polanyi, M. (1966). *The Tacit Dimension*. London: Routledge & Kegan Paul.
Puusa, A., & Eerikäinen, M. (2010). Is tacit knowledge really tacit? *Electronic Journal of Knowledge Management, 8*(3), 307-318. Retrieved from https://academic-publishing.org/index.php/ejkm/article/view/912/875
Rasoolimanesh, S. M., & Ali, F. (2018). Editorial: Partial least squares-structural equation modeling in hospitality and tourism. *Journal of Hospitality and Tourism Technology, 9*(3), 238-248. https://doi.org/10.1108/JHTT-10-2018-142
Schuberth, F., Rademaker, M. E., & Henseler, J. (2023). Assessing the overall fit of composite models estimated by partial least squares path modeling. *European Journal of Marketing, 57*(6), 1678-1702. https://doi.org/10.1108/EJM-08-2020-0586
Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal, 37*(3), 580-607. https://doi.org/10.5465/256701
Seidler-de Alwis, R., Hartmann, E., & Gemünden, H. G. (2004, September 2-4). *The role of tacit knowledge in innovation management.* Competitive Paper presented at the 20th Annual IMP Conference, Copenhagen, Denmark. Retrieved from https://www.impgroup.org/uploads/papers/4585.pdf
Siyal, A. W., Ding, D., & Siyal, S. (2019). M-banking barriers in Pakistan: A customer perspective of adoption and continuity intention. *Data Technologies and Applications, 53*(1), 58-84. https://doi.org/10.1108/DTA-04-2018-0022
Susskind, A. M. (2002). I told you so! Restaurant customers' word-of-mouth communication patterns. *The Cornell Hotel and Restaurant Administration Quarterly, 43*(2), 75-85. https://doi.org/10.1177/001088040204300208
Van Dyne, L., & LePine, J. A. (1998). Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management Journal, 41*(1), 108-119. https://doi.org/10.5465/256902
Vázquez-Casielles, R., Iglesias, V., & Varela-Neira, C. (2017). Co-creation and service recovery process communication: Effects on satisfaction, repurchase intentions, and word of mouth. *Service Business, 11*, 321-343. https://doi.org/10.1007/s11628-016-0311-8
Yadav, A., & Dhar, R. L. (2021). Linking frontline hotel employees' job crafting to service recovery performance: The roles of harmonious passion, promotion focus, hotel work experience, and gender. *Journal of Hospitality and Tourism Management, 47*, 485-495. https://doi.org/10.1016/j.jhtm.2021.04.018
Yener, S., & Arslan, A. (2017). Relationship between the motivational language of school administrators and tacit knowledge sharing of teachers. In J. Dhouha & J. George (Eds.), *Handbook of Research on Tacit Knowledge Management for Organizational Success* (pp. 387-417). Hershey, USA: IGI Global.

Biographical notes

Sultan Alzyoud is Assistant Professor at the Department of Business Administration, School of Business, The Hashemite University, in Jordan. He obtained a Ph.D. in hotel management from Manchester Metropolitan University in the United Kingdom in 2019. He worked as head of the Department of Marketing at the School of Business from 2021 to 2023. Over the past five years, he won the best paper award at two international conferences. Dr. Alzyoud is a trainer in leadership and marketing. His research interests lie in employee innovation, entrepreneurship, psychological safety and leadership, mainly in the field of hospitality.

Waed Ensour is an Associate Professor in the Department of Business Administration at the Hashemite University in Jordan. She holds a Ph.D. in human resource management from the University of Hull, England. Currently, she is the Dean of the School of Business at The Hashemite University. Her research focuses on human resource development, women's career development, and organizational behavior.

Ayman Harb is an Associate Professor of hospitality and tourism management and the Dean of the Tourism and Hospitality School at the University of Jordan-Aqaba Branch. He is a sustainable tourism and hospitality expert specializing in human capital development, tourism and hospitality education and training, and a tourism and hospitality entrepreneurship consultant and trainer. Dr. Harb is a dynamic, self-starter with over 15 years of national and international experience in teaching and working in tourism and hospitality. His research interests lie in the areas of tourism, hospitality management, and entrepreneurship. He has collaborated actively with researchers in several other disciplines of the management field. He has published several scientific articles in well-known journals.

Authorship contribution statement

Sultan Alzyoud: Conceptualization, Data Curation, Methodology, Formal Analysis, Project Administration, Writing – Original Draft, Writing – Review & Editing, References and Citation. **Waed Ensour:** Conceptualization, Writing – Original Draft (Theoretical Background and Discussion Sections). **Ayman Harb**: Conceptualization, Writing – Original Draft (Introduction, Abstract, and Conclusion Section).

Conflicts of interest

The authors declare no conflict of interest.

Citation (APA Style)

Alzyoud, S., Ensour, W., & Harb, A. (2024). Linking employee voice to service recovery performance in the hotel sector: The mediating role of tacit knowledge sharing and employee innovation. *Journal of Entrepreneurship, Management and Innovation, 20*(3), 62-77. https://doi.org/10.7341/20242034

Journal of Entrepreneurship, Management and Innovation (2024)
Volume 20 Issue 3: 78-103

DOI: https://doi.org/10.7341/20242035
JEL Codes: M210, L83, Z310

Turning crisis into chances: Tourism entrepreneurs' timing strategies amidst emergencies

***Katarzyna Czernek-Marszałek*[1], *Dagmara Wójcik*[2], *Patrycja Juszczyk*[3], *Paweł Piotrowski*[4], *Brendan Richard*[5]**

Abstract

PURPOSE: *Nowadays enterprises operate in a very turbulent environment characterized by frequent, significant, and often unpredictable changes. Such conditions, including crises, force enterprises to take quick actions to adapt to changing conditions. The aim of the paper is to identify chances and timing strategies used by tourism entrepreneurs in conditions of large-scale emergencies (such as COVID-19) and show how they can serve organizational resilience.* ***METHODOLOGY:*** *Qualitative research was conducted in the form of 12 individual in-depth interviews and 4 focus group interviews with 22 representatives of selected industries in the tourism sector. The concept of chance management and timing strategies is used to present how, according to our interviewees, changes in the environment caused by the pandemic contributed to the survival and development of their entities in the tourism market.* ***FINDINGS****: The research findings showed that changes caused by the pandemic allowed entities to identify several chances. These chances mainly concerned the introduction of changes to the offer (accelerating previously planned changes and enabling the introduction of unplanned changes). Moreover, they provided the chances to use held digital competences and time to think about the company's development strategy, as well as establishing and developing relationships with stakeholders. Additionally, our research identified four timing strategies used by tourism entrepreneurs in the time of crisis, i.e. chance-grasping strategy, chance-entraining strategy, chance-riding strategy, and chance-creating strategy.* ***IMPLICATIONS****: Tourism enterprises are highly exposed to operating in crisis conditions. Therefore, chance management can be very useful in their activity and our research findings can be also useful regarding its theoretical and practical implications. From the theoretical point of view, we show how the concept of chance management (in particular timing strategies) can be useful for analyzing the reactions of tourism entrepreneurs to changes in times of crisis and taking advantage of opportunities arising from crisis situations. From a practical point of view, we show what strategies, depending on entrepreneurs' subjective assessment of the current and future conditions for implementing changes, can serve organizational resilience in times of crisis.* ***ORIGINALITY AND VALUE****: This paper fills a research gap related to the use of the concepts of chance management and timing strategies from the perspective of tourist enterprises resilience, previously not used in this context and to a limited extent used in the general management literature so far.*

Keywords: *chance management, tourism, timing strategies, opportunities, large scale emergency, COVID-19 pandemic*

1 Katarzyna Czernek-Marszałek, Associate Professor, Faculty of Management, Management Theory Department University of Economics in Katowice, ul. 1 Maja 50, 40-287 Katowice, Poland, e-mail: katarzyna.czernek-marszalek@uekat.pl (ORCID: https:/orcid.org/0000-0002-9889-9821).

2 Dagmara Wójcik, Ph.D., Faculty of Management, Management Theory Department, University of Economics in Katowice, ul. 1 Maja 50, 40-287 Katowice, Poland, e-mail: dagmara.wojcik@uekat.pl (ORCID: https:/orcid.org/0000-0002-9082-8471).

3 Patrycja Juszczyk, Ph.D., Faculty of Management, Management Theory Department, University of Economics in Katowice, ul. 1 Maja 50, 40-287 Katowice, Poland, e-mail: patrycja.juszczyk@uekat.pl (ORCID: https:/orcid.org/0000-0003-2231-5719).

4 Paweł Piotrowski, Ph.D., Faculty of Management, Management Theory Department, University of Economics in Katowice, ul. 1 Maja 50, 40-287 Katowice, Poland, e-mail: pawel.piotrowski@uekat.pl (ORCID: https:/orcid.org/0000-0002-6579-066X).

5 Brendan Richard, Ph.D., Vice President, Marketing Analytics, Delaware North, Las Vegas, NV, United States, e-mail: brendan.richard@gmail.com (ORCID: https:/orcid.org/0000-0002-7932-4635).

Received 30 November 2023; Revised 16 February 2024; Accepted 26 February 2024.

INTRODUCTION

Modern enterprises operate in a turbulent environment characterized by frequent, significant, and often unpredictable changes. Such conditions lead to uncertainty related to running a business, which in turn forces enterprises to take actions to adapt to changing conditions. This uncertainty and the need for change were further intensified by the COVID-19 pandemic, which, due to the rapid spread of the virus around the world, changed the functioning of enterprises in many sectors, especially tourism (UNWTO, 2020a). Restricting and at times, even completely preventing travel caused many companies to go bankrupt, take on significant debt (Flight Global, 2022; Trade Winds, 2023), or significantly reduce their operations. This had far-reaching consequences, for example for employment, as tourism is based on services and is a labor-intensive industry (UNWTO, 2020b).

In such turbulent conditions, tourism enterprises take numerous actions to enable them to survive. These actions are reflected in a unique set of resilience-building strategies, proposed as an answer to the global tourism crisis caused by the COVID-19 pandemic (e.g., Corbisiero & Monaco, 2021; Čorak, Boranić Živoder & Marušić, 2020; Price, Wilkinson & Coles, 2022; Fontanari & Traskevich, 2023; King, Iba & Clifton, 2021; Islam, Kabir & Hassan, 2023). The literature has so far indicated various possible activities under the resilience strategies in the tourism industry, for example, greater use of digital technologies (Fontanari & Traskevich, 2023), increased government assistance (Islam, Kabir & Hassan, 2023), as well as cooperation between tour operators, government agencies and other relevant stakeholders (Islam, Kabir & Hassan, 2023).

As stressed in the literature, the resilience concept refers not only to survival in the market by maintaining stability, but also to development by taking new actions, firstly, recognition and usage of opportunities/chances, and secondly – timely reaction (Alves et al., 2020). Regarding the first element, although these opportunities or chances (in this text treated as synonyms) were mentioned in the literature in the context of resilience (also to the COVID-19 pandemic), they most often referred not to individual organizations, but to the entire tourism sector (e.g., Traskevich & Fontanari, 2023; Sharma et al., 2021; Čorak et al., 2020), usually relating to tourism sustainability (Ioannides & Gyimóthy, 2020; Romagosa, 2020; Stankov, Filimonau & Vujičić, 2020). As Price et al. (2022: 1090) claim, "COVID-19 is represented as an 'opportunity to reshape tourism into a model that is more sustainable, inclusive and caring' (Cheer, 2020, p. 514) rather than a situation in which opportunities may or may not appear depending on the conditions people find themselves in and their own dispositions".

Regarding the second element important for organizational resilience, i.e. timely reaction, the literature often stresses fast adaptation to changes. For example, Supadi and Hadi (2020) identified "adapting," next to "changing" and "sustaining" as the main attributes of business resilience when reacting to a crisis time when it occurs. Moreover, the same authors claim that "the more agile, innovative, and flexible the organization in adapting to the external environment, the more able SMEs to quickly adjust its business processes, strategies, which can build resilient responses to turbulence that falls the organization" (Supadi & Hadi, 2020: 1271). Bhaskara and Filimonau (2021), who analyzed research on disaster management and tourism, indicated that adaptability, next to cooperation, innovation, and human resources, is a key attribute of building organizational resilience among tourism companies.

These two issues, i.e. the need to recognize the chance and the timely reaction of a company in the context of organizational resilience directed the attention of the authors of the paper to the chance management and timing strategies concept (Jing & Van de Ven, 2018). As market uncertainty increased, researchers became interested in studying timing effects in organizational contexts. Over time, this has been reflected, in particular, through the subjective – rather than objective, as previously mentioned in the literature – perception of time. It is expressed in research on timing strategies, which emphasize the temporal perspectives of strategic orientation (Mosakowski & Earley, 2000), taking into account the dynamics of the environment (Lynch, 2000; Durand et al., 2017). Timing strategies show how business entities perceive and adopt strategic timing as a way to improve their performance. Such a subjective perception of time leading to the selection of a specific timing strategy enables chance management, i.e. to seize or create a chance in an appropriate and favorable situational momentum (Jing & Van de Ven, 2018). The chance management concept has not been widely discussed and applied in the literature on management, including strategic management, and has not been used at all in the literature on tourism, including the COVID-19 context. Meanwhile, tourism entrepreneurs, considering the turbulent environment and uncertainty in which they operate, as well as the potentially significant negative impact of these conditions on various spheres of their activity (as shown by the effects of the COVID-19 pandemic), should demonstrate a strong orientation towards chance as well as a timely reaction to crisis.

At this point, it must be mentioned that other theories or concepts have also addressed the topic of opportunities or timely reactions to changes in the market, for example: entrepreneurial opportunities, effectuation, or dynamic capabilities theory. However, they rarely emphasize the aspect of time, i.e. when to look for or create a chance, because as Jing and Van de Ven (2018) – the authors of the chance management concept – point out: "different time points of change are associated with different degrees of chance favorability" (p. 161). The theories mentioned focus on different aspects related to the topic. For example, the literature on entrepreneurial opportunities provides insight into why some entrepreneurs recognize opportunities and others do not (Mary George et al., 2016). Moreover, opportunities in this research stream were most often treated either as objectively existing or as subjective, although with time, both opportunities discovering and creating started to be conceptualized – as in the case of chance management concept – as overlapping phenomena (e.g., Alvarez & Barney, 2007; Renko, Shrader & Simon, 2012; Sarasvathy et al., 2003; Shane & Venkataraman, 2000). In dynamic capabilities theory, the primary focus is on leveraging organizational capabilities, skills, and competences to capitalize on opportunities resulting from evolving trends, technological advancements, or changing market conditions (Teece, Pisano, & Shuen, 1997). As Teece (2007) argues, dynamic capabilities enable a firm to identify, integrate, and adapt resources in response to market changes. Although this leads to the selection of a specific strategy, as in chance management, it is not the time of change but the entrepreneurs' dynamic capabilities that are the main subject of considerations. In the effectuation research stream, causation and effectuation are two dominant types of entrepreneurial decision-making logic. Although they are used to develop strategies to cope with uncertainty, similar to chance management, they focus on entrepreneurial decision-making logic in the context of possessed resources and assumed or unassumed (but possible in a particular situation) organizational goals, as well as on the interplay and combination between causation and effectuation, especially on new venture creation (Khurana, Dutta & Ghura, 2022). Thus, the time of making decisions and the moment of recognizing and using the opportunity – in the context of perceiving current and future momentum as favorable or hostile – being crucial in chance management, is not the main element of considerations in the above-mentioned, relatively well-established theories in the literature. It is the chance management view that allows us to consider whether and which of the timing strategies, i.e. chance-grasping strategy, chance-entraining strategy, chance-riding strategy and chance-creating strategy, are used (and how) in crisis conditions by tourism enterprises for the purpose of organizational resilience.

Hence, we believe that the use of chance management, including timing strategies, allows us to fill the important and, at the same time interesting research gap. This allows us to look at the topic of opportunities/chances and timely reactions to changes from a different and new perspective. At the same time, it is a perspective that can complement what we know so far regarding this issue when it was examined through the lens of other theories. Moreover, our research fills another gap related to the lack of tourism resilience studies conducted from the perspective of individual enterprises instead of the entire tourism sector, as is usually the case in the literature.

Thus, the paper's aim is to identify chances and timing strategies used by tourism entrepreneurs in conditions of large-scale emergencies (COVID-19) and show how they can serve organizational resilience. We formulate two research questions (RQ):

RQ1: What chances are recognized and used by tourism entrepreneurs in crisis conditions for organizational resilience?
RQ2: How and when do tourism entrepreneurs use chances in crisis conditions for organizational resilience, i.e. what timing strategies did they use?

Identification and presentation of chances recognized by tourism enterprises during the crisis (answer to RQ1) is necessary to understand what timing strategies and how they were used by these enterprises (RQ2). To answer those questions, we present findings of qualitative research conducted from May 2021 to January 2022 in the form of 12 individual in-depth interviews (IDIs) and four focus group interviews (FGIs) with representatives of four selected industries in the tourism sector in Poland: 1) accommodation facilities, 2) tourist attractions, 3) travel agencies, and 4) the MICE industry (altogether 22 participants).

From the theoretical point of view, our paper allows us to demonstrate the use of the concept of chance management and timing strategies from the perspective of tourist entrepreneurs' resilience, previously not used in this context and to a limited extent used in the general management literature so far. The findings of our research show that the COVID-19 pandemic has created difficult operating conditions, but they have enabled the use of various types of chances, e.g. significant changes to the offerings provided or the implementation of digitalization solutions that have enabled companies not only to survive but even to develop. Moreover, four types of timing strategies i.e. chance-grasping strategy, chance-entraining strategy, chance-riding strategy, and chance-creating strategy (Jing & Van de Ven, 2018; Wójcik & Juszczyk, 2023), were identified based on our research as taken by tourism entrepreneurs to overcome the negative effects of the COVID-19 pandemic. Tourism enterprises are highly exposed to operating in crisis conditions. Therefore, chance management can be very useful in their activity and our research findings, in addition to contributing to theory, can be also used in economic practice.

The paper consists of five parts, the first of which is the introduction. The next part, which constitutes the theoretical basis for the research, presents the way of understanding the words "chance" and "opportunity", as well as the concepts of chance management and timing strategies. This part also presents the premises of tourism enterprises' orientation towards chance and short-term strategy in search of organizational resilience. The third part of the paper is the research methodology preceding the research findings. The fifth part is a discussion of the findings obtained with the existing knowledge from the literature, as well as a conclusion, including research limitations, directions for future research, and managerial implications.

LITERATURE REVIEW

Understanding of opportunities and chances in the literature

Both words, i.e. opportunity and chance, often appear in management literature. Both of them mean a situation or event where doing something brings benefits. An opportunity relates to a situation or event in which it is possible to do something we would like to do. It implies good odds for something beneficial for an organization (Juszczyk & Wójcik, 2023). Opportunities are usually planned or known. In turn, a chance is defined as an occasion that allows something to be done. The term is used to talk about destiny, fate, something unpredictable, or something that unpredictably falls upon someone. Chance is usually unplanned or random. It is mostly connected with risk, a piece of luck, a turn of good fortune. An opportunity refers to a favorable option, a good way, a moment, or a specific point in time (Sandström, 2005). In the case of chance, the literature highlights the probability of success with assessment and evaluation of its level (Hilbert, 2012; Levy, 2003). Concerning an opportunity, attention is concentrated on the events conducive to success, usually without gradation of the potential benefit. Thus, taking a chance implies being prepared for both positive and negative effects (Jarunwaraphan & Mallikamas, 2020), while taking an opportunity has only positive connotations (Sebt et al., 2009). To conclude, chance has a broader range of meanings than opportunity (Juszczyk & Wójcik, 2023). However, the difference, as Jing and Van de Ven (2018) – the authors of chance management concept themselves – claim – is small. Thus, they use both terms, chance and opportunity, interchangeably, treating them as synonyms.

Jing and Van de Ven (2018) define the chance to change as "a favorable moment for change agents to enact organizational change events" (p. 165). They follow a relational view of chance management, according to which the change agents can assess the favorability of current and future momentum and how they can benefit from introducing different timing strategies in order to use a perceived chance. In this paper, we follow this view too. Moreover, we adopt the same position regarding both terms, i.e. chance and opportunity. We treat them interchangeably despite the awareness of a slight difference between them. However, we claim that treating them as synonyms does not hamper the understanding of the issues discussed. At the same time, distinguishing both terms may, in some cases, be so difficult or risky that it would not serve to maintain the clarity of considerations.

Chance management and timing strategies concept

The growing uncertainty and turbulence of the environment make it impossible to build reliable forecasts, thus significantly shortening the planning and strategic action horizon of many organizations. Therefore, long-term plans and strategies lose importance and the actions taken are a combination of rational intentions and accidental factors, such as, for example, chances. Thus, entities increasingly focus on taking and creating chances (Brown & Eisenhardt, 1997), and this can be done alone or in beneficial relationships with partners (Mischkowski & Glöckner, 2016). As a consequence, emerging strategies and incremental relationships are becoming increasingly important (Kohtamäki et al., 2022; Monticelli et al., 2023).

According to Mintzberg (1978, 1979: 25), strategy is "a way of shaping the relationship between an organization and its environment." If the actions undertaken by organizations are emerging, then only in retrospect will they develop into some pattern or consistency, which will provide the basis for including them in the term "strategy" (Mintzberg & Waters, 1985; Tidström, 2008; Tsoukas, 2010, Dahl et al., 2016). Stańczyk-Hugiet (2004) points out that the temporality of strategies implemented by entities in a sudden and unplanned manner as an answer to changes appearing in the environment is an element of the strategy that appears in a given place and time. It is so even though such a strategy is not created according to formalized procedures and is based on previously determined strategic goals. Strategy understood in this way is revealed in streams of organizational activities, constituting a sequence of decisions determining the organization's operation "over a certain period of time" (Simon, 1976, p. 163).

As the literature shows (Orlikowski & Yates, 2002), prior studies have taken an objective perspective toward time, assuming time to be uninfluenced by human actions. However, with time, research has shown a shift towards a more subjective perspective of timing (Pérez-Nordtvedt et al., 2008), where "time is experienced through the interpretive processes of people who create meaningful temporal notions such as events, cycles, routines, and rites of passage" (Orlikowski & Yates, 2002, p. 689). Considering the subjective perspective of time, research on the so-called "timing strategy" stresses that managers adopt and perceive strategic timing as a way to ameliorate their efficiency and output. In the field of management, timing strategies can be understood as "reactions tailored to current situations and a specific, favorable moment in time" (Wójcik & Juszczyk, 2023). Thus, timing strategies emphasize the temporal perspectives of strategic orientation (Mosakowski & Earley, 2000), taking into account the dynamics of the environment (often the industry itself – Porter (1990)) and social dynamics, as well as the temporal nature of the elements occurring in these environments (Lynch, 2000; Durand et al., 2017). Moreover, in economic practice, the chance and intuition of managers, including those in the tourism sector, underlay any decision related to the proper timing of the actions of organizations.

Thus, the subjective perspective towards time focuses on timing strategy as an important way to manage the chance, i.e. taking advantage of the chances, appropriate and favorable moments – time – or situations. Organizations can, therefore, tailor their timing strategies to improve their chances of success. With such a view, managers can assess the favorability of current and future chances to reap benefits from identifying and using a perceived chance by adopting different timing strategies (Wójcik & Juszczyk, 2023). Jing and Van de Ven (2018) make three assumptions in their chance management concept. Firstly, many changes are cyclical and, therefore, predictable. Secondly, what is impossible now may turn out to be possible due to the changing rhythm of the environment (e.g., after introducing changes within the organization). Thirdly, change agents play a key role – they choose the time and change according to a specific vision.

Based on the relational approach to the use of chance, Jing and Van de Ven (2018) present four timing strategies: chance-grasping strategy, chance-entraining strategy, chance-riding strategy, and chance-creating strategy. They are identified based on how the entities deciding to introduce the change, the so-called change agents, perceive and evaluate the results of current and future momentum (see Figure 1).

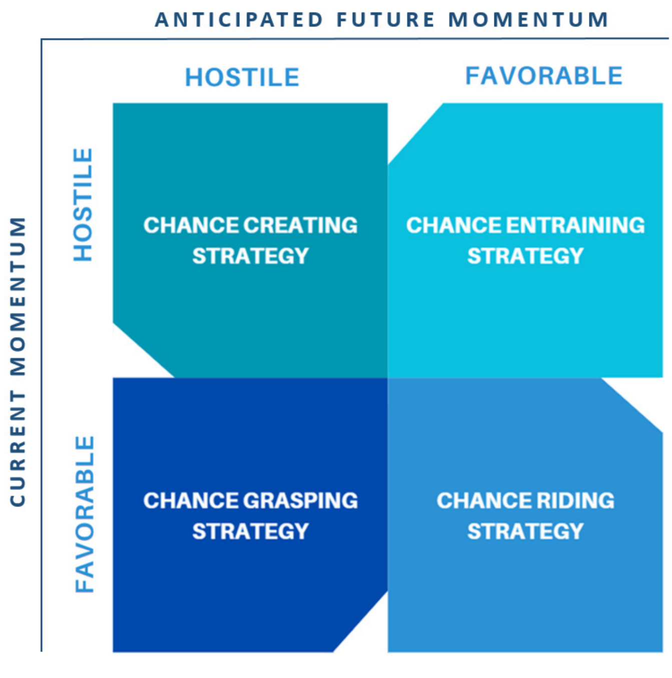


Figure 1. Four different timing strategies of chance management

Source: Jing and Van de Ven (2018).

The chance-grasping strategy can be used when the current momentum is favorable and, at the same time, future momentum is perceived as unclear or hostile. Thus, organizations should act promptly to grasp the chance; otherwise, it may slip away (Jing & Van de Ven, 2018).

The second, chance-entraining strategy refers to the situation when the current momentum is perceived as unfavorable for a change but is expected to turn favorable soon. Thus, organizations adapt their activities – when they are performed and at what rate – to the changing rhythm of the environment. Thus, with the chance-entraining strategy, organizations try to attune their actions parallel to favorable chances derived from environmental changes (Perez-Nordtvedt et al., 2008). This strategy is often used in situations of cyclical changes that, to some extent, can be predicted.

As for the third strategy, i.e. chance-riding strategy, it is possible to implement when entities in organizations perceive current and future momentum for changes as favorable. In that case, they create a vision and depending on the occasion, organizations pay particular attention to basing the development of the vision of the idea on the open imagination. They can then realize the vision based not only on the present but also on future opportune moments (Kotter, 1990). Therefore, this strategy is about developing a vision for long-term changes (with long-term benefits, not just a quick profit) to take advantage of a valuable opportunity.

The last of the strategies is the chance-creating strategy. It can be taken when both current and future momentum for change are perceived as hostile. This strategy is driven by organizations' motivation and plans, followed by their actions to perceive and manipulate the environment to create a favorable chance. In that approach, the chance creation is at least a partially endogenous process for organizations being change initiators. They first change some conditions, then wait for a response to their actions from the environment, and then take further actions once the situation is perceived to be favorable. Thus, organizations can create a chance by redirecting the momentum towards the environment (Jing & Van de Ven, 2018; Wójcik & Juszczyk, 2023).

Tourism enterprises' orientation towards chance and short-term strategies in search of organizational resilience

Wójcik and Juszczyk (2023) emphasize two variables to timing strategies, i.e. orientation towards strategy (in a long- or short-term perspective) and orientation towards chance (weak or strong). Based on the literature (e.g., Čorak et al., 2020; Kwok & Koh, 2022; Panzer-Krauze, 2022) and observation of economic practice, in the context of the unpredictability, uncertainty, and turbulence of the environment caused by the COVID-19 pandemic, tourism enterprises and destinations had to adapt to new environmental conditions, abandoning existing plans, often also those of a strategic nature. Thus, they had to adopt a short-term strategy orientation (Čorak et al., 2020) and a strong orientation towards chance in their pursuit of organizational resilience.

The origins of the concept of resilience, often used in the context of a crisis, are described in various ways in the literature. Some researchers point out that the concept of resilience ("elasticity") comes from ecology (Holling, 1973), where "resilience" was expressed as the tolerance and response of ecosystems to various types of changes. Subsequently, the concept has found wide application in psychology, engineering, social sciences, and other disciplines (Jinyan et al., 2023). In management, it is used especially for entrepreneurs' coping with crises (Bangso et al., 2023). With the deepening of research, scholars have generally recognized that the concept is not only "maintaining stability and restoring the original state" as covered by "engineering resilience" and "ecological resilience," but also "renewing, transforming, establishing a new growth path, resisting risks," which is emphasized by adaptive resilience based on an evolutionary perspective (Hu, 2012).

The business world recognizes resilience as a crisis management strategy for business stability and adaptability to all types of changes during natural disasters and emergencies (Sharma et al., 2021). Business resilience is linked to the organization's ability to adapt to the environment and new circumstances to mitigate the effects of the incident (Supardi et al., 2020). Resilience strategies include coordination, various crisis management techniques, creating relationships with partners, sometimes even a comprehensive network, recognition, usage of opportunities/chances, and timely response to them (Alves et al., 2020).

Tourism enterprises have undertaken many activities reflecting short-term strategy orientation and a strong orientation towards chance in their pursuit of organizational resilience. For instance, the rapid implementation of innovations, e.g. innovative products and services, start-ups, innovative models of mass cooperation, or crowdsourcing (Qiu et al., 2020). All of them were perceived as a chance to improve companies' survivability and, thus, organizational resilience. For example, to continue operating and limit customer contact, restaurants created theme boxes and outdoor bar activities or focused on delivery or pick-up instead of on-site service (Breier et al., 2021). Moreover, companies explored solutions such as artificial intelligence (AI) to help with personalization and cost savings (e.g., AI-powered telephony and chatbots), and robots to offset the labor shortage and increase productivity (Berman, 2023; Seo & Lee, 2021). Digitalization of tourist operations was also perceived as an essential opportunity for tourism sector resilience due to contact restrictions and the closure of in-person experiences (Sharma et al., 2021; Fontanari & Traskevich, 2023).

Another visible change in companies' activities was related to the sustainability trend (Casado-Aranda et al., 2021). For instance, some restaurants decided not to implement a delivery service instead of an on-site service because management staff did not perceive this solution as sustainable (Breier et al., 2021). Actions for sustainable development were visible not only at the level of companies but also of entire destinations (Sumanapala & Wolf, 2022; Romagosa, 2020; Seabra & Bhatt, 2022) and are also perceived as a very important element of tourism resilience (Čorak et al., 2020).

The pandemic also resulted in greater government involvement in helping companies during the pandemic crisis, but also in the sudden implementation of various restrictions affecting national and international tourist travel (Sharma et al., 2021; Romagosa, 2020). Such restrictions had a significant impact on companies' short-term activities and, consequently their ability to generate income. As Gössling et al. (2020) claim, international travel restrictions have been especially unprecedented and particularly damaging to the tourism sector. During the pandemic, there was a greater emphasis on domestic tourism due to temporary border closures and obstacles to international tourism (Farmaki et al., 2020), with tourism sector companies abandoning international offerings almost immediately.

Moreover, the pandemic required fast implementation of certain sanitary safety solutions, especially in accommodation services, such as remote check-in, disinfection of rooms, etc. (Farmaki et al., 2020; Salem et al., 2021), which resulted in considerable costs for tourism enterprises (Qiu et al., 2020).

All these activities were aimed at quick implementation and were usually perceived as a chance to survive in the market during a challenging time. In practice, this means implementing emergent strategies (Downs et al., 2003), characterized by improvisation and entrepreneurship in formulating ad hoc actions (Brown & Eisenhardt, 1997) while at the same time learning from current situations and experiences (Noe et al., 2003). Therefore, it can be indicated that in the contemporary shaping of the strategy of tourism enterprises, it is visible that activities are adapted to current situations and a specific, favorable moment.

It is worth emphasizing that an approach reflected in short-term strategy orientation and strong chance orientation has been reinforced by further macroeconomic factors faced by the tourism sector, such as inflation (Huseynli, 2022), geopolitical risk (Hailemariam & Ivanovski, 2021), including the war in Ukraine (Pandey & Kumar, 2023) and the subsequent global volatility and uncertainty (Hadi et al., 2020). The above-mentioned events intensified the activities of tourism enterprises, aimed at treating environmental barriers as opportunities rather than threats (Efrat et al., 2022). This is, for example, noticeable in the context of shaping intangible resources and inter-organizational relationships, i.e. concluding spontaneous and *ad hoc* cooperation agreements (Nguyen et al., 2022).

The flexible and time-based strategy (Stańczyk-Hugiet, 2004; Mintzberg, 1985; Smith & Rupp, 2003; Weber & Tarba, 2014; Dahl et al., 2016) implemented by tourism entities to make changes suddenly appearing in the environment not only allows tourism enterprises to survive in a turbulent and discontinuous environment but also allows for development (Fatonah & Haryanto, 2022). It should be emphasized, however, that although timing strategies seem to be extremely important in contemporary environmental conditions from the organization's functioning point of view (especially in the context of tourism entities affected by the breakthrough crisis of COVID-19) and although they have redefined the classic approach to strategy, in the area of strategic management they remain poorly understood (Jing & Van de Ven, 2018). In particular, we do not know whether and which of the four identified timing strategies are used by tourism enterprises and what chances they see in the actions they undertake, which are assessed through the prism of favorable or hostile momentum, both current and future. Thus, chance management and timing strategies still require further empirical research.

METHODOLOGICAL APPROACH

In this paper, qualitative research was conducted within the interpretative paradigm, assuming that the reality under study is subjective (i.e., as it is presented and interpreted by the interlocutors (Eisenhardt & Graebner, 2007). The rationale for using this type of research was that the researched issue (especially with its theoretical background being chance management and timing strategies concepts) is relatively new, and at the same time is socially important, and of a complex nature.

The research was done in two stages – in the first, in-depth interviews (IDIs) and in the second, Focus Group Interviews (FGIs) were conducted. Before each interview started, interviewees were informed about the aim of the research, that all information is confidential, and that personal data will not be known to the reader. Moreover, participants of FGIs were informed about the rules of the FGI and that there are no right or wrong answers (Morrison-Beedy, Côté-Arsenault & Feinstein, 2001).

IDIs were conducted in April-May 2021, with 12 representatives of four purposefully chosen industries of the tourism sector. The choice of the industries resulted from the criterion of their importance in the tourism sector and the fact that they play a key role in it. The selection of interviewees was purposeful, combined with the snowball technique. According to the sample selection criteria, the interviewees had to represent:

- various types of enterprises in terms of 1) the form of activity, 2) size (number of employees), 3) specificity of the product/service offer, 4) location, and 5) form of ownership; this was to ensure diversity, which is important in qualitative research;
- be company owners/managers who know how the pandemic situation has affected the functioning of the company they represent.

The resulting selected IDI sample consisted of:

- 3 representatives of tourist attractions – i.e. two museums and a mine adapted for tourism purposes;
- 3 representatives of tourist intermediaries – i.e. travel agencies;
- 3 representatives of accommodation facilities (two hotels and one agritourism);
- 2 entities representing MICE companies;
- 1 Polish Chamber of Tourism representative.

All enterprises were located in the south of Poland, in the Silesian Voivodeship. Characteristics of IDIs participants are presented in Table A in the paper's appendix.

At this first stage of the research, a semi-structured questionnaire was used. It contained a list of issues and questions that the moderator wanted to ask. These questions were open and concerned three groups of problems: 1) how the entity's activities in the provision of services/product sales changed during COVID-19, 2) how relations with the external and internal environment changed, and 3) the assessment of one's professional work as a result of changes caused by the pandemic. Within all three groups of issues, the interviewer inquired about the chances that appeared as a result of the pandemic.

At the second stage of the research – from December 2021 to January 2022 – 4 Focus Group Interviews (FGIs) were conducted. FGI was used as a complementary method to IDI. It enables discussion that generates a variety of ideas and also emotions that may be missing in IDI (Richard et al., 2018). FGIs also allow us to better identify similarities and differences of opinion between interviewees. Participants were asked about the same three issues as during IDIs. Additionally, they were asked how they perceived the effects of the COVID-19 pandemic from a longer perspective and how they thought they had changed over time.

FGI participants were representatives of each of the four industries mentioned. The total number of interviewees at this stage was 22 people. The participants selected purposively had to meet the same criteria as those in the first stage of the research. However, in the case of location it was assumed that in order to broaden the scope of the empirical research, they would represent organizations from different parts of Poland, so as to ensure diversity related to the functioning of enterprises during a pandemic in different parts of the country. At this second stage of the research, each of the 4 industries was represented by 5 or 6 interlocutors – 5 from each: accommodation facilities and tourist attractions and 6 interviewees from each: travel agencies and MICE entities. Small groups of FGI participants (Krueger, 2014) allowed for comfortable conditions favoring free expression and discussion, which is necessary for FGI. The detailed characteristics of FGIs participants are presented in Table B in the paper's appendix.

Due to the ongoing pandemic during both stages of the research, the interviews – both IDIs and FGIs – were conducted online using Zoom or Google.meet platforms. IDIs were conducted online or in person (in places suggested by interviewees). It depended on the preferences of the interlocutors because, at that time, due to the pandemic, there were substantial restrictions on face-to-face meetings. In turn, FGIs were conducted entirely using the Zoom platform. Due to restrictions restrictions, it was much easier to invite several people to an online meeting than to organize it live. Research in the field of hospitality has shown that online FGI has the potential to generate similar levels of idea diversity as in-person FGI, while at the same time being: easier to schedule, lower cost, providing more succinct and focused discussions, and delivering findings faster (Richard et al., 2018, 2021).

The shortest IDI lasted less than one hour (54 minutes), the longest one was nearly 3 hours (174 minutes), and the average was almost 2 hours (108 minutes). As for the FGI – the shortest lasted 2 hours 12 minutes, the longest 2 hours 24 minutes, and the average interview lasted 2 hours 17 minutes.

Each IDI and FGI was – with the consent of the interlocutors – recorded. Then, each of them was transcribed by a third-party company. In general, the material was coded and analyzed under the method based on three related activities (Miles & Huberman, 1994), i.e. data reduction (transcribing data, creating case cards for all participants taking part in IDI and FGI and coding material with the use of NVivo software application); data display (development of the final list of codes, agreed by two coders and previously sorted) and data verification (verifying and analyzing data using existing literature, concerning especially chance management and timing strategies concept, together with organizational resilience).

The data was coded by two authors of the paper using deductive codes corresponding to three groups of issues directly related to chance management theory. i.e.: 1) conditions stimulating short-term orientation in business activities and strong chance orientation demonstrated by interviewees, 2) types of chances recognized by interviewees during the COVID-19 pandemic serving organizational resilience, and 3) types of timing strategies: chance-grasping, chance-entraining, chance-riding and chance creating strategy. Each of the two coders first assigned the material to three groups of deductive codes, and then, as the transcripts were read, both groups of codes were detailed inductively by two coders, working independently of each other. As a result, after coding all the material, the coders discussed the code list and developed a common set of final codes. When establishing it, the authors discussed the differences that emerged in their opinions. At this stage, the list and structure of the codes were finally modified, adding individual codes or combining some of them into one group. The final list of codes (deductive and inductive ones) is presented in Table 1. In relation to deductive codes, Table 1 also includes definitions adopted on the basis of the chance management concept (Jing & Van de Ven, 2018).

Table 1. List of codes

No.	Type of code	Code name
1.	D	**Conditions stimulating short-term strategy and chance orientation –** new environmental conditions to which one must adjust by adopting a short-term strategy orientation, abandoning existing plans, often of a strategic nature
1.1.	I	Unpredictability of changes
1.2.	I	Unpredictability of aid from the state/local authorities
1.3.	I	Changes resulting from changing customer expectations
1.4.	I	Accelerated digitization
2.	D	**Chances recognized during COVID-19 crisis serving organizational resilience** (chance being an occasion which allows something to be done)
2.1.	I	A chance to improve/change/expand the product/service offer
2.2	I	A chance to acquire new customer
2.3.	I	A chance to use digital competences
2.4.	I	A chance to use additional time for previously postponed activities (e.g., thinking about the future of the company, applying for grants, etc.)
2.5.	I	A chance to build new relationships with:
2.5.1.	I	Customers
2.5.2.	I	Contractors
2.5.3.	I	Competitors
2.5.4.	I	Employees
3.	D	**Types of timing strategies –** reactions tailored to current situations and a specific, favorable moment in time
3.1.	D	Chance-grasping strategy – current momentum being favorable and future momentum predicted to be hostile or uncertain; change agents grasp the available chance by promptly taking change actions
3.2.	D	Strategy chance-entraining strategy – situational momentum being currently unfavorable but anticipated to become favorable in the near future; entities entrain their change actions with the changing rhythm of the environment
3.3.	D	Chance-riding strategy – both current and future momentum predicted to be favorable, change agents ride this incredible chance to plan and implement organizational change over the long run
3.4.	D	Chance-creating strategy – both current and future momentum perceived to be hostile; change agents create a chance to change by redirecting the development of internal or external momentum

Note: * D – deductive, I – inductive code.

To ensure "thick description" important in qualitative research and increasing its credibility, also allowing us to show the issue of seeing chances in the difficult situation of the pandemic through the eyes of the interviewees, and thus to understand better the analyzed phenomenon (Czernek-Marszałek & McCabe, 2022), we present quotations from our IDIs and FGIs. Each quotation is followed by the participant's code (according to the pattern: [FGI number, R, participant number] and [R, IDI number] – depending on the type of interview (IDI or FGI).

RESULTS

Our research showed that during the COVID-19 pandemic, entrepreneurs took advantage of many different chances, which ultimately, as interviewees claimed, had a positive impact on the functioning of enterprises, serving organizational resilience. Taking advantage of these changes was facilitated by significant and frequent changes, often difficult to predict, affecting the functioning of enterprises in new pandemic conditions.

Operating in conditions of constant change as a catalyst for taking advantage of chances

The changes caused by the COVID-19 pandemic were primarily related to new operating conditions for enterprises, caused by a sharp decline in demand (inability to travel, closure of many institutions and facilities related to entertainment, tourism, or sports), and the inability to conduct business (e.g., due to lack of income, need to lay off employees). As our research participants claimed, all this was accompanied especially by changing customer expectations and preferences, unpredictability of future changes, development and acceleration of digitalization, and uncertainty of further state aid policy towards entrepreneurs. In these conditions – much more difficult than normal – i.e. of constant and hard to predict change, and therefore limited possibilities to plan further actions – entrepreneurs tried to adapt to new market conditions flexibly:

It's hard to plan anything here when we're actually like a boiled frog. So the situation actually changed in such 2-week cycles [3R3]

Undoubtedly it was probably the most difficult period in the activity of our company (…). So everything came to a standstill, we changed the direction of our activities a bit for the time being, until we get organized and we don't know what to do next. [3R5]

In the broadly understood event, we had to adapt to the times, adapt to the pandemic and learn to convince customers that something can also be done online so as not to lose continuity of revenues and keep the company as a functioning and active company, without any terrible debts. Also as a product, we had to... as if we were forced into a very fast digital revolution, which taught us how to produce online events. We have created a small virtual studio in our office from which we can connect and organize such events [3R2].

Importantly, these difficult market conditions became a catalyst for taking advantage of various business opportunities taken by the interlocutors. This served organizational resilience, i.e. allowed companies to survive on the market, retain employees, gain new customers, and sometimes even to expand the business and gain a market advantage.

Our research identified the following chances to:

- introduce changes in the company's offerings (including extension/narrowing, quality improvement, or the method of providing offerings). Some of these changes were planned earlier and the pandemic created an opportunity to accelerate them; some were absolutely not planned;
- develop or use (often previously acquired) digital competences to implement digitalization;
- use time that appeared during the pandemic for activities that were previously postponed in the company (e.g., thinking about the company's further strategy or preparing European Union grant projects);
- build new relationships with various stakeholder groups, i.e. customers, employees, contractors, and even competitors.

Chances to change offerings provided

Referring to changes in the scope of the offer provided, interlocutors indicated that the pandemic had become a catalyst for changes in this area, i.e. it created an opportunity to accelerate previously planned changes to the offer, e.g. introducing new products or services, entering foreign markets or increasing the scope of online sales in the overall sales volume. For instance, one interviewee claimed that in addition to schools' trips offered by her travel agency, she started to prepare an offer based on sustainable tourism, which is something she had planned to do before the COVID-19 pandemic (see Table 2). These changes allowed for organizational resilience and provided an opportunity both to survive in the market and to expand the business. This is shown by the words of some of our interlocutors:

Interviewee: Currently, we have received a lot of inquiries, much more than before, the so-called super individual ones. So there is an inquiry to organize a trip for two people, three people, five people or a group of friends, up to six people (...).
Researcher: Such an exclusive offer, i.e. clearly changing needs and your reaction to these changing needs.
Interviewee: Exactly. So here... it's funny, because it was one of the elements of the development strategy that we had developed there before COVID. This was also the scope we were supposed to develop. It accelerated significantly on its own. [2R4]

The pandemic also created a chance to implement previously unplanned actions to change the company's offer. In this regard, similar to accelerating activities previously planned, entrepreneurs expanded the scope of their offer to adapt it to new customer needs. Thus, they gained new customers and cooperation partners. Importantly, at the same time, by diversifying their offer, entrepreneurs diversified the risk of their business – one business complemented the other (in case one of them had to be completely shut down due to the lockdown) and, as they claimed, they were better prepared for possible difficult situations in the future. All this was mainly intended to serve organizational resilience and the company's survival in difficult market conditions:

We changed, I mean we opened up, I started to be more active in 2021 on Facebook (…). Looking for people, clients, because we haven't been operating for many years, only recently (…). In 2021 we have expanded our service by, that is, we have found new customers. In this way. We also started producing small gifts and started producing gifts generally related to Kryłów. This hasn't happened in the countryside until now. Additionally, we have a historic building, we have a point where these people can be taken. I have an art studio. In this way, one activity stimulated another. [1R2]

Researcher: What has this pandemic changed for you in these three aspects?
Interviewee: for me there is a certain dynamic, not so much of total changes, but of perception of the reality that is here and that may be in a moment. This means a certain diversification of both the activities already undertaken, as well as planning taking into account what has happened. That is, searching for areas and activities that can provide greater certainty of stability. Because, of course, no action will ever give 100% certainty, but certain actions can give greater certainty that we will be prepared for something next, something that is to come or something that has already begun [3R4]

Some interviewees also indicated that the new situation forced them to think more openly and innovatively and, as a result, search for new solutions, which is reflected in the company's diversified offer. For instance, as one of the interlocutors indicated, his company started cooperation with the film industry to rent an accommodation facility and minimize losses related to the lack of customers (see Table 2). As interviewees claimed, such new solutions ensured organizational resilience understood not only as companies' survival on the market but also their development because sometimes these new services became, as they put it, "sales hits":

The benefit is probably that the tour pilots stopped looking at... as I say, at reheated cutlets, that is, at doing the same trip all the time, visiting the same things, showing and saying different things. We have forced, and I think this pandemic has also forced us to look a little broader, not to duplicate programs, but to try to diversify them in some way. And thanks to this, we gained many new attractive products that became sales hits this year. And which turned out to be such a hit and attracted us customers. And also new ones, because it's not just about relying on existing customers all the time. But also *to reach out to new ones and acquire new customers. So I think that the added value is opening up to something new and looking for something more than what we have been doing before. [2R3]*

Chances to use digital competences

Interviewees also pointed to the chances of using previously acquired digital competences to implement an online offer. This, as well as taking advantage of the opportunity to change the company's offer, allowed enterprises not only to survive on the market, but also to acquire new customers, in the case of some interviewees, gain a competitive advantage and ensure further development of the enterprise:

Well, but then the online option appeared, there was a need for the market to evolve online and the world to move to this world, to this virtual reality (...). it appeared in such a nice place, when we could do it and the competition couldn't. So thanks to this, we probably gained some competitive advantage, thanks to which we gained some interesting clients who are still with us and work with us to this day. And it certainly had a positive impact on our professional position, because it protected us from the effects of this pandemic, which probably if it weren't for the world, these new clients and some of the old ones, could have ended tragically for us. [3R2]

These words clearly show what is crucial in the chance management concept, i.e., when a company perceived the time and circumstances as favorable to introducing changes, it implemented them. This allowed the company not only to survive the difficult time of the pandemic, but also to gain a competitive advantage (when for the competition, this moment to introduce changes was not suitable).

Chances to gain additional time to think about the company's future strategy

Our interlocutors also indicated that the pandemic created a chance to use the additional time that appeared (e.g., due to the lack of customers) to think things over or take actions that earlier entrepreneurs did not have time for. For example, to think about the company's strategy and future, write a European Union project, renovate a facility, implement previously indicated digital solutions or develop other forms of activity leading to the diversification of the offer. This also contributed to the company's development, including acquiring new customers, as well as diversifying the business risk:

I thought to myself: okay, maybe this is the right time to enter, for example, the Internet and start working there. And within half a year, out of 200 contacts on LinkedIn, I now have over 15,000 followers on LinkedIn. So I managed to create a rich, large community that follows me and that constantly recommends me, comments, and supports me. And it's nice that I used this time to, instead of sitting and crying, act and do something that will help me further develop. I think that even if this time wasn't difficult, because it was very difficult, there was this space and this time to maybe try to act a little differently and maybe look for something for yourself. I think I took advantage of it. And I don't regret that I made such and no other decisions during this COVID (...). I believe that this is the time for this transforming leader, for this leader of changes who can use every opportunity to think a little differently and start acting. [3R4]

These words clearly show that during the pandemic, there were chances that could be used not only for quick results but also in a short time. But, when future circumstances were also perceived as favorable, entities implemented changes potentially providing long-term benefits for the company. This is related to the so-called chance-riding strategy discussed in further considerations.

Chances to establish and/or develop business relationships with different groups of stakeholders

In the business context, the pandemic was also an opportunity to start or change the scope of cooperation with various stakeholder groups, i.e. employees, customers, contractors, and competitors. These changes included, among others: changes in these engaged entities, their number, or the nature of cooperation with them.

Concerning employees, entrepreneurs drew attention to the pandemic as an opportunity for greater team integration. It resulted, among others, from greater than usual empathy among team members, which is, to some extent, the result of similar experiences related to concerns about the health of loved ones during the pandemic and the desire to share their dilemmas with their colleagues. Moreover, a more flexible approach to working time also contributed to strengthening these relationships.

When it comes to customer relationships, their strengthening during the pandemic was a chance for entrepreneurs to undertake new activities, sometimes on the initiative of the customers themselves. An example may be entrepreneurs looking for new activities during the pandemic.

Opportunities to introduce changes in relationships with contractors and competitors were especially interesting. Regarding the first group, the need for changes in the offer, forced by the pandemic, was an impulse for entrepreneurs to introduce changes in the offer, and these were sometimes a chance to look for new contractors, often operating nearby, and build relationships with them:

> *Also when it comes to organizing some events, there will be some cards, and menus, in quotation marks, because we are not a restaurant, but when it comes to the proposed meals, there will be more emphasis on what we have around us. And we started to cooperate with people who (...). Maybe not any creation, any new institution, but generally there have already been a few meetings in a closer circle, where we will offer such things, do such things, and maybe cooperate more. [R2]*

Among the contractors, state and local government offices were an important group in the case of entrepreneurs who noticed a change in approach and a chance for better cooperation with them. The change in approach towards entrepreneurs resulted from the possibility of a wider extent of remote communication.

The next group of stakeholders for whom the pandemic was an opportunity to build or tighten relationships were competitors. Such cooperation had a different nature, including the lending of equipment and sharing of experiences. It led to the introduction of new, cheaper, sometimes innovative solutions from the perspective of companies:

> *If the set designer calls me and says: Marek, we have such and such an idea, we talk to each other about certain innovative solutions that sell well with one client and this supplier with whom we live closely, he is not afraid to talk to us about it, he just boasts that we should also try to promote it and indeed this cooperation at this level works very, very well and if we have a product that we will develop, we try to promote it to other clients, also showing that there are such possibilities, that thanks to what we have done, we can duplicate it, we can improve it, sometimes make it cheaper if possible, just to show that we also try to look at the market and the fact that it is difficult situation because customers are reducing their budgets, even though they sometimes demand more than before the pandemic. [4R5]*

A particularly important issue in this case, which was the impulse to build those relations, was frequent changes in the introduction and removal of restrictions. The appropriate interpretation of the regulations required legal assistance, which was cheaper to obtain by working together. Moreover, such cooperation created an opportunity to represent one's position towards the authorities and, thus, allowed organizational resilience.

As the above findings show, even in such an extremely difficult period for running a business as the COVID-19 pandemic, entrepreneurs representing the tourism sector were able to identify various types of chances. They served organizational resilience because, thanks to their use, companies could survive on the market and, in some cases, develop their offer. The circumstances caused by the pandemic were a kind of catalyst for changes in business activities, some of which were planned even before their appearance. In some cases, digitalization provided more time that could be used for more careful planning of strategic activities. The relationships built with employees, clients, contractors, and competitors increased the chance of survival on the market through a faster response to market expectations or the ability to present one's position through various types of associations, making it more visible to the authorities.

Synthetically, together with some additional quotations, we present our findings regarding chances recognized by tourism entrepreneurs during the COVID-19 pandemic and serving organizational resilience in Table 2.

Table 2. Chances taken during the COVID-19 pandemic by tourist entrepreneurs serving organizational resilience

Type of chance		Actions taken to seize the chance	Organizational resilience effects	Quote
Chance to change the offer provided	Previously planned	• introduction of new products/services to the offer (e.g., individual tourism, next to group tourism; production of gifts alongside accommodation activities; introducing offer based on sustainable tourism) • more open and innovative thinking • entering new markets, e.g. foreign ones • changes in the seasonality of business activity • increasing the scope of online sales in the overall sales volume	• survival on the market (e.g., thanks to risk diversification resulting from the diversification of goods and services; one activity complementing another), • business development (e.g., by increasing the company's turnover, gaining new cooperation partners; introducing new elements in the offer being "sales hits") • better preparation for future difficult situations (alertness)	*Interviewee: But somewhere in the back of my mind I have an idea for sustainable development... to teach kids how to travel responsibly. Because it is very, very, very important nowadays.* *Researcher: I understand that it is also about ecological aspects related to caring for the climate, yes, we are talking about that?* *Interviewee: yes, as ecological as possible. But also supporting some local organizations or local places. Stopping at local farms, not necessarily McDonald's (laughter). And things like that. So somewhere around here we will also slowly implement such things into school trips. And since, as I say, this topic is very close to me, I hope that it will also be like this... increasing the attractiveness of the offered trips, our trips. [2R1]*
	Not previously planned			*We are a small business structure, but this year we also established a limited liability company that engaged in the production of hemp products and cold-pressed oils. We are also looking for other sources of income (...) it is a side activity, but related to the fact that, well, we are located in the countryside and we have opportunities to do something other than tourism [3R3]* *Oh, and maybe going back to the entity's activities – I'm also in talks with the film industry, because, as you can see behind me, we have historic interiors that have already taken part in some productions several times. It is also a solution and a supplement to the budget apart from tourism. So I also want to develop the functioning of the facility in this direction [3R3]*
Chance to use digital competences		• using existing digital competences • development of new digital competences • online event production • gaining knowledge and experience regarding the advantages and disadvantages of online solutions	• survival on the market (including by acquiring new customers) • gaining a competitive advantage • enterprise development	*One of the initiatives I organized was a networking space, the Dialog Possibilities conference, where we talked on various topics with our invited speakers. And when it stopped, the event that had been organized systematically for 3 years stopped. And then it was made... this question, this decision, what to do, whether to stop activities completely or look for an alternative that would enable further development. And then we created or moved our event to online. And we created an event on the Internet in the form of a conference with experts and our participants, where tickets were normally sold, where everything took place in our virtual space. Also looking for a way not to completely close down the business and at the same time look for a solution to what happened. And everything that was event-related and what was happening offline was stopped at that moment [3R4]*
Chance to gain additional time to think about the company's future strategy		• rethinking the company's strategy and future • writing a European Union project to get financial support for business activities • renovation of the facility • implementation of previously indicated digital solutions • development of other forms of activity leading to the diversification of the offer	Company development thanks to acquiring new customers and diversifying business risk	*[COVID] postponed all of that for us. In a sense, it lengthened. But maybe it can also be explained by the fact that thanks to this we still have a moment to refine something, improve something (...) these were not milestones (laughter), it was just a fight for survival. Now we can only enjoy the fact that we have rested and have the strength to continue working somewhere here. That we've just done things during the pandemic that will help us diversify in the future [R1]*

Type of chance	Actions taken to seize the chance	Organizational resilience effects	Quote
Chance to establish and/or develop business relationships with different groups of stakeholders	• searching for new tasks for employees during the closure of the facility • looking for opportunities to change the company's offer through cooperation with other entities • mutual lending of equipment by existing competitors • using the possibility of remote communication • accepting proposals from existing customers • creation of new entities representing the interests of the sector	Company survival and development through: • better team integration • higher number of contractors • a new product in the offer • a more competitive offer • better negotiating position in contacts with the authorities	*Currently, due to the pandemic (...), I am also preparing these offers.* *I am not only a person who only sells the finished product, but it also creates. Thanks to this, I also met many new contractors, people. Not only those that were already known to me from somewhere, but as if now you can get to know them in person, over the phone, or simply how they eat sees face to face. [2R3]* *However, what has changed is the emergence of new creations from the bottom up. Here I use the word "creation" as creations then and now established organizations, such as the Turystyczna Organizacja Otwarta. Organization which started to speak out very strongly on matters above all these smaller entrepreneurs. (...) But personally... it was also the case that we among themselves... I saw it with various owners of travel agencies. Also we talked and, as if potentially competitors, although I think that the Warsaw market is so huge that we are not for ourselves competition [2R2].*

Timing strategies

As shown by previous analyses of the activities of tourism sector entrepreneurs undertaken in the face of the crisis related to the pandemic, not all of them assessed the situation as clearly hostile to their organization. Therefore, we are dealing with a subjective perception of time, which was the starting point for the use of various timing strategies related to the use of opportunities emerging in the environment. Our research findings allowed us to identify examples of all four timing strategies in chance management, i.e. chance-grasping, chance-entraining, chance-riding, and chance-creating strategy.

Chance-grasping strategy

In entrepreneurs' statements, relatively often, one could see references to the chance-grasping strategy – seizing an opportunity related to the assessment of the current situation as favorable and the future as at least unclear. The interviewees emphasized that the pandemic had created conditions in which the product they offered was more popular than usual or the circumstances caused by the pandemic favored faster changes in their professional activity. It acted as a catalyst for these changes. In this case, appropriate behavior allowed them to seize the opportunity. At the same time, they were unsure about the future situation. Such a strategy was already evidenced by the previously quoted statements of the interlocutors regarding, for example, the use of digital competences or changes in the offer. They are also highlighted in the following statements:

> *Generally speaking, this pandemic has certainly given us the advantage of accelerating some of our assumptions as an office. So we wanted to expand the offer to include trips there in months other than the classics. And we succeeded, we did it and we will definitely strive to get there. When it comes to entering other foreign markets there, we also did it because we had time for it during this pandemic. But we must be very careful in our actions and, above all, in expecting results. So we have a large margin here that everything we plan somewhere at some time may simply not work out. [R4]*

> *As I mentioned at the beginning, we were renovating this house because it is 120 years old. We renovated it for 10 years, only on weekends (…). We do it economically. Do the renovation ourselves. The pandemic has actually grounded us here permanently. My job in a corporation in Warsaw is over. This house came to life. You could say that the pandemic helped us make a life decision and open our own business. The pandemic helped us decide to open it and finally take up agritourism. [R2]*

> *This is related to the pandemic of this type and so far schools have not been interested in coming to us because they preferred to go elsewhere. The schools looked for places as close as possible to the fact that the kids had not been together*

for a year. This was dictated by the pandemic. The children were not integrated. There was a terrible wilderness there. These children couldn't even play together. They were distracted and difficult to reach. Teachers were looking for outside activities. This is a change of offer. We simply went in to meet their needs. We did not limit ourselves only to agritourism and hosting people here but also made an extra offer. Because of the pandemic... These were forced behaviors of teachers, children, and in general. Revenue volume. It automatically increased. This mainly allowed us to exist throughout September and half of October. Tourism has stopped. And schools would allow us to engage in additional activities. [R2]

Chance-entraining strategy

Some statements showed a positive attitude towards the future, despite the current unfavorable situation. However, it was noticed that the pandemic situation would not last forever and, according to the changing rhythm of the environment, it would pass one day. Therefore, entities could adjust their actions in the long run to the expected favorable situation in the future. This approach was consistent with the assumptions of the chance-entraining strategy:

I hope that our entity will continue to exist as it existed and we will develop. Especially since we also have a plan for... maybe not a great diversification of services, but before the pandemic we bought a tenement house where we have an office and we want to open a hostel there. So our heads are also busy, today, when there are no customers, they are busy with renovation and thinking about the future. Of course, it will take a while, because it is an old tenement house, over two hundred years old, in the center of Bielsko-Biała. So I hope I'll see you in about 2 years. Then we hope to move (laughter) and I hope that by then we will no longer think about closing hotels, hostels, and so on. [2R1]

Chance-riding strategy

Some enterprises focused on taking advantage of short-term opportunities that appeared in the environment, and also tried to take actions that were to have a positive impact on the company in the future, which they expected to change for the better in the long term. This approach was part of the chance-riding strategy:

First of all – take advantage of this moment before we are locked up. So if there is something, we try our best to take it and not give it up. Well, we are actually thinking about using this time, when nothing will be happening, for additional tasks – writing additional projects, obtaining funds perhaps for some other activities, not necessarily for education for children and youth. Renovation of the exhibition, because the building is old, is also... Well, actually 7 years old, so it also requires some renovation and renewal. So, well, we can use this time of stagnation to prepare ourselves for the better times, maybe. [R1]

Here the company introduced a lot of new improvements strictly for COVID. And it has changed for the better because to some extent the meetings are not as pleasant as you mentioned before, but only online, but we can do much more of these meetings, if someone cancels the meeting, we save time. [R7]

In other cases, the interlocutors did not refer so much to their activity, but to the activity of entities in the environment and the impact of actions taken as a result of the chance created by the environment on the functioning of entities in the long run:

These were funds to maintain fees and leases, which we didn't manage to get, and they were also funds to change the course of action, i.e. someone who took advantage of this moment and went online, that is, bought equipment for video, for streaming today these companies are doing well, so it helped some. We didn't succeed for various reasons, in the sense that we approached it fairly, that maybe our situation wasn't that bad, and maybe there was no need to fight for something that turned out to be not good after all. [R10]

Chance-creating strategy

Due to unfavorable external conditions during the pandemic, which also influenced the perception of the future as unclear or hostile, some entities had to use the chance-creating strategy to survive on the market. Creating an opportunity involves diversifying one's professional activity or trying to influence the environment through activity on the Internet. The following statements may demonstrate this approach:

The times are very uncertain, it is not known whether there will be events or weddings, I have a few events for January, but I am already afraid that they will be at great risk. I acquired some other skills, such as photographing interiors, and apartments, filming interiors, and real estate. So I'm slightly changing my industry in a different direction. I also used to program websites and stores for 12 years, and then I got into product and advertising photography, then into events and weddings. And slowly, at the same time, I will probably go back to my roots, because the future is so uncertain that you have to balance a bit because you don't know what will happen. [R1]

For me there is a certain dynamic, not so much of complete changes, but of perception of the reality that is here and that may be in a moment. This means a certain diversification of both the activities already undertaken, as well as planning taking into account what has happened. That is, searching for areas and activities that can provide greater certainty of stability. Because, of course, no action will ever provide 100% certainty, but certain actions can provide greater certainty that we will be prepared for something next, something that is to come or something that has already begun. So for me personally, it's like this... It's a time of a bit of fear and a bit of fear at the beginning, but then transforming into change and searching for new solutions. For example, listen, at the very beginning of this COVID I thought to myself, what can I do? (…). I thought to myself: OK, maybe this is the right time to go, for example, to the Internet and start working there. And within half a year, out of 200 contacts on LinkedIn, I now have over 15,000 followers on LinkedIn. So I managed to create a rich, large community that follows me and that constantly recommends me, comments and supports me. And it's nice that I took advantage of this time (…). I think that even if this time was not difficult, because it was very difficult, there was this space and this time to maybe try to act a little differently and maybe look for something for yourself. I think I took advantage of it (…). I would probably never want to go back to these situations. However, I have faced them and I believe that this is the time for a transforming leader, for a change leader who can use every opportunity to think a little differently and start acting. [3R4]

As the above examples show, the environmental conditions caused by the pandemic and their subjective assessment resulted in tourism sector entities using all four timing strategies.

DISCUSSION AND CONCLUSIONS

Uncertainty is considered one of the key properties of crises (Nohrstedt et al., 2018). Some crises, including the COVID-19 pandemic – due to their scope, meaning, global reach, and non-expected appearance – are labeled as large-scale emergencies (Crick & Crick, 2020). As our research has shown, the large-scale emergency crisis caused by COVID-19 forced entrepreneurs to react in a timely manner to adapt to the new market situation flexibly. Thus, our research is in line with works stressing adopting a short-term strategy orientation by tourism enterprises during the COVID-19 pandemic (Čorak et al., 2020; Do, Nguyen, D'Souza, Bui, & Nguyen, 2022; Alves, Lok, Luo & Hao, 2020).

However, our research extends the knowledge from the literature in this context because, in addition to the short-term orientation taken by tourism enterprises, it shows – with the use of the chance management concept – that the research entities were also highly chance-oriented. We see this as a contribution to the theory because the concept of chance management, including timing strategies, has not been widely used in the management literature. In particular, it has not been used in the context of organizational resilience of tourism enterprises. At the same time, this concept, unlike other theories more established in the literature and useful to analyze opportunities/chances (e.g., dynamic capabilities or effectuation theory), allows us to consider a chance – its recognition and use – primarily from the time perspective, i.e. by assessing the time of implementing changes, depending on whether current and future circumstances are subjectively perceived as favorable or unfavorable. This allows the identification of timing strategies, which are a key issue in chance management. Secondly, the issue of opportunities/chances in the context of tourism resilience after COVID-19 has so far been analyzed mainly by the entire tourism sector, not individual enterprises. Thus, our contribution relates to fulfilling the two indicated gaps of knowledge.

In our paper, we answer the two research questions: RQ1) What chances are recognized and used by tourism entrepreneurs in crisis conditions for organizational resilience?, and RQ2) How and when do tourism entrepreneurs use chances in crisis conditions for organizational resilience, i.e., what timing strategies did they use?

Regarding the answer to the first question, our research made it possible to identify various types of emerging chances that served organizational resilience. Tourist entrepreneurs used them to help the company survive in the market, but also – what may be more surprising – develop their business and even gain a competitive advantage (Krupski, 2013; Juszczyk & Wójcik, 2023). Some of those chances were identified in the literature, although it should be emphasized that they were not the main area of interest and empirical research in these works. Thus, this research also brings added value in this respect because it allows for organizing knowledge about the opportunities perceived and used by tourism enterprises during the crisis caused by the COVID-19 pandemic. The identified opportunities include, in particular, a possibility for development of an offer based more strongly on sustainable tourism and ecotourism (e.g., Romagosa, 2020; Seabra & Bhatt, 2022), increasing travelers' trust in companies (Laparojkit & Suttipun, 2021), taking chances to introduce changes in organizational culture and leadership (Czernek-Marszałek, 2022) as well as increasing level of digitization of the sector (Ntalakos et al., 2022; Sharma et al., 2021; Fontanari & Traskevich, 2023). Thus, our research shows that companies focused on solutions such as diversifying their services and supply chains, using local and diversified markets, and using digital technologies (Rastegar et al., 2023). This is in line with the claim by Kuckertz et al. (2020) that companies that treated the adversity caused by the COVID-19 crisis as a chance gained access to broader opportunities in the environment and, therefore, to greater benefits.

Our research also showed that the pandemic conditions forced entrepreneurs to diversify their offers and look for completely new solutions. Flexible adaptation, modification, extension, or a complete change of the existing offer enabled entrepreneurs to acquire new customers, and – sometimes even to their surprise – the offered products or services became "sales hit." For example, it can be indicated that the change in the offer allowed entrepreneurs to establish cooperation with schools that organized trips for children and became reliable customers in the absence of a lockdown.

In this context, it is worth emphasizing that in conditions of uncertainty, cooperation has become more important (Zafari et al., 2020). Entrepreneurs undertook inter-organizational cooperation and built new relationships with various stakeholder groups, i.e. customers, employees, contractors, local authorities, and even competitors. Such cooperation was different, concerned different areas, and had a different scope, including the lending of equipment and sharing of experiences. It also allowed for the implementation of new, cheaper, and sometimes also innovative – from the perspective of companies – solutions. Thus, our research findings are in line with those works in which inter-organizational cooperation emerges as a critical means to effectively address typically adverse implications of crisis (Crick & Crick, 2020; Deters & Zardo, 2023; Islam et al., 2023). It is argued that the intense and multidimensional cooperation involving authorities, companies, universities, and competitors expedite development and innovations (Turner et al., 2022; Deters & Zardo, 2023). Environmental uncertainty potentially opens up greater opportunities to generate relational rents through inter-organizational cooperation (Castañer & Oliveira, 2020).

Comparing our research findings to previous work in the field of tourism resilience, we can conclude that the literature also emphasized the importance of the opportunities/chances arising from the crisis. Hence, our conclusions are consistent with previous works in many areas. For instance, the literature stresses that crises could generate a chance to create more resilient companies that become more proactive, learn from their experiences, and collaborate in the social and regional spheres (Castro & Zermeño, 2020). In this context, the concept of resilience is adaptability to all types of changes, during different crises, disasters, and emergencies (Sharma et al., 2021). In the same way, it was perceived by our interviewees who, using their adaptive capacity, often treated barriers in the environment as chances for their enterprises' development, which at the same time constituted an important lesson for the future (Price et al., 2022; Noe et al., 2003). The COVID-19 pandemic has provided tourism entrepreneurs with certain characteristics, such as much higher flexibility in acting, and developing innovativeness, including technological ones (Price et al., 2022; Sharma et al., 2021; Fontanari & Traskevich, 2023), which allowed them to face crises and strengthen the resilience of their enterprises (Castro & Zermeño, 2020). In this context, they learned to adapt their efforts to the external pace of environmental change based on the assessment of the dynamics of the situation, i.e. pay attention to changing conditions both inside and outside the organization to change their actions if necessary (Huy, 2001) and be better prepared to implement them in the future.

Relating to the second research question concerning timing strategies, our findings are in line with what Pettigrew (2012) stressed, that simple concepts for formulating and implementing long-term strategies must grapple with deeper layers of complexity in times of change and uncertainty. Such adaptation to changes in the environment means that organizations have to use dynamic strategies adapted to emerging chances, such as timing strategies (Wójcik & Juszczyk, 2023). Indeed, according to our interlocutors, the growing uncertainty and turbulence of the environment often make long-term plans and strategies lose importance as determinants of an organization's development. Thus, affirmatively, chances are perceived as possibilities in a positive way, in turn, timing strategies as a way to move away from the paradigm of "linear order, regularity, and constancy" (Merry & Kassavin, 1995) in the long term, and instead perceived as spontaneous, sudden actions, adapted to the current situation.

Our research identified four types of timing strategies that companies used to overcome the crisis caused by the COVID-19 pandemic. These were: chance-grasping strategy, chance-entraining strategy, chance-riding strategy, and chance-creating strategy (Jing & Van de Ven, 2018). Taking into account the statements of the interlocutors, it can be noted that the chance-grasping strategy was dominant. In this strategy, entrepreneurs perceived current circumstances as favorable for the implementation of changes, while future circumstances were perceived as at least unclear. This assessment of future conditions resulted from several changes taking place in the environment and high uncertainty as to how they will develop in the future (Juszczyk & Wójcik, 2023). Our research shows that this uncertainty was strengthened by, for example, changes in customer expectations and preferences (Hu et al., 2021) or difficulties in predicting public aid policy towards entrepreneurs (Shubtsova et al., 2020). Hence, in case of uncertainty about the future or the perception of the future time for change as unfavorable, entrepreneurs in the tourism industry believe that to take advantage of the opportunity, change should be introduced as soon as possible. Our interlocutors acted *ad hoc*, using their entrepreneurship and improvisation (Brown & Eisenhardt, 1997) by introducing changes to the offer or quickly acquiring digital competencies, which was also associated with changes in professional activity. The chance-grasping strategy, as the most frequently used one, allows us to conclude that tourism enterprises operating in conditions of uncertainty adapt mainly to the situation after the fact – that is, they are reactive and much less proactive. This is consistent with the findings of Bhaskar and Filimonau (2021), who explain their findings by referring to some specific characteristics of tourism enterprises, such as belonging to SMEs or limited resources.

The findings of our research also showed the use of the chance-entraining strategy. In that case the dynamics of changes in the environment resulting from COVID-19 were perceived as unfavorable for changes, but entrepreneurs expected that they would change to a favorable one shortly. The studied enterprises, therefore, adapted their activities to the changing rhythm of the environment (Perez-Nordtvedt et al., 2008; Jing & Van de Ven, 2018), hoping for the further development of their entities. Examples included the desire to diversify services and plans to open a new hostel after the pandemic. As in the case of all four strategies, the use of this type of timing strategy results from the individual perception of managers of tourism enterprises (Venkataraman, 2003). In this approach, the timing strategies implemented allowed not only the survival but also the development of enterprises.

The third timing strategy identified in our research was the chance-riding strategy. Our interlocutors perceived the current and future momentum of change as positive. The COVID-19 pandemic was treated by tourism entrepreneurs not only as a present, convenient moment to introduce changes and implement plans (Kotter, 1990) but also as an element allowing for long-term benefits and, therefore, a valuable opportunity. The activities undertaken in these circumstances included: submitting appropriate applications for external funds (for activities not yet implemented), renovation and modernization of exhibitions, and – as the interlocutors emphasized – preparing for new, better times.

The last identified as a result of the research timing strategy, i.e. the chance-creating strategy, manifested itself in the perception of the current and future situation by tourism enterprises as hostile. As a result, entrepreneurs consciously diversified their professional activity and acquired new skills and competencies to be able to find their way in an uncertain reality and a future perceived as hostile. In this approach, chance creation was an endogenous process among the surveyed entrepreneurs, and therefore, they were the initiators of changes (Jing & Van de Ven, 2018; Wójcik & Juszczyk, 2023).

To conclude, based on our findings, it can be said that enterprises that used the appropriate timing strategy and treated the crisis caused by the COVID-19 pandemic as a chance were not only able to survive on market but also to develop. Moreover, some businesses underwent a certain transformation, adopted innovative solutions, and, as a result, were renewed (Prince et al., 2022). Thus, chance management serves organizational resilience.

Last but not least, our research can also be related to previous work in the literature on opportunities. For instance, in the context of different approaches on whether opportunities are discovered or created by entrepreneurs or whether they exist as objective phenomena or are subjectively perceived by entrepreneurs (e.g., Shane, 2003; Shane & Venkataraman, 2000; Sarason et al., 2006; Edelman & Yli-Renko, 2010), our research is consistent with these works, which emphasize that both ways of understanding opportunities are correct (e.g., Renko, Shrader & Simon, 2012). Chance management emphasizes that perception is subjective, but it requires adaptation to objectively existing external changes. Moreover, it is the time in which the decision is made to introduce a change and adapt to internal and external factors in a specific way (i.e., using timing strategies) that determines the effect of the implemented changes. The authors of the chance management concept – Jing and Van de Ven (2018) – claim that the role of change agents is assumed to be both adaptive and purposeful. Also, our research showed that when the assessment of current and future momentum for introducing a change allowed it, entrepreneurs decided to implement previously planned strategies. Additionally, these changes could be long-term in terms of their implementation time and their effects.

This corresponds to the results of some research on opportunities in other theories, e.g. dynamic capabilities or effectuation and causation. For instance, our research has shown that, as Renko, Shrader, and Simon (2012) claim, it is possible that entrepreneurs actively search for opportunities, even when they do not know the actual target of this search, and that the process of opportunity recognition may have both an element of search and serendipity. Our participants' perception of opportunities did not exclude active shaping and exploiting opportunities, as is the case with opportunities based on dynamic competences. These opportunities are proactive and aim to capitalize on emerging trends and changes, and their benefits are often long term. In our research, examples of the chance-creation strategy were also associated with the active creation of opportunities and did not exclude long-term changes.

Referring to the theory of effectuation and causation, it seems that chance management is only close to the logic of effectuation at first glance. This means that, especially in uncertain conditions, a set of entrepreneurial actions is dominated by the means at hand and a flexible and experimental strategy-oriented logic. However, chance management does not entirely rule out causation, a set of entrepreneurial actions dominated by a goal and planning-oriented logic. Our research showed that previously planned and well-thought-out changes were also implemented. Our findings in this context are, therefore, consistent with those which indicate (e.g., Cherbib, 2024) that the combination of causation and effectuation may be particularly beneficial (especially in conditions of uncertainty) and may foster the potential of highly entrepreneurial-oriented firms.

Limitations and future research directions

Our study has some limitations. First, research in the form of IDIs and FGIs is not representative, so it shows the situation only of entities selected for research, although this does not mean that the presented findings were not also characteristic of other entities in the tourism industry. Secondly, empirical research was carried out during the period of restrictions resulting in the occurrence of COVID-19. This was before the emergence of further factors stimulating changes in the environment, such as the war in Ukraine or rapidly increasing inflation. Repeating the research may allow researchers to assess to what extent the occurrence of new circumstances influenced the emergence and identification of new opportunities in the environment and their use by enterprises. Moreover, it would be possible to assess to what extent taking advantage of the chances that emerged as a result of the COVID-19 pandemic allowed tourism sector enterprises to gain a competitive advantage in the long term, and not only during the pandemic itself. Another limitation is the fact that the empirical research was conducted on a group of enterprises operating in the Polish tourism market, which, due to the specific nature of certain events in the environment caused by, for example, the policy of the state authorities, the public's approach to restrictions, could influence the nature of the emerging opportunities, precisely in this specific market. Conducting similar research in other countries would perhaps help identify other types of chances perceived and exploited by tourism enterprises during crisis periods. Finally, the qualitative nature of the study only identified the types of chances perceived and used by tourism enterprises without indicating which were most frequently used and which had the most significant impact on the enterprise.

Managerial implications

The conducted research has shown that even the most difficult conditions in the organization's environment, caused by difficult-to-predict global changes, such as the outbreak of the COVID-19 pandemic, can generate chances for tourism sector entities. However, their use requires, first of all, the ability of entrepreneurs to recognize them, and this ability may be related to the competencies they have, not always those directly related to their business (e.g., in the case of the COVID-19 pandemic, in particular in the field of digital competences). Also, four identified timing strategies used in chance management seem to be particularly useful for managers in the context of identifying, assessing, and exploiting perceived chances, i.e. the chance-grasping strategy, chance-creating strategy, hance-riding strategy, and chance-creating strategy.

Managers should be aware that employees are a particularly important group in the context of strengthening relationships. Due to the inability to perform typical tasks resulting from their duties, the situation caused by the pandemic was an opportunity to integrate the team better. Managers' attention should also focus on all groups of external stakeholders because cooperation with them can generate many opportunities. Closer than usual cooperation with clients, contractors, and competitors may constitute a chance, among others: to diversify the offer and reduce business costs, which is crucial for the organization's survival in challenging environmental conditions.

Acknowledgments

We would like to thank the Editors and Reviewers for their interesting and valuable comments that allowed us to improve the paper.

References

Ahadi, A., Bower, M., Singh, A., & Garrett, M. (2021). Online professional learning in response to COVID-19—towards robust evaluation. *Future Internet*, *13*(3), 56. https://doi.org/10.3390/fi13030056

Alvarez, S. A., & Barney, J. B. (2007). Discovery and creation: Alternative theories of entrepreneurial action. *Strategic Entrepreneurship Journal*, *1*(1-2), 11-26. https://doi.org/10.2139/ssrn.900200

Alves, J. C., Lok, T. C., Luo, Y., & Hao, W. (2020). Crisis management for small business during the COVID-19 outbreak: Survival, resilience and renewal strategies of firms in Macau. Retrieved from https://doi.org/10.1186/s11782-020-00094-2

Bangso, F. D., Djati, S. P., & Himawan Brahmantyo, M. H. (2023). Crisis management as a form of tourism policy transformation: Review of tourism resilience research. *Journal of Positive School Psychology*, *7*(1), 396-423.

Berman, D. (2023, September 11). *Revolutionizing The Hospitality Industry With Artificial Intelligence*. Retrieved from https://www.forbes.com/sites/forbesbusinesscouncil/2023/09/11/revolutionizing-the-hospitality-industry-with-artificial-intelligence

Bhaskara, G. I., & Filimonau, V. (2021). The COVID-19 pandemic and organisational learning for disaster planning and management: A perspective of tourism businesses from a destination prone to consecutive disasters. *Journal of Hospitality and Tourism Management*, *46*, 364-375. https://doi.org/10.1016/j.jhtm.2021.01.011

Breier, M., Kallmuenzer, A., Clauss, T., Gast, J., Kraus, S., & Tiberius V. (2021). The role of business model innovation in the hospitality industry during the COVID-19 crisis. *International Journal of Hospitality Management*, *92*. https://doi.org/10.1016/j.ijhm.2020.102723

Brown S. L., & Eisenhardt K. M. (1997). The art of continuous change: Linking complexity theory and time-paced evolution in relentlessly shifting organizations. *Administrative Science Quarterly, 42*(1), 1-34. https://doi.org/10.2307/2393807

Casado-Aranda, L. A., Sánchez-Fernández, J., & Bastidas-Manzano, A. B. (2021). Tourism research after the COVID-19 outbreak: Insights for more sustainable, local and smart cities. *Sustainable Cities and Society*, *73*, 103126. https://doi.org/10.1016/j.scs.2021.103126

Castañer, X., & Oliveira, N. (2020). Collaboration, coordination, and cooperation among organizations: Establishing the distinctive meanings of these terms through a systematic literature review. *Journal of Management*, *46*(6), 965-1001. https://doi.org/10.1177/0149206320901565

Castro, M. P., & Zermeño, M. G. G. (2020). Being an entrepreneur post-COVID-19–resilience in times of crisis: A systematic literature review. *Journal of Entrepreneurship in Emerging Economies*, *13*(4), 721-746. https://doi.org/10.1108/jeee-07-2020-0246

Cheer, J. M. (2020). Human flourishing, tourism transformation and COVID-19: A conceptual touchstone. *Tourism Geographies*, *22*(3), 514-524. https://doi.org/10.1080/14616688.2020.1765016

Čorak, S., Boranić Živoder, S., & Marušić, Z. (2020). Opportunities for tourism recovery and development during and after COVID-19: Views of tourism scholars versus tourism practitioners. *Tourism. An International Interdisciplinary Journal*, *68*(4), 434-449. https://doi.org/10.37741/t.68.4.5

Corbisiero, F., & Monaco, S. (2021). Post-pandemic tourism resilience: Changes in Italians' travel behavior and the possible responses of tourist cities. *Worldwide Hospitality and Tourism Themes*, *13*(3), 401-417. https://doi.org/10.1108/whatt-01-2021-0011

Crick, J. M., & Crick, D. (2020). Coopetition and COVID-19: Collaborative business-to-business marketing strategies in a pandemic crisis. *Industrial Marketing Management*, *88*, 206-213. https://doi.org/10.1016/j.indmarman.2020.05.016

Czernek-Marszałek, K. (2022). Motivation to work in the context of COVID-19 impact on tourism industry enterprises. *Problemy Zarządzania*, *20*(1(95)), 106-124. https://doi.org/10.7172/1644-9584.95.5

Czernek-Marszałek, K., & McCabe, S. (2022). Why qualitative papers get rejected by Annals of Tourism Research?. *Annals of Tourism Research*, *92*. https://doi.org/10.1016/j.annals.2021.103338

Dahl, J., Kock, S., & Lundgren-Henriksson, E. L. (2016). Conceptualizing coopetition strategy as practice: A multilevel interpretative framework. *International Studies of Management & Organization*, *46*(2-3), 94-109. https://doi.org/10.1080/00208825.2015.1093794

Deters, H., & Zardo, F. (2023). The European Commission in Covid-19 vaccine cooperation: Leadership vs coronationalism?. *Journal of European Public Policy*, *30*(6), 1051-1071. https://doi.org/10.1080/13501763.2022.2064900

Do, B., Nguyen, N., D'Souza, C., Bui, H. D., & Nguyen, T. N. H. (2022). Strategic responses to COVID-19: The case of tour operators in Vietnam. *Tourism and Hospitality Research*, *22*(1), 5-17. https://doi.org/10.1177/1467358421993902

Downs, A., Durant, R., & Carr, A. N. (2003). Emergent strategy development for organizations. *Emergence*, *5*(2), 5-28. https://doi.org/10.1207/s15327000em050204

Durand, R., Grant, R. M., & Madsen, T. L. (2017). The expanding domain of strategic management research and the quest for integration. *Strategic Management Journal*, *38*(1), 4-16. https://doi.org/10.1002/smj.2607

Edelman, L., & Yli–Renko, H. (2010). The impact of environment and entrepreneurial perceptions on venture-creation efforts: Bridging the discovery and creation views of entrepreneurship. *Entrepreneurship Theory and Practice*, *34*(5), 833-856. https://doi.org/10.1111/j.1540-6520.2010.00395.x

Efrat, K., Souchon, A. L., Wald, A., Hughes, P., & Cai, J. (2022). Mitigating coopetition tensions: The forgotten formation stage. *European Management Review*, *19*(4), 527-548. https://doi.org/10.1111/emre.12498

Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, *50*(1), 25-32. https://doi.org/10.5465/amj.2007.24160888

Farmaki, A., Miguel, C., Drotarova, M. H., Aleksić, A., Časni, A. Č., & Efthymiadou, F. (2020). Impacts of Covid-19 on peer-to-peer accommodation platforms: Host perceptions and responses. *International Journal of Hospitality Management*, *91*(September). https://doi.org/10.1016/j.ijhm.2020.102663

Fatonah, S., & Haryanto, A. T. (2022). Exploring market orientation, product innovation and competitive advantage to enhance the performance of SMEs under uncertain events. *Uncertain Supply Chain Management*, *10*(1), 161-168. https://doi.org/10.5267/j.uscm.2021.9.011

Fontanari, M., & Traskevich, A. (2023). Smart-solutions for handling overtourism and developing destination resilience for the post-covid-19 era. *Tourism Planning & Development*, *20*(1), 86-107. https://doi.org/10.1080/21568316.2022.2056234

Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism*, *29*(1), 1-20. https://doi.org/10.1080/09669582.2020.1758708

Hadi, D. M., Naeem, M. A., & Karim, S. (2022). The exposure of the US tourism subsector stocks to global volatility and uncertainty factors. *Current Issues in Tourism*, 1–14. https://doi.org/10.1080/13683500.2022.2031916

Hailemariam, A., & Ivanovski, K. (2021). The impact of geopolitical risk on tourism. *Current Issues in Tourism*, *24*(22), 3134–3140. https://doi.org/10.1080/13683500.2021.1876644

Harper, L (2022, March 9). *How will increased debt change the airline industry?*. Retrieved from https://www.flightglobal.com/airlines/how-will-increased-debt-change-the-airline-industry/147632.article

Hilbert, M. (2012). Toward a synthesis of cognitive biases: How noisy information processing can bias human decision making. *Psychological Bulletin*. *138*(2), 1-27. https://doi.org/10.1037/a0025940

Holling, C. S. (1973). Resilience and stability of ecological systems. *Annual Review of Ecology and Systematics*, *4*(1), 1–23.

Hu, X. (2012). Review and prospect of research on regional economic elasticity. *Foreign Economics & Management*, *34*(8), 64–72.

Hu, F., Teichert, T., Deng, S., Liu, Y., & Zhou, G. (2021). Dealing with pandemics: An investigation of the effects of COVID-19 on customers' evaluations of hospitality services. *Tourism Management*, *85*, 104320. https://doi.org/10.1016/j.tourman.2021.104320

Huseynli, N. (2022). Econometric analysis of the relationship between tourism revenues, inflation and economic growth: The case of Morocco and South Africa. *African Journal of Hospitality, Tourism and Leisure*, *11*(1), 135-146. https://doi.org/10.46222/ajhtl.19770720.216

Huy, Q.N. (2001). Time, temporal capability, and planned change. *Academy of Management Review*, *26*(4), 601-623. https://doi.org/10.5465/amr.2001.5393897

Ioannides, D., & Gyimóthy, S. (2020). The COVID-19 crisis as an opportunity for escaping the unsustainable global tourism path. *Tourism Geographies*, *22*(3), 624-632. https://doi.org/10.1080/14616688.2020.1763445

Islam, M. S., Kabir, M. M., & Hassan, K. (2023). Resilience strategies of tour operators during the uncertainty of COVID-19: Evidence from Bangladesh. *Tourism Planning & Development*, *20*(2), 281-300. https://doi.org/10.1080/21568316.2022.2144429

Jarunwaraphan, B., & Mallikamas, P. (2020). A corpus-based study of english synonyms: Chance and opportunity. *REFLection*s, *27*(2), 218-245. https://doi.org/10.61508/refl.v27i2.248710

Jing, R., & Van de Ven, A. H. (2018). Toward a chance management view of organizational change. *Management and Organization Review*, *14*(1), 161-178. https://doi.org/10.1017/mor.2017.32

Jinyan, Y., Yingnan, Z., Yahui, Z., & Yixuan, J. (2023). Spatial and temporal changes and influencing factors of tourism resilience in China's provinces under the Impact of COVID-19. *Journal of Resources and Ecology*, *14*(2), 217-229. https://doi.org/10.5814/j.issn.1674-764x.2023.02.001

Juliano, M. (2023, April 28). *Cruise bounces back but it is floating in a sea of debt***.** Retrieved from https://www.tradewindsnews.com/cruise-and-ferry/cruise-bounces-back-but-it-is-floating-in-a-sea-of-debt/2-1-1423477

Juszczyk, P., & Wójcik, D. (2023). The concept of chance management in coopetition among cultural institutions. *European Management Studies*, *21*(2), 25-50. https://doi.org/10.7172/2956-7602.100.2

Khurana, I., Dutta, D. K., & Ghura, A. S. (2022). SMEs and digital transformation during a crisis: The emergence of resilience as a second-order dynamic capability in an entrepreneurial ecosystem. *Journal of Business Research*, *150*, 623-641. https://doi.org/10.1016/j.jbusres.2022.06.048

King, C., Iba, W., & Clifton, J. (2021). Reimagining resilience: COVID-19 and marine tourism in Indonesia. *Current Issues in Tourism*, *24*(19), 2784-2800. https://doi.org/10.1080/13683500.2021.1873920

Klein, V. B., & Todesco, J. L. (2021). COVID-19 crisis and SMEs responses: The role of digital transformation. *Knowledge and Process Management*, *28*(2), 117-133. https://doi.org/10.1002/kpm.1660

Kohtamäki, M., Whittington, R., Vaara, E., & Rabetino, R. (2022). Making connections: Harnessing the diversity of strategy-as-practice research. *International Journal of Management Reviews*, *24*(2), 210-232. https://doi.org/10.1111/ijmr.12274

Kotter, J. P. (1990). *What leaders really do. Harvard Business Review on leadership*. Boston, MA: Harvard Business School.

Krueger, R. A. (2014). *Focus groups: A practical guide for applied research*. London: Sage Publications.

Krupski, R. (2013). Rodzaje okazji w teorii i w praktyce zarządzania. *Prace Naukowe Wałbrzyskiej Wyższej Szkoły Zarządzania i Przedsiębiorczości*, *21*, 5-16.

Kuckertz, A., Brändle, L., Gaudig, A., Hinderer, S., Morales Reyes, C.A., Prochotta, A., Steinbrink, K.M., & Berger, E.S. (2020). Startups in times of crisis – A rapid response to the COVID-19 pandemic. *Journal of Business Venturing Insights*, 13. https://doi.org/10.1016/j.jbvi.2020.e00169

Kwok, A.O.J., & Koh, S.G.M. (2022). COVID-19 implications for tourism: Shifts, trends, challenges, and opportunities. In A.O.J. Kwok, M. Watabe, & S.G. Koh (Eds.), *COVID-19 and the Evolving Business Environment in Asia*. Singapore: Springer. https://doi.org/10.1007/978-981-19-2749-2_3

Laparojkit, S., & Suttipun, M. (2021). The influence of customer trust and loyalty on repurchase intention of domestic tourism: A case study in Thailand during COVID-19 crisis. *The Journal of Asian Finance, Economics and Business*, *8*(5), 961-969. https://doi.org/10.13106/jafeb.2021.vol8.no5.0961

Levy, M. (2003). Are rich people smarter?. *Journal of Economic Theory*, *110*(1), 42-64. https://doi.org/10.1016/s0022-0531(03)00024-3

Lynch, R. (2000) *Corporate Strategy*, 2nd ed. London: Prentice Hall.

Mary George, N., Parida, V., Lahti, T., & Wincent, J. (2016). A systematic literature review of entrepreneurial opportunity recognition: Insights on influencing factors. *International Entrepreneurship and Management Journal*, *12*, 309-350. https://doi.org/10.1007/s11365-014-0347-y

Merry, U., & Kassavin, N. (1995). *Coping with Uncertainty: Insights from the New Sciences of Chaos, Self-Organization, and Complexity*. Praeger Publishers/Greenwood Publishing Group.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. London: Sage.

Mintzberg, H. (1978). Patterns in strategy formation. *Management Science*, 24(9), 934-948. https://doi.org/10.1287/mnsc.24.9.934
Mintzberg, H. (1979). An emerging strategy of "direct" research. *Administrative Science Quarterly*, *24*(4), 582-589. https://doi.org/10.2307/2392364
Mintzberg, H., & Waters, J. A. (1985). Of strategies, deliberate and emergent. Strategic *Management Journal*, *6*(3), 257-272. https://doi.org/10.1002/smj.4250060306
Mischkowski, D., & Glöckner, A. (2016). Spontaneous cooperation for prosocials, but not for proselfs: Social value orientation moderates spontaneous cooperation behavior. *Scientific Reports*, *6*(1), 21555. https://doi.org/10.1038/srep21555
Monticelli, J. M., Verschoore, J. R., & Garrido, I. L. (2023). The emergence of coopetition in highly regulated industries: A study on the Brazilian private healthcare market. *Industrial Marketing Management*, *108*, 35-46. https://doi.org/10.1016/j.indmarman.2022.11.007
Morrison-Beedy, D., Côté-Arsenault, D., & Feinstein, N. F. (2001). Maximizing results with focus groups: Moderator and analysis issues. *Applied Nursing Research*, *14*(1), 48-53. https://doi.org/10.1053/apnr.2001.21081
Mosakowski, E., & Earley, P. C. (2000). A selective review of time assumptions in strategy research. *Academy of Management Review*, *25*(4), 796-812. https://doi.org/10.5465/amr.2000.3707728
Nguyen, T. Q. T., Johnson, P., & Young, T. (2022). Networking, coopetition and sustainability of tourism destinations. *Journal of Hospitality and Tourism Management*, *50*, 400-411. https://doi.org/10.1016/j.jhtm.2022.01.003
Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2003) *Human Resource Management: Gaining a Competitive Advantage* (4th ed.). New York: McGraw-Hill.
Nohrstedt, D., Bynander, F., Parker, C., & 't Hart, P. (2018). Managing crises collaboratively: Prospects and problems—A systematic literature review. *Perspectives on Public Management and Governance*, *1*(4), 257-271. https://doi.org/10.1093/ppmgov/gvx018
Ntalakos, A., Belias, D., Koustelios, A., & Tsigilis, N. (2022). Effect of Covid-19 on the tourism industry: Opportunities and threats in Covid-19 Era. In 4th International Conference on Finance, Economics, Management and IT Business (FEMIB), 107-114. Retrieved from https://doi.org/10.5220/0011065200003206
Orlikowski, W. J., & Yates J. (2002). It's about time: Temporal structuring in organizations. *Organization Science*, *13*(6), 684-700. https://doi.org/10.1287/orsc.13.6.684.501
Pandey, D. K., & Kumar, R. (2023). Russia-Ukraine war and the global tourism sector: A 13-day tale. *Current Issues in Tourism*, *26*(5), 692-700. https://doi.org/10.1080/13683500.2022.2081789
Panzer-Krauze, S. (2022). Rural tourism in and after the COVID-19 Era: "Revenge travel" or chance for a degrowth-oriented restart? Cases from Ireland and Germany. *Tourism and Hospitality*, *3*(2), 399-415. https://doi.org/10.3390/tourhosp3020026
Pérez-Nordtvedt, L., Payne, G. T., Short, J. C., & Kedia, B. L. (2008). An entrainment-based model of temporal organizational fit, misfit, and performance. *Organization Science*, *19*(5), 785-801. https://doi.org/10.1287/orsc.1070.0330
Pettigrew, A. M. (2012). Context and action in the transformation of the firm: A reprise. *Journal of Management Studies*, *49*(7), 1304-1328. https://doi.org/10.1111/j.1467-6486.2012.01054.x
Porter, M. E. (1990). New global strategies for competitive advantage. *Planning Review*, *18*(3), 4-14. https://doi.org/10.1108/eb054287
Price, S., Wilkinson, T., & Coles, T. (2022). Crisis? How small tourism businesses talk about COVID-19 and business change in the UK. *Current Issues in Tourism*, *25*(7), 1088-1105. https://doi.org/10.1080/13683500.2021.2023114
Qiu, R. T., Park, J., Li, S., & Song, H. (2020). Social costs of tourism during the COVID-19 pandemic. *Annals of Tourism Research*, *84*, 102994. https://doi.org/10.1016/j.annals.2020.102994
Rastegar, R., Seyfi, S. & Shahi, T. (2023). Tourism SMEs' resilience strategies amidst the COVID-19 crisis: The story of survival. *Tourism Recreation Research*. https://doi.org/10.1080/02508281.2023.2233073
Renko, M., Shrader, R. C., & Simon, M. (2012). Perception of entrepreneurial opportunity: A general framework. *Management Decision*, *50*(7), 1233-1251. https://doi.org/10.1108/00251741211246987
Richard, B., Sivo, S., Orlowski, M., Ford, R., Murphy, J., Boote, D., & Witta, E. (2018). Online focus groups: A valuable alternative for hospitality research?. *International Journal of Contemporary Hospitality Management*, *30*(11), 3175-3191. https://doi.org/10.1108/ijchm-11-2017-0715
Richard, B., Sivo, S. A., Orlowski, M., Ford, R. C., Murphy, J., Boote, D. N., & Witta, E. L. (2021). Qualitative research via focus groups: Will going online affect the diversity of your findings?. *Cornell Hospitality Quarterly*, *62*(1), 32-45. https://doi.org/10.1177/1938965520967769
Romagosa, F. (2020) The COVID-19 crisis: Opportunities for sustainable and proximity tourism. *Tourism Geographies*, *22*(3), 690-694. https://doi.org/10.1080/14616688.2020.1763447
Salem, I. E., Elbaz, A. M., Elkhwesky, Z., & Ghazi, K. M. (2021). The COVID-19 pandemic: The mitigating role of government and hotel support of hotel employees in Egypt. *Tourism Management*, *85*, 104305. https://doi.org/10.1016/j.tourman.2021.104305
Sarason, Y., Dean, T., & Dillard, J. F. (2006). Entrepreneurship as the nexus of individual and opportunity: A structuration view. *Journal of Business Venturing*, *21*(3), 286-305. https://doi.org/10.1016/j.jbusvent.2005.02.007
Sarasvathy, S. D., Dew, N., Velamuri, S. R., & Venkataraman, S. (2010). Three views of entrepreneurial opportunity. In Z.J. Acs & D.B. Audretsch (Eds.), *Handbook of Entrepreneurship Research* (pp. 77-96). New York: Springer. https://doi.org/10.1007/978-1-4419-1191-9_4
Seabra, C., & Bhatt, K. (2022). Tourism sustainability and COVID-19 pandemic: Is there a positive side?. *Sustainability*, *14*(14), 8723. https://doi.org/10.3390/su14148723
Sebt, M. H., Gereei, A., & Naghash, T. H. (2009). A comprehensive framework for integrated management of opportunities and threats by using dynamic system. *International Journal of Civil Engineering*, *7*(3), 16-169.
Seo K.H., & Lee J.H., (2021) The emergence of service robots at restaurants: Integrating trust, perceived risk, and satisfaction. *Sustainability*. *13*(8): 4431. https://doi.org/10.3390/su13084431
Shane, S. A. (2003). *A General Theory of Entrepreneurship: The Individual-Opportunity Nexus*. Cheltenham: Edward Elgar Publishing.
Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, *25*(1), 217-226. https://doi.org/10.2307/259271
Sharma, G.D., Thomas, A., & Paul, J. (2021). Reviving tourism industry post-COVID-19: A resilience-based framework. *Tourism Management Perspectives*, *37*, 100786. https://doi.org/10.1016/j.tmp.2020.100786
Shubtsova, L. V., Kostromina, E. A., Chelyapina, O. I., Grigorieva, N. A., & Trifonov, P. V. (2020). Supporting the tourism industry in the context of the coronavirus pandemic and economic crisis: Social tourism and public-private partnership. *Journal of Environmental Management & Tourism*, *11*(6), 1427-1434. https://doi.org/10.14505/jemt.v11.6(46).13
Simon, H. A. (1976). From substantive to procedural rationality. In T.J. Kastelein, S.K. Kuipers, W.A. Nijenhuis, & G.R. Wagenaar (Eds.), *25 Years of Economic Theory* (pp. 65-86). Cham: Springer. https://doi.org/10.1017/cbo9780511572203.006

Smith, A. D., & Rupp, W. T. (2003). An examination of emerging strategy and sales performance: Motivation, chaotic change and organizational structure. *Marketing Intelligence & Planning*, *21*(3), 156-167. https://doi.org/10.1108/02634500310474
Stankov, U., Filimonau, V., & Vujičić, M. D. (2020). A mindful shift: An opportunity for mindfulness-driven tourism in a post-pandemic world. *Tourism Geographies*, *22*(3), 703-712. https://doi.org/10.1080/14616688.2020.1768432
Stańczyk-Hugiet, E. (2004). O istocie strategii wiedzy. *Przegląd Organizacji*, (7-8), 6-8.
Sumanapala, D., & Wolf, I. D. (2022). The changing face of wildlife tourism during the COVID-19 pandemic: An opportunity to strive towards sustainability?. *Current Issues in Tourism*, *25*(3), 357-362. https://doi.org/10.1080/13683500.2021.1960281
Supardi, S., & Hadi, S. (2020). New perspective on the resilience of SMEs proactive, adaptive, reactive from business turbulence: A systematic review. *Journal of Xi'an University of Architecture & Technology, 12*, 1265-1275. https://doi.org/10.37896/jxat12.05/1524
Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, *28*(13), 1319–1350. https://doi.org/10.1002/smj.640
Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, *18*(7), 509–533. https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z
Tidström, A. (2008). Perspectives on coopetition on actor and operational levels. *Management Research: Journal of the Iberoamerican Academy of Management*, *6*(3), 207-217. https://doi.org/10.2753/jmr1536-5433060304
Tsoukas, H. (2010). Practice, strategy making and intentionality: A Heideggerian onto-epistemology for strategy as practice. *Cambridge Handbook of Strategy as Practice*, *3*, 47-62. https://doi.org/10.1017/cbo9780511777882.004
Turner, S., Segura, C., & Niño, N. (2022). Implementing COVID-19 surveillance through inter-organizational coordination: A qualitative study of three cities in Colombia. *Health Policy and Planning*, *37*(2), 232-242. https://doi.org/10.1093/heapol/czab145
United Nations World Tourism Organization. (2020a). *UNWTO World Tourism Barometer - Special focus on the Impact of COVID-19*. Madrid: UN World Tourism Organization. Retrieved from https://doi.org/10.18111/9789284421930
United Nations World Tourism Organization. (2020b). *Supporting jobs and economies thorough travel & tourism: A call for action to mintage the socio-economic impact of COVID-19 and accelerate recovery*. Retrieved from https://doi.org/10.18111/9789284421633
Venkataraman, S. (2003). Foreword. In S. Shane (Ed.), *A general theory of entrepreneurship: The individual-opportunity nexus* (pp. xi–xii). Cheltenham: Edward Elgar Publishing.
Weber, Y., & Tarba, S. Y. (2014). Strategic agility: A state of the art introduction to the special section on strategic agility. *California Management Review, 56*(3), 5-12. https://doi.org/10.1525/cmr.2014.56.3.5
Wójcik, D., & Juszczyk, P. (2023), Timing strategies in cooperation among cultural and art institutions. *Organization and Management* (in press).
Zafari, K., Biggemann, S., & Garry, T. (2020). Mindful management of relationships during periods of crises: A model of trust, doubt and relational adjustments. *Industrial Marketing Management*, *88*, 278-286. https://doi.org/10.1016/j.indmarman.2020.05.026

Appendix

Table A. IDIs Interviewee characteristics

Interviewee code	Type of activity	Function in the company	Year of establishment	Legal form	Size	Location	Range of activity
R1	accommodation	owner	2006	private sole proprietorship	micro	Żarki	national
R2	travel agency	owner	1991	private sole proprietorship	micro	Bielsko-Biała	regional
R3	travel agency	director	1992	general partnership	small	Bielsko-Biała	regional
R4	MICE	owner	2010	private sole proprietorship	micro	Katowice	regional
R5	travel agency	owner	1997	limited liability company	small	Żory	national
R6	accommodation	director	2001	limited liability company	medium	Zawiercie	national
R7	travel agency Polish Chamber of Tourism	Owner	1991	civil partnership	micro	Gliwice	regional
R8	tourist attraction	office manager	1953	association	small	Tarnowskie Góry	global
R9	MICE	owner	1991	private sole proprietorship	micro	Katowice	European
R10	tourist attraction	director	1970	public institution	small	Chorzów	regional
R11	tourist attraction	director	2004	public institution	small	Tychy	national
R12	accommodation	manager	2015	private sole proprietorship	small	Ustroń	national

Table B. FGIs participants' characteristics

No.	Code	Position	Age	Education	Year of establishment	City	Woivodship	Company size	Legal form	Reach	Type of activity
1	1R1	manager	31-40	higher	2019	Gdynia	pomorskie	micro	private sole proprietorship	national	accommodation
2	1R5	operations director of the resort	31-40	higher	2021	Karpacz	dolnośląskie	medium	limited liability company	national	accommodation
3	1R4	owner	41-50	higher	2016	Łęki Dukielskie	podkarpackie	micro	private sole proprietorship	national	accommodation
4	1R3	manager	up to 30	secondary	2020	Muszyna	małopolskie	micro	private sole proprietorship	national	accommodation

No.	Code	Position	Age	Education	Year of establishment	City	Woivodship	Company size	Legal form	Reach	Type of activity
5	1R2	manager	41-50	higher	2020	Kryłów	lubelskie	micro	private sole proprietorship	national	accommodation
1	3R1	owner	41-50	higher	2017	Konin	wielkopolskie	micro	general partnership	national	tourist attraction
2	3R5	marketing director	31-40	higher	2011	Bałtów	świętokrzyskie	large	limited liability company	national	tourist attraction
3	3R2	owner	41-50	higher	2005	Ząbki	mazowieckie	micro	private sole proprietorship	regional	tourist attraction
4	3R3	owner	51-60	higher	2012	Ścibórz	opolskie	micro	private sole proprietorship	national	tourist attraction
5	3R4	owner	31-40	secondary	2016	Zabrze	śląskie	micro	private sole proprietorship	national	tourist attraction
1	2R2	owner	31-40	higher	2015	Warszawa	mazowieckie	micro	private sole proprietorship	regional	travel agency
2	2R4	managing director	41-50	higher	2011	Wrocław	dolnośląskie	micro	private sole proprietorship	regional	travel agency
3	2R5	owner	31-40	secondary	2019	Kalisz	wielkopolskie	micro	private sole proprietorship	regional	travel agency
4	2R1	owner	41-50	higher	1991	Bielsko-Biała	śląskie	micro	private sole proprietorship	regional	travel agency
5	2R3	owner	41-50	higher	2000	Warszawa	mazowieckie	micro	private sole proprietorship	regional	travel agency
6	2R6	owner	61-70	higher	2011	Słupsk	pomorskie	micro	private sole proprietorship	regional	travel agency
1	4R9	owner	31-40	higher	1999	Warszawa	mazowieckie	micro	private sole proprietorship	national	MICE
2	4R3	president	31-40	higher	2018	Warszawa	mazowieckie	small	private sole proprietorship	national	security (cooperation with event industry)
3	4R7	project manager	31-40	higher	2013	Warszawa	mazowieckie	small	limited liability company	national	MICE
4	4R1	owner	31-40	higher	2015	Warszawa	mazowieckie	micro	private sole proprietorship	regional	MICE
5	4R5	senior project manager	31-40	higher	2009	Warszawa	mazowieckie	small	limited liability company	national	MICE
6	4R10	owner	41-50	higher	2018	Łódź	łódzkie	micro	private sole proprietorship	regional	MICE

Biographical notes

Katarzyna Czernek-Marszałek is an Associate Professor and the head of the Department of Management Theory at the University of Economics in Katowice. Her research interests include inter-organizational relationships (especially cooperation and coopetition), its determinants (e.g., trust, social embeddedness), innovations, and knowledge transfer. Her empirical research focuses on the tourism sector. Her works are published in journals such as Industrial Marketing Management, Tourism Management, Journal of Destination Marketing & Management, Annals of Tourism Research, Journal of Travel Research or Current Issues in Tourism.

Dagmara Wójcik is a Ph.D. Assistant Professor in the Department of Management Theory at the University of Economics in Katowice. Her research interests include strategic management issues, i.e. inter-organizational cooperation and coopetition in the creative industries such as performing arts. She is also the researcher involved in individual and team projects subsidized by the National Science Centre, the Ministry of Science and Higher Education, or the European Commission.

Patrycja Juszczyk is a Ph.D. Assistant Professor in the Department of Management Theory at the University of Economics in Katowice. Her research interests include the issues of strategic management, in particular, coopetition, cooperation and competition, especially in non-commercial organizations (public and non-profit). As a researcher, she conducts research that focuses mainly on the issues of social relationships and other sociological concepts and theories in management and quality studies.

Paweł Piotrowski is a Ph.D. Assistant Professor in the Department of Management Theory at the University of Economics in Katowice. His research interests focus on management and marketing issues related to the tourism sector, especially public management in tourism, place marketing, heritage management, events marketing, and tourism.

Brendan Richard is a Vice President of Marketing Analytics at Delaware North. His research focuses on innovation in hospitality and tourism with interests including the sharing economy, crowdsourcing, revenue management and future studies. He has published articles in Cornell Hospitality Quarterly, International Journal of Contemporary Hospitality Management, International Journal of Qualitative Methods, Journal of Revenue & Pricing Management, Journal of Vacation Marketing, and Journal of Tourism Futures.

Authorship contribution statement

Katarzyna Czernek-Marszałek: Conceptualization, Data Curation, Data Analysis, Funding Acquisition, Method, Project Administration; Supervision, Writing – Original Draft, Writing – Review & Editing. **Dagmara Wójcik**: Conceptualization, Data Curation, Funding Acquisition, Writing – Original Draft. **Patrycja Juszczyk**: Conceptualization, Data Curation, Funding Acquisition, Writing – Original Draft. **Paweł Piotrowski**: Data Curation, Data Analysis, Funding Acquisition, Writing – Original Draft. **Brendan Richard**: Writing – Review & Editing.

Conflicts of interest

The authors declare no conflict of interest.

Citation (APA Style)

Czernek-Marszałek, K.,Wójcik, D., Juszczyk, P., Piotrowski, P., & Richard, B. (2024). Turning crisis into chances: Tourism entrepreneurs' timing strategies amidst emergencies. *Journal of Entrepreneurship, Management and Innovation, 20*(3), 78-103. https://doi.org/10.7341/20242035

Journal of Entrepreneurship, Management and Innovation (2024)
Volume 20 Issue 3: 104-125

DOI: https://doi.org/10.7341/20242036
JEL Codes: Q01, L83, R11, I31, Z32, C52

The potential of accessible tourism for sustainable development of local communities in northern Pakistan

Hassaan Ahmed[1], Hadiqa Riaz[2]

Abstract

PURPOSE: *Accessible tourism holds significant importance for local communities as it is a cornerstone for fostering inclusivity and equal participation in the tourism industry. Recognizing the growing global emphasis on inclusivity, especially for individuals with diverse needs, this research aims to explore the multifaceted impacts of accessible tourism on the sustainable development of local communities in the northern areas of Pakistan. Additionally, the study assesses the moderating role of destination image between accessible tourism dimensions and the sustainable development of local communities. Given that destinations heavily rely on tourism to fulfill their socio-economic needs, it becomes imperative to evaluate the potential transformative impact of accessible tourism on their sustainable development.* ***METHODOLOGY:*** *A self-administered survey was completed using a two-stage sampling approach with 321 tourists and 321 local residents from five tourist destinations in northern Pakistan. Subsequently, the collected data were analyzed using Structural Equation Modeling (SEM) to test the proposed hypotheses.* ***FINDINGS:*** *The results show the significance of all four dimensions of accessible tourism (accessible core resources and attractors, accessible supporting factors and resources, accessible qualifying and amplifying determinants, and destination planning and management) in the sustainable development of local communities. The moderation assessment further confirms that destination image strengthens the relationship between accessible core resources and attractors, contributing to the sustainable development of local communities. However, destination image was found to have a negative moderating effect between accessible qualifying and amplifying determinants and the sustainable development of local communities.* ***IMPLICATIONS:*** *Empirical findings offer fresh insights for destination planners and policymakers in the tourism industry. These insights pertain to the effective utilization of accessible tourism practices, which can significantly contribute to the sustainable development of destinations. Additionally, tourism businesses can leverage the research to attract a broader segment of tourists, increase profitability, and enhance tourist satisfaction by implementing accessible practices and services. Understanding the moderating role of destination image can further guide them in crafting responsible tourism narratives that resonate with diverse travelers.* ***ORIGINALITY AND VALUE:*** *The study marks an initial attempt to explain how destinations, particularly those heavily reliant on tourism, can strategically leverage accessible tourism as a crucial factor in fostering sustainable community development.*

Keywords: *accessible tourism, sustainable development, local communities, northern Pakistan, inclusivity in tourism, destination image, structural equation modeling, tourism policy, community development, tourist satisfaction*

1 Hassaan Ahmed, Ph.D., Associate Professor, Department of Management Sciences, Salim Habib University, Karachi, NC-24, Deh Dih, Salim Habib Road, Karachi, 74900, Pakistan, e-mail: hassaan.ahmed@shu.edu.pk (ORCID: https://orcid.org/0000-0001-6797-414X).
2 Hadiqa Riaz, Lecturer, Department of Business Studies, Bahria Business School, Bahria University Karachi, 13 National Stadium Rd, Karsaz Faisal Cantonment, Karachi, Karachi City, Sindh, Pakistan, e-mail: hadiqariaz2490@gmail.com (ORCID: https://orcid.org/0000-0002-2941-3349). Corresponding Author.

Received 9 November 2023; Revised 9 January 2024; Accepted 29 January 2024.

INTRODUCTION

Tourism has emerged as the most extensive and rapidly expanding industry in the 21st century (UNWTO, 2022). This unprecedented growth has spurred the development and utilization of diverse alternative forms of tourism, each characterized by its unique dynamics and offering (Qiao et al., 2021). Recognized as an alternative form of travel, accessible tourism has gained prominence as a burgeoning market in recent years (Kasimati, 2019). It involves addressing attitudinal and institutional barriers in society and encompasses accessibility in various aspects such as the physical environment, transportation, accommodation, communications, as well as facilities and services. In essence, accessible tourism caters to any segment of the market seeking seamless access to tourism experience (Benjamin et al., 2021a). According to Kanwal et al. (2020), the benefits of accessible tourism extend to the entire population. Accessible tourism, as a continuously growing service industry, not only facilitates job creation and foreign exchange generation but also fosters improved environmental conservation. Furthermore, it serves as a custodian of local heritage, thereby contributing to the comprehensive development of the local destination (Abbas et al., 2021).

To achieve stable growth in the tourism industry, the sustainable development of the local communities is imperative. Numerous researchers have emphasized the indispensability of engaging local communities for the long-term success of tourism development (Jehan et al., 2023a; Ramkissoon, 2023; Saluja et al., 2022). The descriptive approach of the triple bottom line (TBL) theory also posits that tourism planners should manage tourism resources effectively, ensuring the sustainable development of a destination's economic, socio-cultural, and environmental aspects (Elkington, 1994). As studied by Aquino et al. (2018), accessible tourism plays a pivotal role in promoting sustainable community development. By ensuring the accessibility of tourist destinations, local communities can tap into previously underserved market segments (Tomasi et al., 2020). Recognizing the benefits of economic growth and social inclusion, the World Tourism Organization has prioritized the provision of inclusive tourism. Pakistan and numerous other nations are making significant efforts to encourage and implement initiatives that support accessible travel. The tourism industry of Pakistan is presently valued at approximately USD 2.5 billion, and it is projected to increase to USD 4 billion within the next four years (World Travel & Tourism Council, 2021). Pakistan Tourism Development Corporation (PTDC) has made efforts to promote accessible tourism in Pakistan by collaborating with various stakeholders, including disability organizations and tourism industry professionals (The Nation, 2020). However, according to Nazneen et al. (2019), there are significant gaps in assessing Pakistan's competitiveness in providing accessible tourism. For instance, Rashid et al. (2020) found that the travel industry in Pakistan requires fundamental changes to incorporate accessible facilities, such as supporting infrastructure, transportation, and efficient policies to serve people with special needs. The existing evidence suggests that Pakistan has the potential to provide accessible tourism. However, there is a lack of insight regarding the current state of accessible tourism in Pakistan and its potential benefits for sustainable community development.

The profound impact of accessible tourism on destination competitiveness has been widely acknowledged by researchers (Cronjé & du Plessis, 2020a; Domínguez Vila et al., 2015a; Natalia et al., 2019). However, most of the studies in the field of tourism predominantly concentrate on traditional tourism and its consequences (Aquino et al., 2018b; Han, 2021a; Miličević et al., 2017a; Pasanchay & Schott, 2021a; Pratama & Mandaasari, 2020; Qiao, Ding, Linlin, et al., 2021; Wang et al., 2020) leaving a scarcity of research that delves into the implications of accessible tourism. Moreover, existing studies on accessible tourism are mainly conducted in Western countries (Cronjé & du Plessis, 2020; Devile & Kastenholz, 2018; Natalia et al., 2019). Consequently, the applicability of these findings to the Pakistani context may be questionable. This research gap is significant because it hinders the development of evidence-based policies and practices that can facilitate the development of accessible destinations. Furthermore, a favorable and inclusive destination image not only attracts a diverse range of travelers but also inculcates a sense of belonging and empowerment within the local community (Lee & Jan, 2019). This situation suggests that the impact of destination image on the relationship between accessible tourism and the sustainability of local communities can vary. The existing research lacks sufficient evidence to support such a moderated relationship. Building upon this background, the present study attempts to investigate how accessible tourism impacts the sustainable development of local communities in relation to their socio-cultural, economic, and environmental aspects. The study will specifically focus on renowned tourist destinations located in the northern areas of Pakistan. The present research will also explore the moderating role of destination image between accessible tourism and the sustainable development of local communities. Given the aforementioned, this study makes a significant contribution to the extant literature and intends to offer valuable insights that can assist the tourism industry in crafting impactful strategies for accessible tourism.

LITERATURE REVIEW AND CONCEPTUAL BACKGROUND

The Triple Bottom Line (TBL) approach

Tourism inherently imparts adverse effects on the climate; however, it concurrently holds considerable potential for positive impacts. Effectively managing tourism to optimize its positive outcomes while mitigating negative consequences is paramount (Uslu et al., 2020). The pivotal strategy in this regard is the adoption of the triple bottom line approach. This approach recognizes tourism's capacity to yield economic advantages, generate employment, and stimulate local economies, while concurrently acknowledging its potential for environmental degradation and social upheaval (Tseng et al., 2020). Stakeholders within the tourism sector aim to achieve equilibrium between economic prosperity, societal well-being, and ecological sustainability by incorporating the triple bottom line approach. This necessitates the implementation of eco-friendly initiatives, community involvement, and the preservation of cultural heritage (Roxas et al., 2020). Such a comprehensive outlook is imperative for crafting a tourism paradigm that supports economic advancement and prioritizes environmental preservation and social accountability (Elkington, 1994). The adoption of the triple bottom line approach in tourism aligns with the principles of sustainable development for local communities in Pakistan. By integrating economic growth, social well-being, and environmental conservation, this approach seeks to ensure that tourism contributes positively to the livelihoods of local residents while preserving the cultural and natural heritage of the region.

The concept of accessible tourism

Accessible tourism aims to provide "tourism for all" by ensuring that individuals with access requirements, such as mobility, vision, hearing and cognitive abilities, can participate in tourism activities independently, equitably, and with dignity (Darcy & Dickson, 2009). This initial definition of accessible tourism only focused on eliminating obstacles that hinder people with disabilities (PwD). The concept of accessible tourism has evolved to encompass a broader scope that involves transforming the entire tourism concept. The contemporary approach to accessible tourism is to align the tourist environment with the principles of Universal Design, ensuring its usability and access by all population groups, irrespective of their age, condition, capacity, or impairment (De Matteis et al., 2021). This inclusion encompasses a wide range of people, including families with young children, expectant females, individuals with disabilities, and older adults. It underscores the importance of inclusiveness, ensuring that everyone can participate in tourism activities regardless of their specific requirements (Darcy et al., 2020). It is estimated that millions of individuals with accessibility requirements travel every year, both domestically and internationally. This underscores the substantial market potential of accessible tourism and emphasizes the significance of creating more inclusive tourism opportunities for all individuals, regardless of their abilities or disabilities (Cochran, 2020).

Saluja et al. (2022) claimed that accessible tourism positively impacts economic sustainability by creating economic opportunities, generating employment and increasing income within local communities, all due to the rise in visitors seeking accessible travel experiences. Furthermore, Giampiccoli et al. (2020) found that accessible tourism actively preserves cultural heritage by eliminating obstacles and offering inclusive experiences that facilitate cultural understanding and the transmission of knowledge. Han (2021) inculcates that accessible tourism supports environmental sustainability by promoting responsible practices, adopting universal design principles, and safeguarding natural resources and ecosystems. In this context, accessible tourism is crucial in securing the continuous growth and sustainability of the local population. However, conceptualizing accessible tourism to reflect all its dimensions is critical. More recently, the concept has started to mature with a conceptualization that sought to make sense of individual studies and provide a holistic index (Natalia et al., 2019). Domínguez Vila et al. (2015) were among the first to incorporate Ritchie and Crouch's (2003) competitiveness model to compare the current state of accessible tourism between the two regions. According to Domínguez Vila et al. (2015), Ritchie and Crouch's (2003) competitiveness model can be used to examine the accessibility of tourist destinations. The current study also utilized accessible tourism conceptualization adapted by Domínguez Vila et al. (2015) to investigate the potential impact of accessible tourism in the northern areas of Pakistan. The subsequent literature review will discuss various dimensions of accessible tourism in relation to the sustainable development of local communities.

Accessible core resources and attractors

Accessible core resources refer to the accessibility of primary tourism resources and attractions. These factors are the foremost considerations for tourists when choosing among various destinations (Lestari et al., 2022). Cronjé and du Plessis (2020) conceptualized core resources and attractors as the integration of essential hospitality elements: physiography, tourism superstructure, and culture and heritage. Tomasi et al. (2020) identified that accessible tourism activities have been closely intertwined with the well-being and sustainability of local communities. As Coban and Yildiz (2019) observed, when a destination provides convenient access to visually appealing landscapes, it draws in a larger influx of tourists. Attracting tourists creates economic opportunities, supports infrastructure development, and improves essential services. There is a growing perspective that the success of tourism should not be solely gauged by the number of visitors it attracts but rather by its capacity to contribute to local economies and generate overall positive outcomes for destinations. Goffi et al. (2019) argue that the importance of cultural resources should not be overlooked, as they often have an essential part in attracting visitors and influencing the competitiveness of a destination. Physical and perceptual accessibility to heritage sites and activities involves establishing disability-friendly public transportation networks and implementing appropriate road signage. Dandotiya and Aggarwal (2022) affirmed that the level of accessibility to core resources and attractors encourages the safeguarding of indigenous traditions and thus enhances local investment in cultural assets and facilities that cater to the needs of the local population. A similar study by Jehan et al. (2023) underlined that convenient access to core resources facilitates the cultivation and preservation of diverse community amenities, promoting their development and ongoing maintenance. Thus, from the literature mentioned above, the subsequent hypothesis is put forward:

H1: Accessible core resources and attractors are positively related to the sustainable development of local communities.

Accessible supporting factors and resources

Accessible supporting factors and resources refer to the elements that are readily available and easily accessible, thus having a supplemental effect in enhancing the competitiveness and sustainability of local destinations. These factors include created resources, such as well-established infrastructure for accommodation, transportation, and communication (Lestari et al., 2022). Recent studies (Janjua et al., 2022; Mathew & P M, 2021) found that enhancing the accessibility of supporting resources elevates the overall travel experience and contributes to the well-being of the local communities. Kamyabi and Alipour (2022) highlighted that carefully constructed pathways empower individuals facing mobility challenges to explore destinations effortlessly with comfort and independence. Furthermore, the provision of seamless transportation alternatives like low-floor buses and vehicles equipped with wheelchair ramps enhances the overall mobility of tourists with special needs. The study by Setini et al. (2021) found that accessible factors and resources increase tourist numbers and amplify local business revenue streams. Bano et al. (2022) emphasize the instrumental role of Information and Communication Technologies (ICT) as a supporting factor in fostering the development of local communities by providing new tools and distribution channels. ICT facilitates business transactions, networking with partners, and global information dissemination in the tourism industry. Information and Communication Technologies (ICT) assist travelers with accessibility needs by furnishing them with comprehensive information, recommendations, and booking details pertinent to tourist destinations through online applications. Additionally, Benjamin et al. (2021) believe that accessible infrastructure offers convenient access to essential services and recreational activities, subsequently promoting the preservation of cultural heritage and mitigating adverse ecological impacts. By investing in and prioritizing accessible supporting resources, local communities can achieve sustainability through economic, socio-cultural, and environmental benefits. Given the evidence above, the following hypothesis is developed:

H2: Accessible supporting factors and resources are positively related to the sustainable development of local communities.

Accessible qualifying and amplifying determinants

Accessible qualifying and amplifying determinants encompass a range of competitive factors, including location, cost/value, and safety and security, that meet the basic accessibility requirements to improve the inclusivity of people with special needs (Lestari et al., 2022). Cheer et al. (2019) emphasize the importance of implementing measures that aim to reduce transportation costs and provide affordable and customized options, as this approach would enable greater accessibility to travel destinations (Setini et al., 2021). Khanh and Phong (2020) highlight that expanding the tourist market and increasing visitor numbers leads to heightened tourism revenue for destinations. This, in turn, contributes to local economic growth and nurtures a business ecosystem. Accessible destinations enable individuals with access requirements to immerse themselves in the local culture and traditions. By facilitating meaningful experiences and interactions, these destinations instill cultural exchange and social integration (Paul & Roy, 2023). Kamyabi and Alipour (2022) identified that by ensuring that destinations provide a secure environment, tourists with disabilities can confidently engage in exploration and enjoyment. The provision of a positive and secure travel experience not only supports return visits but also promotes positive word-of-mouth recommendations. This organic promotion attracts more visitors, stimulating tourism demand and economic development. Qiao et al. (2021) corroborate that destinations that prioritize accessibility often incorporate sustainable practices, such as eco-friendly transportation, energy-efficient infrastructure, and responsible waste management. These sustainable initiatives mitigate environmental impact associated with over-tourism, underscoring the commitment to environmental preservation. Darcy et al. (2020) found that the integration of accessible qualifying determinants into strategies for destination planning has been proven to strengthen the economic, socio-cultural, and environmental development of the local population. Consequently, it is predicted that:

H3: Accessible qualifying and amplifying determinants are positively related to the sustainable development of local communities.

Destination planning and management

Accessible tourism destination planning involves comprehensive management of diverse aspects related to a specific destination, encompassing the identification and facilitation of both natural and developed resources, along with supportive measures, in a well-coordinated approach to maximize its attractiveness and inclusivity for tourists with diverse needs (Fyall & Garrod, 2020). Destination planning and management that prioritizes accessible tourism significantly contribute to the long-term sustainability of the local population. By prioritizing accessibility for individuals with disabilities and diverse requirements, it expands the potential for a broader spectrum of tourists to visit and actively participate in the community. This deliberate focus on inclusivity enhances the economic benefits of tourism and fosters social integration and cultural exchange (Darcy et al., 2020). The relationship between destination planning and the sustainability of local communities has been the center of focus of different recent studies (Uslu et al., 2020). The effectiveness of destination planning and management, particularly within the domain of accessible tourism, is significantly linked to the competence and strategic acumen of decision-makers engaged in the process. Discourse underscores the pivotal role decision-makers play in shaping the outcomes of accessible tourism initiatives, exerting influence over the destinations' capacity to accommodate diverse requirements (Dandotiya & Aggarwal, 2022). However, Volgger et al. (2021) highlight that an observed need exists for a more comprehensive examination and enhancement of the skill set and expertise of decision-makers in the context of accessible tourism planning. The level of proficiency and perspicacity demonstrated by decision-makers assumes a critical role in delineating the inclusivity, sustainability, and overall success of destination planning endeavors tailored to meet the needs of a diverse spectrum of tourists. According to Thetsane (2019), investing in training programs for tourism providers to cater to the unique requirements of individuals not only enhances the quality of the tourism experience but also presents economic and local entrepreneurship opportunities. Wang et al. (2020), through a dynamic system approach, researched urban Chinese destinations and concluded that accessible destination planning should prioritize the preservation of the region's natural and cultural heritage by embracing sustainable tourism practices. This entails promoting responsible behaviors among tourists, supporting environmentally friendly local businesses, and actively conserving delicate ecosystems through the establishment of protected areas. Kumar et al. (2021) further added that the comprehensive integration of destination planning and accessible tourism initiatives cultivates social inclusion and environmental sustainability and yields substantial economic advantages for local communities. Based on the above literature, it can be presumed that destination planning and management of accessible tourism significantly impact local communities' sustainability. Thus, the following hypothesis is postulated:

H4: Destination planning and management are positively related to the sustainable development of local communities.

The moderating role of destination image

Destination image is crucial in understanding how individuals decide when selecting a travel destination. The current study defined destination image as collective perceptions, beliefs, and impressions that individuals with disabilities and other access requirements hold regarding the level of accessibility and inclusivity offered by a particular destination (Huete-Alcocer & Lopez, 2019). Accessible tourism brings financial advantages while enhancing the reputation of destinations, thereby fostering the sustainable growth of the local population (Rasoolimanesh et al., 2021). Cham et al.'s (2021) study examined country-related factors on the destination image and found that perceiving a destination as an accessible tourism provider holds considerable potential for positively impacting the economic, sociocultural, and environmental advancement of local communities. Domínguez Vila et al. (2015) remarked that when a destination is recognized as accessible, it attracts a diverse range of tourists, including those with disabilities or special needs, resulting in an expanded visitor base that brings economic benefits to the destination. Dyk et al. (2019) investigated the implications of destination image for sustainable development and underlined that a positive destination image fosters social inclusivity and empowerment by ensuring equitable access to tourism experiences, nurturing a sense of community pride, and safeguarding the preservation of local culture. According to Liu et al. (2020), the image of a destination as an accessible tourism provider benefits the local economy and facilitates environmental preservation through sustainable and responsible tourism practices.

On the contrary, Loureiro and Jesus, (2019) identified that regardless of how accessible a destination is, if the image of the destination is not favorable, it will struggle to attract visitors. As a result, this inability to attract visitors could hinder the overall development of the destination. Given the significance of destination image, it is anticipated that destination image plays a moderating role in the relationship between different dimensions of accessible tourism and the sustainable development of local communities. Consequently, the following hypotheses are formulated:

H5: Destination image moderates the relationship between accessible core resources and attractors and sustainable development of local communities.
H6: Destination image moderates the relationship between accessible supporting factors and resources and sustainable development of local communities.
H7: Destination image moderates the relationship between accessible qualifying and amplifying determinants and sustainable development of local communities.
H8: Destination image moderates the relationship between destination planning and management and sustainable development of local communities.

Referring to the literature review and its gaps, the research model for this study is presented in Figure 1.

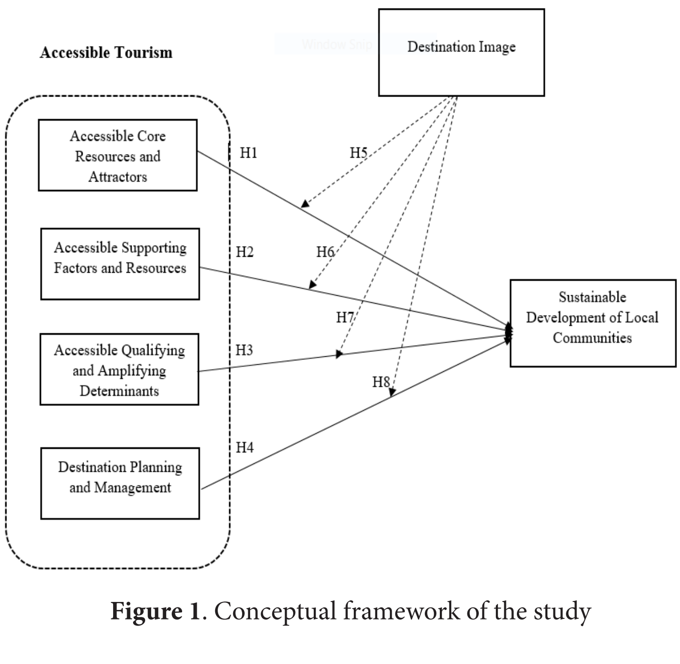


Figure 1. Conceptual framework of the study

RESEARCH METHODOLOGY

Study area

The study was aimed to be performed on local communities of the northern areas of Pakistan. The areas are located in the northern region of the country and share borders with Afghanistan to the west and China to the north and northeast. The northern areas consist of two districts, Baltistan and Gilgit, with Gilgit serving as the capital. The major political hubs in the area are Gilgit, Skardu, Hunza, and Chilas (Ministry of Tourism, 2021). Every year, thousands of local and international tourists visit these areas to enjoy the spectacular beauty of nature. Diverse local communities, such as Balti, Gilgit, Hunza, Kalasha, and Wakhi people, inhabit the northern areas of Pakistan. Each community possesses its unique cultural practices and customs. The locations draw a varied group of tourists, encompassing adventure seekers, nature lovers, mountaineers, and those interested in culture. While accessibility for people with specific requirements can be challenging due to the rugged terrain and limited infrastructure in certain areas, efforts are being made by Pakistan Tourism Development Corporation (PTDC) to accommodate these visitors and address their needs (Khan, 2021). Despite the obstacles faced, individuals involved in the tourism industry note a significant increase in tourism after the relaxation of COVID-19 restrictions. Consequently, the percentage of foreign travelers visiting Pakistan has risen to approximately 12–15%, compared to the previous 5–6%. The remaining 85% of tourists are domestic travelers. The local communities residing in these areas rely heavily on tourism since it provides opportunities for productive and inclusive employment, fosters small business growth, funds the preservation of natural and cultural resources, and enhances economic empowerment (Hussain, 2022). The data for the current study were primarily collected from five tourist destinations, Naran-Kaghan, Hunza, Skardu, Naltar, and Kashmir valleys, which have the highest population density in the region

Sample and procedure

A cross-sectional approach was employed to achieve the study objective, focusing on a specific phenomenon within a defined study period. Prior to the formal survey, a pilot study was conducted to assess the refinement and feasibility of the research instrument. A preliminary analysis was undertaken with a sample size of 50 participants to ascertain the clarity and unambiguity of the items. The primary objective was to examine the initial reliability and validity of the study model. The outcomes of the validity and reliability measures met the stipulated minimum thresholds, affirming the instrument's operationalization capability in fulfilling the primary objectives of the study. Nonetheless, a few minor issues pertaining to the structure and content of the survey items were identified and successfully rectified. Data collection for this study was performed from April to June 2023, the optimal time to visit northern Pakistan due to favorable weather conditions.A two-stage sampling approach was employed to ensure appropriate participants for data collection. In the first stage, data was collected from both local and international tourists, considering their perspectives on accessible tourism and destination image. The target sample for this phase included tourists with specific access requirements, as per the criteria defined by Darcy and Buhalis 2010. Following this, in the second stage, a separate sample consisting of local residents in tourist areas was selected to evaluate the impact of accessible tourism on various aspects of sustainable community development. A combination of proportionate stratified and convenience sampling methods was used to gather the necessary data. Specifically, tailored questionnaires were designed for each stage, addressing both the tourist sample and the local population. The proportionate stratified sampling approach involved enlisting an equal number of participants from each of the five tourist destinations: Naran-Kaghan, Hunza, Skardu, Naltar, and Kashmir. The questionnaires were distributed to the participants, accompanied by a clear explanation of the study's purpose and the voluntary and confidential nature of their involvement. The participants were provided with approximately 10 to 12 minutes to complete the survey either through a Tablet using an online link or by filling out a hard copy of the questionnaire. Respondents encountered no difficulties completing the questionnaire in both stages, as all unclear questions and responses were eliminated. In the second stage, to conduct a comprehensive assessment of the economic, socio-cultural, and environmental consequences associated with accessible tourism, the data collection predominantly targeted local residents. Ultimately, a total of 321 responses were received in each stage after a thorough screening process. Current research in the field of hospitality management suggests that a sample size ranging from 200 to 300 respondents is considered appropriate Therefore, based on the assumptions outlined by Mihalic and Kuščer (2021), the present study collected data from 321 respondents. Additionally, in line with the recommendations of Tiwari et al. (2022), convenience sampling was employed to ensure a large and diverse representation of the target population, which in this case consisted of tourists and local residents of the northern areas of Pakistan.

Measurement instrument

The measurement instrument utilized in this study was developed based on prior research. To ensure the validity of the scale items, the items were initially reviewed and discussed with four tourism and hospitality professionals to assess content validity. Two separate questionnaires (see Appendix A and B) were created to gather data. The first questionnaire was specifically designed to gather insights from tourists visiting the northern areas of Pakistan. Its main purpose was to evaluate the current status of accessible tourism in the region and examine how the destination was perceived in terms of its accessibility. A total of six constructs were used in this study. Accessibility of core resources and attractors was measured by five items, accessible supporting factors and resources were measured by five items, accessible qualifying and amplifying determinants, and destination planning and management were each measured by five items. All these items were taken from Domínguez Vila et al. (2015), Dwyer et al. (2014) and Gomezelj and Mihalič (2008). Furthermore, the destination image was assessed using six items adopted from Lee and Xue (2020). A separate sequel questionnaire was designed to measure the impact of accessible tourism on the sustainable development of local communities. In line with the study of Lee and Jan (2019), the sustainable development of local communities was assessed through a unified construct comprising eight items. These items encompassed economic, socio-cultural and environmental aspects and were adapted from the work of Chahal and Devi (2016), Jehan et al. (2023), and Lee and Jan (2019). It is important to note that the studies from which we adapted measurement items were conducted in the context of traditional tourism. As a result, the indicators they used for each construct were adjusted and modified to suit the current study's context. The first part of both questionnaires was designed to collect demographic information from the respondents (see Tables 1 and 2). Conclusively, a total of 600 questionnaires were given to local and international tourists, while 600 questionnaires were distributed to local residents. After eliminating incomplete questionnaires, we finalized 321 complete responses from each sample for further analysis. To ensure the absence of biases in the responses, the study employed Herman's single-factor test to assess whether the instrument introduced any biases in the data. The results indicated that after transforming all the measurement items into a single variable, the factor explained 17.8% of the variance. Since this variance of 17.8% falls below the threshold of 50%, it can be concluded that there was no significant presence of common method bias.

Data analysis technique

The current study used Partial Least Square Structural Equation Modeling (PLS-SEM) to assess the precision of the measurement model and to test the statistical significance of the proposed hypotheses. Descriptive statistics were separately computed for each sample to analyze the demographic information of the respondents. However, for structural equation modeling, the responses from both questionnaires were merged and treated as a unified dataset. This approach allowed for a comprehensive analysis to be conducted, examining and quantifying the impact of accessible tourism on the sustainable development of local communities.

RESULTS

Table 1 presents demographic information about tourists visiting the northern areas of Pakistan. It shows that 65.7% of the tourists were male, while 34.3% were female, indicating a higher representation of male tourists. The majority of tourists, accounting for 31.2% and 31.5% of the total sample, fell under the age brackets of 26 to 34 years and 35 to 44 years, respectively. This suggests a significant presence of young and middle-aged visitors. In terms of education, 48% of the tourists had completed their undergraduate or graduate studies, 40.8% had education up to a Master's level or higher, and 11.2% had education up to Matric/O-levels. Occupation-wise, 48.6% of the tourists were either self-employed or worked in the private sector, 26.8% were public sector employees, and 16.2% were students. The results further show that 86% of the sample were local tourists from Pakistan, while 14% were international tourists from different countries. Additionly, the proportions of 30.2%, 48.2%, 10.9%, and 10.5% delineate the compositional breakdown of tourists with accessibility needs: 30.2% encompasses individuals with disabilities, 10.5% pertains to senior or elderly tourists aged 60 and above, 48.2% represent parents accompanied by young children, 10.9% shows expectant female tourists, and 10.5%

pertains to senior or elderly tourists aged 60 and above. These statistics elucidate the disparate prevalence of accessibility considerations among different tourist demographics in the study. It is important to note that, in the case of tourists with disabilities, the data was collected from people who accompany these tourists, such as family or friends. Finally, the majority of tourists (51.4%) had a visit duration of less than 5 days, 35.2% stayed for 5 days, and 13.4% stayed for more than 5 days, providing valuable insights into the duration of their visit to the northern areas of Pakistan.

Table 1. Demographic profile of tourists

Items	Category	Frequency	Percentage
Gender	Male	211	65.7%
	Female	110	34.3%
Age	18–25	63	19.6%
	26–34	100	31.2%
	35–44	101	31.5%
	45–54	23	7.2%
	55–64	23	7.2%
	65 or above	11	3.4%
Level of education	Matric/O-Levels	39	11.2%
	Undergraduate/ Graduate	156	48%
	Master or above	126	40.8%
Occupation	Student	52	16.2%
	Public Sector Employee	86	26.8%
	Private Sector Employee/Self-employed	156	48.6%
	Retired/Unemployed	27	8.4%
Tourist status	Local Tourist (From Pakistan)	276	86%
	International Tourist	45	14%
Accessibility need	Tourists with disabilities	97	30.2%
	Parents with children	155	48.2%
	Expectant females	35	10.9%
	Senior/old age tourists	34	10.5%
Average duration of visit	Less than 5 days	165	51.4%
	5 days	113	35.2%
	More than 5 days	43	13.4%

Data was collected from local residents in northern Pakistan to measure the sustainable development of local communities, and their demographic information is presented in Table 2. Of 321 local residents, 69.5% were male, and 30.5% were female.

Table 2. Demographic profile of local residents

Items	Category	Frequency	Percentage
Gender	Male	223	69.5%
	Female	98	30.5%
Age	18–25	70	21.8%
	26–34	101	31.5%
	35–44	92	28.7%
	45–54	14	4.4%
	55–64	21	6.5%
	65 or above	23	7.2%
Level of education	Matric/O-Levels	147	45.8%
	Undergraduate/Graduate	132	41.1%
	Master or above	42	13.1%
Occupation	Student	35	10.9%
	Self-Employed	162	50.5%
	Public sector Employee	21	6.5%
	Private Sector Employee	69	21.5%
	Retired	34	10.6%

Items	Category	Frequency	Percentage
Monthly income	Less than 40k	57	17.8%
	40k–60k	165	51.4%
	60k–80k	49	15.3%
	80k–100k	18	5.6%
	100k or above	32	10.0%

The largest age group, comprising 31.5% of the sample, falls within the range of 26 to 34 years, indicating a significant proportion of young residents. In terms of education, 45.8% completed education up to Matric/O-Levels, which suggests that the current standard of education in northern Pakistan is not very comparable. 41.1% pursued higher education at the undergraduate/graduate level, and 13.1% attained a Master's degree or above, reflecting a diverse educational background. Self-employment was the dominant occupation, representing 50.5% of the respondents, followed by private sector employment at 21.5%. The data reveals that the respondents' monthly income predominantly falls within the range of Rs. 0k–40k (17.8%) to Rs. 40k–60k (51.4%), indicating that residents generally have a moderate income level, which is not particularly high.

Measurement/outer model assessment

In the first stage of structural equation modeling, the measurement model was assessed in terms of reliability and validity for the studied constructs. The detailed results are recorded in Tables 3 and 4. Construct reliability is measured using composite reliability, and the obtained values for all the constructs range from 0.601 to 0.912. These values are higher than the suggested threshold of 0.6, as Hair et al. (2013) recommended, indicating strong consistency among the items within each construct. Convergent validity is assessed using factor loading and the average variance extracted (AVE) from the data. The standardized factor loadings of all items fall within the range of 0.513 to 0.690, which exceeds the suggested criterion of 0.5, as proposed by Hair et al. (2013). This demonstrates that the items adequately capture the underlying construct, confirming convergent validity.

Table 3. Constructs with reliability and validity

Construct	Item	Factor loading	Cronbach's alpha	CR	AVE
Accessible Core Resources and Attractors (ACR)	ACR1	0.828	0.886	0.896	0.690
	ACR2	0.729			
	ACR3	0.858			
	ACR4	0.833			
	ACR5	0.895			
Accessible Supporting Factors and Resources (ASF)	ASF1	0.912	0.922	0.927	0.762
	ASF2	0.833			
	ASF3	0.900			
	ASF4	0.828			
	ASF5	0.889			
Accessible Qualifying and Amplifying Determinants (AQAD)	AQAD1	0.812	0.876	0.880	0.669
	AQAD2	0.818			
	AQAD3	0.762			
	AQAD4	0.813			
	AQAD5	0.881			
Destination Planning and Management (DPM)	DPM1	0.870	0.901	0.903	0.718
	DPM2	0.846			
	DPM3	0.823			
	DPM4	0.803			
	DPM5	0.892			
Destination Image (DI)	DI1	0.782	0.900	0.913	0.668
	DI2	0.831			
	DI3	0.856			
	DI4	0.881			
	DI5	0.708			
	DI6	0.836			

Construct	Item	Factor loading	Cronbach's alpha	CR	AVE
Sustainable Development of Local Communities (SLC)	SDLC1	0.673	0.758	0.873	0.513
	SDLC2	0.667			
	SDLC3	0.601			
	SDLC4	0.806			
	SDLC5	0.708			
	SDLC6	0.710			
	SDLC7	0.767			
	SDLC8	0.782			

Note: CR: Composite Reliability, AVE: Average Variance Extracted.

Subsequently, discriminant validity was measured using the Fronell-Larcker criterion by comparing the average variance extracted (AVE) derived from each variable to the shared variance. Table 4 presents the findings related to discriminant validity, demonstrating a satisfactory outcome. The diagonal values in the table exhibit higher values compared to the non-diagonal values within their respective columns and rows, which further reinforces the validity of the measurement model.

Table 4. Discriminant validity

	ACR	AQAD	ASF	DI	DPM	SDLC
Accessible Core Resources and Attractors (ACR)	0.830					
Accessible Qualifying and Amplifying Determinants (AQAD)	0.615	0.818				
Accessible Supporting Factors and Resources (ASF)	0.510	0.729	0.873			
Destination Image (DI)	0.581	0.744	0.731	0.818		
Destination Planning and Management (DPM)	0.515	0.715	0.683	0.763	0.847	
Sustainable Development of Local Communities (SDLC)	0.565	0.780	0.763	0.758	0.769	0.716

The results of the correlation matrix and descriptive statistics are exhibited in Table 5. The correlations among the accessible tourism dimensions, destination image, and sustainable development of local communities were consistently moderately strong to strong, ranging from $r = 0.49$ to $r = 0.75$, all of which are statistically significant at $p < 0.001$. This finding indicates a satisfactory association between all dimensions of accessible tourism and the overall sustainability of the local communities of the northern areas of Pakistan.

Table 5. Correlation, mean and standard deviation

	AQAD	ASF	ACR	DPM	DI	SDLC
Accessible Qualifying and Amplifying Determinants (AQAD)	1					
Accessible Supporting Resources and Attractors (ASF)	0.726**	1				
Accessible Core Resources and Attractors (ACR)	0.608**	0.499**	1			
Destination Planning and Management (DPM)	0.715**	0.679**	0.509**	1		
Destination Image (DI)	0.730**	0.720**	0.561**	0.755**	1	
Sustainability of Local Communities (SDLC)	0.755**	0.760**	0.558**	0.753**	0.736**	1
Mean	4.138	4.285	4.05	4.308	4.506	4.551
SD	1.635	1.639	1.581	1.608	1.538	1.417

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

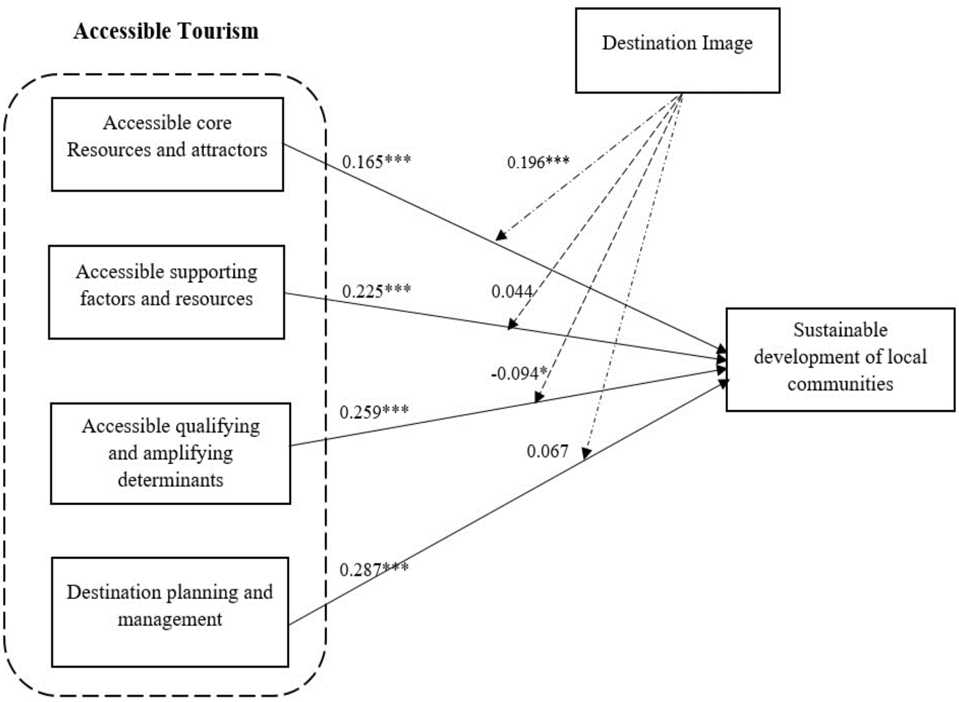
Structural/inner model assessment

By the evaluation procedure proposed by Hair et al. (2013), several checks were performed to assess the structural model's accuracy. Collinearity issues among the predictor variables were examined, and it was found that all Variance Inflation Factor (VIF) values were less than 5.0, indicating no significant concerns regarding collinearity. The fit of the model was evaluated using the Standardized Root Mean Square Residual (SRMR), which was found to be 0.062, lower than the threshold of 0.08. This result suggests that the model fits well with the data. Q2 and R-squared (R2) values of the endogenous variable were analyzed to measure the relevance and predictive power of the research model. The R2 value of sustainable development of local communities (0.774) indicates substantial predictive accuracy. Furthermore, the Q2 value for the sustainability of local communities was above zero, demonstrating that the exogenous constructs had significant explanatory power and provided satisfactory predictive relevance for the endogenous constructs in the model.

The results of the structural model presented in Table 6 and Figure 3 show that accessible core resources and attractors ($\beta = 0.165$, $p < 0.00$) and accessible supporting factors and resources ($\beta = 0.225$, $p < 0.00$) have a significant positive effect on the sustainable development of local communities. Therefore, H1 and H2 are accepted. In addition, H3 and H4 are also supported, indicating that accessible qualifying and amplifying determinants ($\beta = 0.259$, $p < 0.000$) and destination planning and management ($\beta = 0.287$, $p < 0.000$) have a substantial effect on the sustainable development of the local communities of the northern areas of Pakistan. Subsequently, to measure the importance of each path, the effect size (F2) was calculated. The findings in Table 5 indicate that all of the hypothesized paths (H1, H2, H3, H4) demonstrate a small yet meaningful effect size (Sawilowsky, 2009).

Table 6. Results of hypothesis testing (direct effect)

	Hypothesized Path	Std Beta	Std Error	T-value	F2	P-value	Decision
H1	ACR -> SDLC	0.165	0.041	4.021	0.055	0.00	Supported
H2	ASR -> SDLC	0.225	0.048	4.655	0.079	0.00	Supported
H3	AQAD -> SDLC	0.259	0.051	5.102	0.093	0.00	Supported
H4	DPM -> SDLC	0.287	0.046	6.204	0.128	0.00	Supported



Note: ***Significant at 1% level, **significant at 5% level; *significant at 10% level; **significant at 5% level.

Figure 2. Results of structural model

Table 7 shows the moderating results of destination image on the relationship between four dimensions of accessible tourism and sustainable development of local communities. A two-stage approach, as outlined by Becker et al. (2018), was applied to assess the moderation effect. The results, presented in Table 7, demonstrate that destination image positively moderates the relationship between the accessible core resources and attractors and sustainable development of local communities ($\beta = 0.196$, $p < 0.000$) with a fairly moderate effect size ($F2 = 0.120$). Destination image was found to have a non-significant moderating effect on the relationship between supporting factors and resources and the sustainable development of local communities (β = 0.044, $p < 0.462$), as well as between destination planning and management and sustainable development of local communities (β = 0.067, $p < 0.205$). As a result, hypotheses H6 and H8 are rejected. Finally, destination image shows negative moderation between the accessible qualifying and amplifying determinants and the sustainable development of local communities (β = -0.094, $p < 0.042$) with a small effect size (F2 = 0.053). However, since the significant value is $p < 0.05$, H7 is accepted. These results are presented in Table 6 and Figure 2.

Table 7. Hypotheses testing for a moderation effect

	Hypothesized Path	Std Beta	Std Error	T-value	F2	P-value	Decision
H5	DI x ACR -> SDLC	0.196	0.031	6.303	0.120	0.000	Supported
H6	DI x ASR -> SDLC	0.044	0.060	0.735	0.003	0.462	Not Supported
H7	DI x AQAD-> SDLC	-0.094	0.045	5.102	0.014	0.042	Supported
H8	DI x DP-> SDLC	0.067	0.053	1.268	0.006	0.205	Not Supported

To provide further insights, we created interaction plots depicted in Figures 3, 4, 5, and 6 by employing one standard deviation value below and above the mean of the destination image. The utilization of ±1 standard deviation in testing and illustrating interaction effects is a common method for representing high and low values (Dawson, 2014). As illustrated in Figure 3, accessible core resources (on the X-axis) exhibit a stronger positive effect on the sustainable development of local communities (on the Y-axis) when the destination image is high (depicted by a dotted line), in comparison to a low destination image (depicted by a solid line). The significant interaction effect highlights that a more positive destination image corresponds to a stronger relationship between accessible core resources and the sustainable development of local communities.

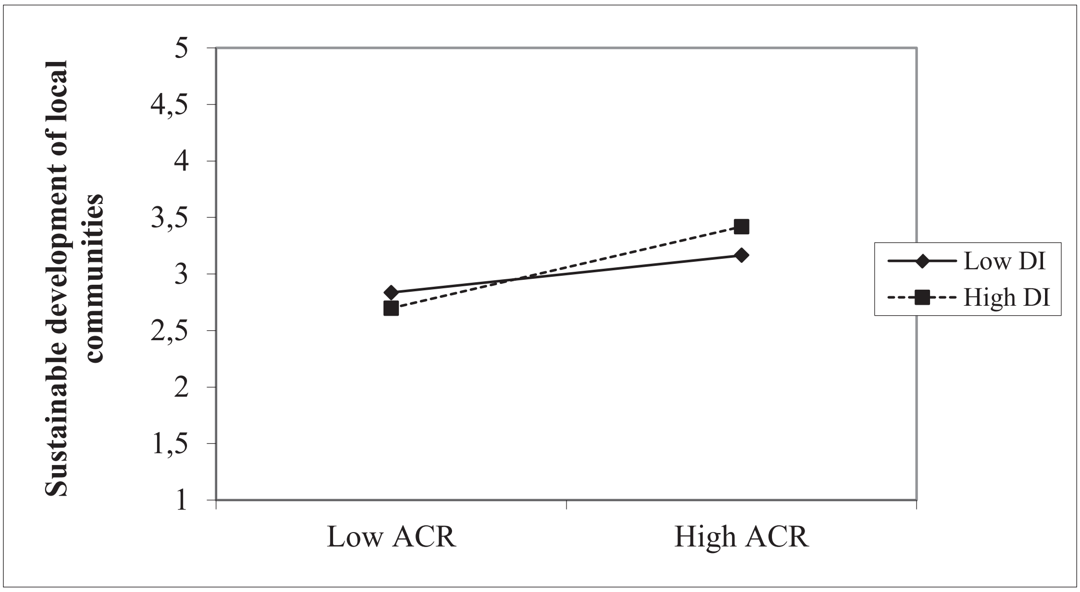


Figure 3. Interaction plot between accessible core resources and sustainable development of local communities

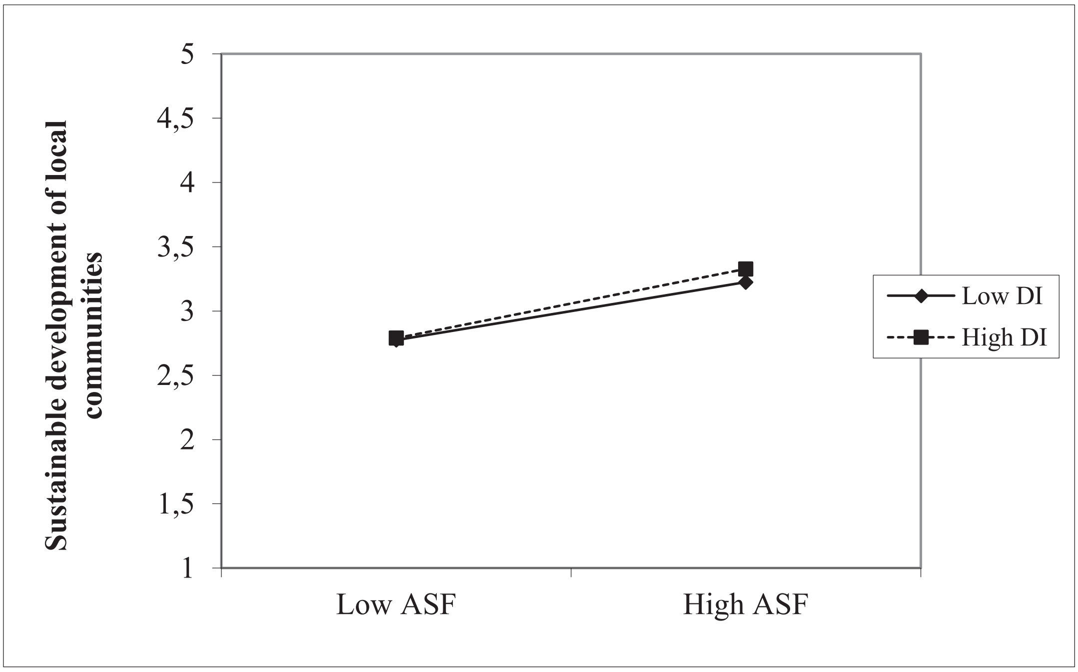


Figure 4. Interaction plot between accessible supporting factors and resources and sustainable development of local communities

In two of the interactions (Figures 4 and 5), the sustainable development of local communities is not significantly improved by the presence of the destination image, as indicated by the steeper dotted lines. While the dotted lines in Figures 4 and 6 may suggest an increase, a simple slope analysis reveals that this increase lacks statistical significance. Therefore, it can be inferred that the destination image does not significantly moderate the relationship between accessible supporting factors and the sustainable development of local communities, nor between destination planning and sustainable development of local communities. Unlike the other three interactions, the interaction effect depicted in Figure 5 shows a very slight increase in the dotted line, which is statistically significant. However, the negative coefficient value indicates that a higher destination image weakens the relationship between accessible qualifying and amplifying determinants and the sustainable development of local communities.

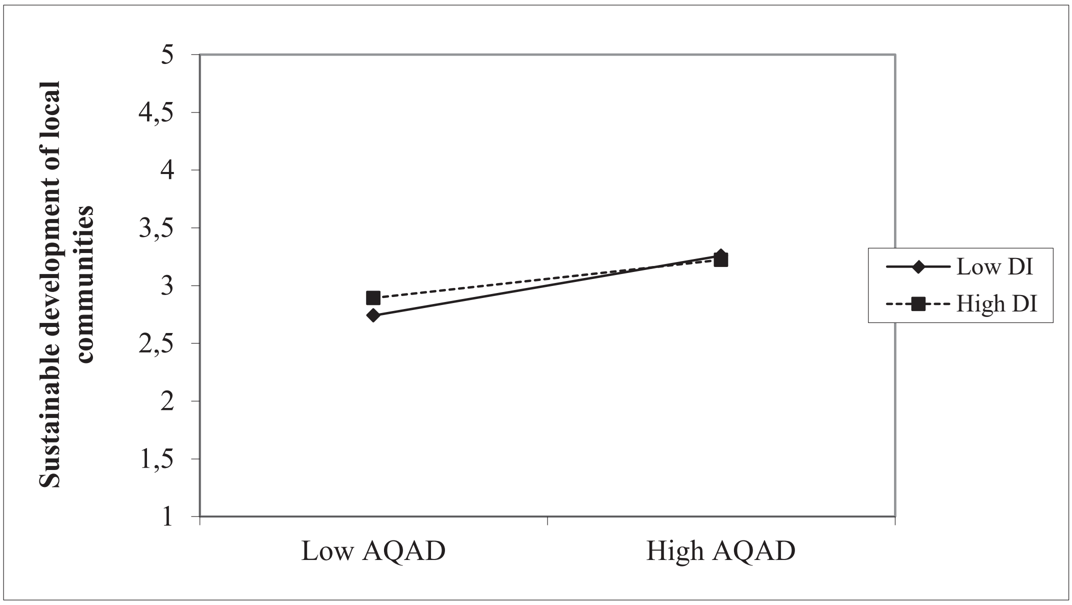


Figure 5. Interaction plot between accessible qualifying and amplifying determinants and sustainable development of local communities

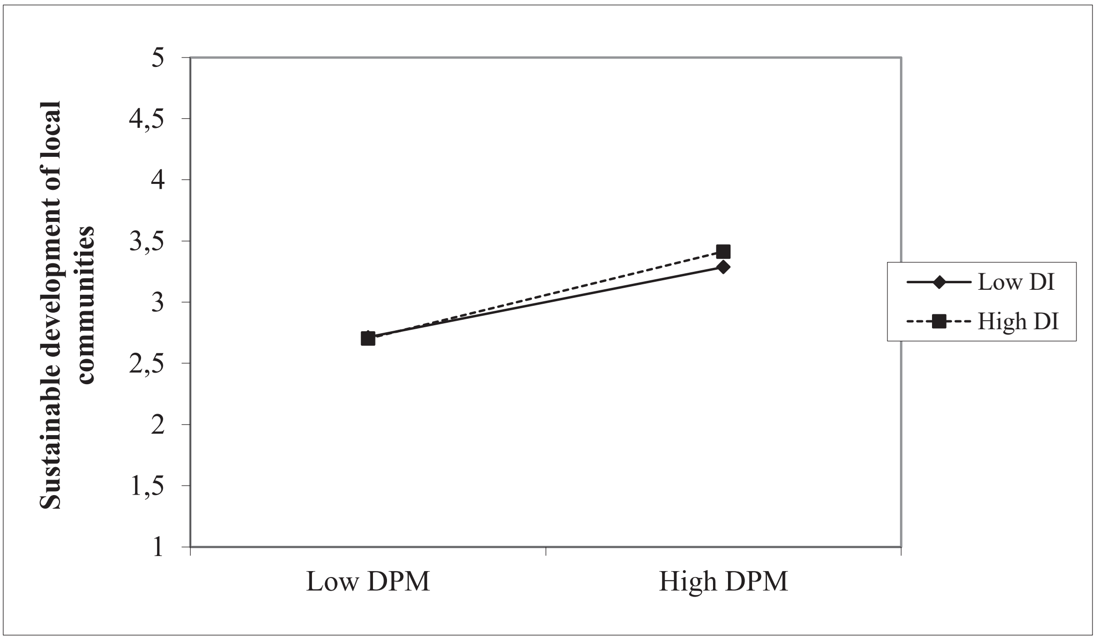


Figure 6. Interaction plot between destination planning and management and sustainable development of local communities

DISCUSSION

This result endorses the view of Lee and Jan (2019), who considered tourism as a strong predictor of economic, socio-cultural, and environmental development of the destination. The study found significant relationships between accessible core resources and attractors and the sustainable development of local communities. Enhanced access to core resources leads to increased tourist arrivals, which benefits the local economy and promotes cultural exchange. The recent investments by the Pakistan Tourism Development Corporation (PTDC) in accessible tourism facilities and new attractions have made a significant contribution to job creation, poverty reduction, and socio-economic development in the northern region (Pakistan Tourism Development Corporation, 2022). Responsible management of these resources also ensures the preservation of the natural environment. While recent studies have not directly assessed the relationship between these variables, this finding is partially consistent with other studies that indicate the positive effect of core resources and attractions on promoting the well-being of the local community (Lestari et al., 2022). The results also corroborate a significant relationship between accessible supporting factors and resources and sustainable local development. Partially consistent with the work of Benjamin et al. (2021) and Kamyabi and Alipour (2022), this evidence indicates that well-established infrastructure, facilitating amenities, and efficient transportation systems significantly enhance the destination's economic, socio-cultural, and environmental sustainability. The majority of the residents in northern Pakistan are involved in farming, livestock rearing, and hospitality-related businesses. Therefore, improved connectivity and visitor convenience lead to positive economic outcomes. Additionally, PTDC initiatives of geotagging major tourist sites, camping pods at new tourist locations, and roadside facilities (such as toilets, tuck-shops, and restrooms) have all been completed to enhance the accessible travel experience (Pakistan Tourism Development Corporation, 2022).

The results of the study also support the positive significance of accessible qualifying and amplifying determinants and sustainable community development. Pakistan is widely recognized as a budget-friendly destination. The country's relatively low cost of living allows travelers with diverse needs to find affordable deals on accommodation, food, and transportation. The Pakistan Ministry of Tourism has launched streamlined immigration procedures, such as providing e-visa facilities for 175 countries and offering on-arrival visas for 50 countries. This initiative promotes cultural diversity and enhances the positive impact of tourism on the local economy. Besides, with the improvement of the law and order situation in northern Pakistan, there has been a notable surge in tourism, catering to all types of tourists with diverse needs (The Nation, 2020). The results of the study partially concurred with the study of Jehan et al. (2023) in the context of the local community perspective. The findings also confirmed a positive relationship between destination planning and management and the sustainable development of local communities. Incorporating accessible tourism practices makes destinations more inclusive, attracting a broader range of tourists and thereby increasing tourist spending, which contributes to local sustainability. The tourism industry of Pakistan has formulated plans for accessible tourist destinations. Additionally, the industry has developed master plans for new integrated tourism zones, national parks, and tourist resorts, all equipped with accessible facilities (Pakistan Tourism Development Corporation, 2022). This result partially agrees with Goffi et al. (2019) in the context of destination competitiveness. In particular, destination planning and management, in contrast to other accessible tourism dimensions, have the strongest effect on the sustainable development of local communities.

In addition, the current study also proved that the strength of the relationship between accessible core resources and attractors and the sustainability of local communities positively fluctuates with the inclusion of destination image as a moderating variable. The increased demand for accessible core resources and attractors, such as convenient access to visually appealing landscapes, inclusive infrastructure, and transportation, leads to optimized investment in accessible tourism practices, which benefit sustainable community development. Furthermore, it is interesting to find that destination image negatively moderates the relationship between accessible qualifying and amplifying determinants and sustainability of local communities. Despite significant improvements in Pakistan's image as a tourist destination, some tourists still perceive a lack of accessible facilities and proper safety and security measures for people with diverse needs. These concerns may hinder their decision to visit Pakistan's northern areas. While recent studies have not directly explored the moderating role of destination image, this finding is partially consistent with other studies indicating the significant role of destination image in promoting revisit intention, which in turn supports the sustainable development of the local population (Tavitiyaman et al., 2021; Ullah et al., 2022). The current study also predicts the moderating role of destination image for accessible supporting factors and resources and destination planning and management. However, destination image was not found as a significant moderator between these hypothesized relationships. The findings underscore the multifaceted factors influencing sustainability in the region and highlight the importance of destination planning and accessible supporting resources beyond the influence of destination image in fostering sustainable community development.

CONCLUSION

The current study primarily focuses on examining how accessible tourism influences the sustainable development of local communities, with a moderating role of destination image. To achieve this objective, the current study utilized accessible tourism conceptualization adapted by Domínguez Vila et al. (2015) to investigate the potential impact of accessible tourism in northern Pakistan. As predicted, accessible tourism was found to have a significant impact on the sustainable development of local communities. The findings endorse the significance of accessible core resources and attractors, accessible supporting factors and resources, qualifying and amplifying determinants, and destination planning and management in fostering economic, socio-cultural, and environmental sustainability. The efforts made by the Pakistan Tourism Development Corporation to enhance accessibility have contributed to job creation, poverty reduction, and socio-economic development in the region while preserving the natural environment. Furthermore, the study highlights the role of destination image as a moderating variable, indicating its positive influence on the relationship between accessible core resources and attractors and local community sustainability but a negative influence on the relationship between accessible qualifying and amplifying determinants and sustainability. These findings underscore the multifaceted nature of sustainable community development in the tourism industry and emphasize the need for continued investment in accessible tourism practices and the management of tourist destinations in northern Pakistan.

Theoretical and practical implications

From the theoretical standpoint, this study is one of few that conceptualize and test accessible tourism and incorporates key dimensions from the perspective of tourists with special access requirements. Moreover, to the best of the authors' knowledge, this study fills a noticeable gap in the existing literature by examining the relationship between accessible tourism and the sustainable development of local communities. Given the increasing emphasis on accessible tourism, the current study offers unique insights and contributes significantly to the academic understanding of how accessible tourism can be leveraged to foster the sustainable development of the local population. The current study also substantially contributes to the extant literature by conceptualizing destination image as a moderator between accessible tourism and the sustainable development of local communities. Previous studies have mainly tested destination image in the context of tourist behavioral intention and satisfaction. In this regard, this research increases the empirical knowledge pertinent to accessible tourism. This research also addresses another gap in the existing literature on tourism in Pakistan, as there is a lack of studies on this aspect. By focusing on the growing tourism in Pakistan, specifically in the northern areas, the research provides a synthesis to understand the current state of affairs and challenges, contributing valuable insights for enhancing inclusive tourism experiences for diverse travelers.

The study also provides valuable practical implications for policymakers and destination planners in the tourism industry. The northern areas of Pakistan have a substantial reliance on tourism. Consequently, the provision and promotion of accessible tourism in this area can serve as an effective tool in building sustainable local development. The findings of this study not only offer practical implications for the northern areas of Pakistan but also hold significance for countries undertaking initiatives to offer inclusive tourism. The current study suggests tourism authorities focus on improving infrastructure and accessibility, ensuring that tourism initiatives benefit both tourists and local population. Our findings suggest a clear need for better training of tourism staff regarding accessible tourism requirements. Hotels, restaurants, and tour operators often lack the knowledge and expertise to implement accessibility measures effectively. Thus, prioritizing training and development programs for the local workforce will enhance the quality of accessible facilities. Our study provides evidence that destination image can fluctuate the relationship between accessible tourism and sustainable development; thus, destination planners should focus on developing destination marketing campaigns to attract diverse groups of tourists and promote the area's inclusive approach. Furthermore, our findings hold significance for policymakers involved in the development of accessible tourism. They can utilize the insights from our study to identify pertinent issues and develop public policies and effective actions that ensure accessible and high-quality tourism for all. By adopting inclusive tourism policies, the northern areas of Pakistan can unlock the potential of accessible tourism, leading to sustainable growth and benefiting both tourists and local communities.

Limitations and directions for future research

A few limitations of this study must be acknowledged. Firstly, only Ritchie and Crouch (2003) attributes with significant relevance were included in the analysis, Future studies should consider more dimensions with regard to accessibility measures. This approach would allow for a more comprehensive exploration of the factors that influence sustainable community development. Secondly, the study employed sustainability of local communities as a composite variable to gauge the economic, socio-cultural, and environmental dimensions of sustainable community development. Future research could consider investigating these dimensions as distinct variables. This approach would allow for the examination of the individual impact of each dimension of accessible tourism on various facets of the local community's development. Finally, the study participants were selected exclusively from the northern areas of Pakistan, which may restrict the generalizability of the results to other geographic locations.

References

Abbas, J., Mubeen, R., Iorember, P. T., Raza, S., & Mamirkulova, G. (2021). Exploring the impact of COVID-19 on tourism: Transformational potential and implications for a sustainable recovery of the travel and leisure industry. *Current Research in Behavioral Sciences*, *3*(2),1-11. https://doi.org/10.1016/j.crbeha.2021.100033

Aquino, R. S., Lück, M., & Schänzel, H. A. (2018). A conceptual framework of tourism social entrepreneurship for sustainable community development. *Journal of Hospitality and Tourism Management*, *1*(37), 23–32. https://doi.org/10.1016/j.jhtm.2018.09.001

Bano, S., Liu, L., & Khan, A. (2022). Dynamic influence of aging, industrial innovations, and ICT on tourism development and renewable energy consumption in BRICS economies. *Renewable Energy*, *192*(4), 431–442. https://doi.org/10.1016/j.renene.2022.04.134

Becker, J.-M., Ringle, C. M., & Sarstedt, M. (2018). Estimating moderating effects in PLS-SEM and PLSc-SEM: Interaction term generation data treatment. *Journal of Applied Structural Equation Modeling*, *4*(2),1-21. https://doi.org/10.47263/JASEM.2(2)01

Benjamin, S., Bottone, E., & Lee, M. (2021). Beyond accessibility: Exploring the representation of people with disabilities in tourism promotional materials. *Journal of Sustainable Tourism*, *29*(3), 295-313. https:/doi/abs/10.1080/09669582.2020.1755295

Chahal, H., & Devi, A. (2016). Impact of local community quality-of-life (QOF) on sustainable development of pilgrimage destinations: Mediating role of destination image. *International Journal of Applied Business and Economic Research*, *14*(4), 269–296.

Cham, T.-H., Hwa, C., Ting, H., & Memon, M. (2021). Will destination image drive the intention to revisit and recommend? Empirical evidence from golf tourism. *International Journal of Sports Marketing and Sponsorship*, *23*(2), 385-409. https://doi.org/10.1108/IJSMS-02-2021-0040

Cheer, J., Milano, C., & Novelli, M. (2019). Tourism and community resilience in the Anthropocene: Accentuating temporal overtourism. *Journal of Sustainable Tourism*, *27*(4), 554–572. https://doi.org/10.1080/09669582.2019.1578363

Coban, G., & Yildiz, O. S. (2019). Developing a destination management model: Case of Cappadocia. *Tourism Management Perspectives*, *30*(1), 117–128. https://doi.org/10.1016/j.tmp.2019.02.012

Cochran, A. L. (2020). Understanding the role of transportation-related social interaction in travel behavior and health: A qualitative study of adults with disabilities. *Journal of Transport & Health*, *19*(1), 100948. https://doi.org/10.1016/j.jth.2020.100948

Cronjé, D. F., & Du Plessis, E. (2020). A review on tourism destination competitiveness. *Journal of Hospitality and Tourism Management*, *45*(6), 256–265. https://doi.org/10.1016/j.jhtm.2020.06.012

Dandotiya, R., & Aggarwal, A. (2022). An examination of tourists' national identity, place attachment and loyalty at a dark tourist destination. *Kybernetes*, *52*(3), 6063-6077, https://doi.org/10.1108/K-08-2021-0756

Darcy, S., & Buhalis, D. (2010). From disabled tourists to accessible tourism. *Concepts and Issues, 1*(2), 1-20, https://doi.org/10.21832/9781845411626-004

Darcy, S., & Dickson, T. J. (2009). A Whole-of-life approach to tourism: The case for accessible tourism experiences. *Journal of Hospitality and Tourism Management*, *16*(1), 32–44. https://doi.org/10.1375/jhtm.16.1.32

Darcy, S., Mckercher, B., & Schweinsberg, S. (2020). From tourism and disability to accessible tourism: A perspective article. *Tourism Review*, *75*(1), 140-144, https://doi.org/10.1108/TR-07-2019-0323

Dawson, J. F. (2014). Moderation in management research: What, why, when, and how. *Journal of Business and Psychology*, *29*(1), 1–19. https://doi.org/10.1007/s10869-013-9308-7

De Matteis, F., Notaristefano, G., & Bianchi, P. (2021). Public—Private Partnership Governance for Accessible Tourism in Marine Protected Areas (MPAs). *Sustainability*, *13*(15), 8455. https://doi.org/10.3390/su13158455

Devile, E., & Kastenholz, E. (2018). Accessible tourism experiences: The voice of people with visual disabilities. *Journal of Policy Research in Tourism, Leisure and Events*, *10*(3), 265–285. https://doi.org/10.1080/19407963.2018.1470183

Domínguez Vila, T., Darcy, S., & Alén González, E. (2015). Competing for the disability tourism market – A comparative exploration of the factors of accessible tourism competitiveness in Spain and Australia. *Tourism Management*, *47*(1), 261–272. https://doi.org/10.1016/j.tourman.2014.10.008

Dwyer, L., Cvelbar, L., Mihalic, T., & Koman, M. (2014). Integrated destination competitiveness model: Testing its validity and data accessibility. *Tourism Analysis*, *19*(1), 1-19. https://doi.org/10.3727/108354214X13927625340073

Dyk, A., Tkaczynski, A., & Slabbert, E. (2019). Repeat tourism, destination image and behavioural intentions: Implications for sustainable development in South Africa. *Tourism Recreation Research*, *44*(7), 1–7. https://doi.org/10.1080/02508281.2019.1637610

Elkington, J. (1994). *Enter the Triple Bottom Line*. New York: Routledge.

Fyall, A., & Garrod, B. (2020). Destination management: A perspective article. *Tourism Review*, *75*(1), 165–169. https://doi.org/10.1108/TR-07-2019-0311

Giampiccoli, A., Mtapuri, O., & Nauright, J. (2020). Tourism development in the Seychelles: A proposal for a unique community-based tourism alternative. *Journal of Tourism and Cultural Change*, *19*(5), 1–14. https://doi.org/10.1080/14766825.2020.1743297

Goffi, G., Cucculelli, M., & Masiero, L. (2019). Fostering tourism destination competitiveness in developing countries: The role of sustainability. *Journal of Cleaner Production*, *209*(2), 101–115. https://doi.org/10.1016/j.jclepro.2018.10.208

Gomezelj, D. O., & Mihalič, T. (2008). Destination competitiveness—Applying different models, the case of Slovenia. *Tourism Management*, *29*(2), 294–307. https://doi.org/10.1016/j.tourman.2007.03.009

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning*, *46*(1), 1-12.

Han, H. (2021). Consumer behavior and environmental sustainability in tourism and hospitality: A review of theories, concepts, and latest research. *Journal of Sustainable Tourism*, *29*(7), 1021–1042. https://doi.org/10.1080/09669582.2021.1903019

Huete-Alcocer, N., & Lopez, V. (2019). The role of destination image in tourist satisfaction: The case of a heritage site. *Economic Research-Ekonomska Istraživanja*, *33*(2), 1–18. https://doi.org/10.1080/1331677X.2019.1654399

Hussain, B. (2022). Share of foreign tourists increasing in Pakistan despite turmoil. Retrieved from https://www.brecorder.com/news/40234858

Janjua, Z. ul A., Krishnapillai, G., & Rehman, M. (2022). Importance of the sustainability tourism marketing practices: An insight from rural community-based homestays in Malaysia. *Journal of Hospitality and Tourism Insights*, *6*(2), 575–594. https://doi.org/10.1108/JHTI-10-2021-0274

Jehan, Y., Batool, M., Hayat, N., & Hussain, D. (2023). Socio-economic and environmental impacts of tourism on local community in Gilgit Baltistan, Pakistan: A local community prospective. *Journal of the Knowledge Economy*, *14*(1), 180–199. https://doi.org/10.1007/s13132-021-00885-9

Kamyabi, M., & Alipour, H. (2022). An investigation of the challenges faced by the disabled population and the implications for accessible tourism: Evidence from a mediterranean destination. *Sustainability*, *14*(8), 4708, https://doi.org/10.3390/su14084702

Kanwal, S., Rasheed, M. I., Pitafi, A. H., Pitafi, A., & Ren, M. (2020). Road and transport infrastructure development and community support for tourism: The role of perceived benefits, and community satisfaction. *Tourism Management*, *77*(1), 104014. https://doi.org/10.1016/j.tourman.2019.104014

Kasimati, E. (2019). Accessible tourism in Greece: What is the current status?. *Journal of Ekonomi, 1*(1), 1–33.

Khan, D. A. (2021). Northern areas of Pakistan – *World Heritage Sites—Tourism in Pakistan*. Retrieved from https://tourisminpakistan.net/northern-areas-of-pakistan/

Khanh, C., & Phong, L. (2020). Impact of environmental belief and nature-based destination image on ecotourism attitude. *Journal of Hospitality and Tourism Insights*, *3*(4), 489-505.https://doi.org/10.1108/JHTI-03-2020-0027

Kumar, S., Valeri, M., & Shekhar. (2021). Understanding the relationship among factors influencing rural tourism: A hierarchical approach. *Journal of Organizational Change Management*, *35*(2), 385–407. https://doi.org/10.1108/JOCM-01-2021-0006

Lee, S. W., & Xue, K. (2020). A model of destination loyalty: Integrating destination image and sustainable tourism. *Asia Pacific Journal of Tourism Research*, *25*(1), 393–408. https://doi.org/10.1080/10941665.2020.1713185

Lee, T. H., & Jan, F.-H. (2019). Can community-based tourism contribute to sustainable development? Evidence from residents' perceptions of the sustainability. *Tourism Management*, *70*(3), 368–380. https://doi.org/10.1016/j.tourman.2018.09.003

Lestari, Y. D., Saidah, F., & Nadhira, A. (2022). Effect of destination competitiveness attributes on tourists' intention to visit halal tourism destination in Indonesia. *Journal of Islamic Marketing*, *14*(4), 937-965. https://www.researcher-app.com/paper/10465086

Liu, M., Liu, Y., Mo, Z., & Ng, K. (2020). Using text mining to track changes in travel destination image: The case of Macau. *Asia Pacific Journal of Marketing and Logistics, 33*(2), 371-393. https://doi.org/10.1108/APJML-08-2019-0477

Loureiro, S. M. C., & Jesus, S. (2019). How perceived risk and animosity towards a destination may influence destination image and intention to revisit: The case of Rio de Janeiro. *Anatolia*, *30*(4), 497–512. https://doi.org/10.1080/13032917.2019.1632910

Mihalic, T., & Kuščer, K. (2021). Can overtourism be managed? Destination management factors affecting residents' irritation and quality of life. *Tourism Review*, *77*(1), 16–34. https://doi.org/10.1108/TR-04-2020-0186

Miličević, K., Mihalič, T., & Sever, I. (2017). An investigation of the relationship between destination branding and destination competitiveness. *Journal of Travel & Tourism Marketing*, *34*(2), 209–221. https://doi.org/10.1080/10548408.2016.1156611
Ministry of Tourism. (2021). *Pakistan Tourism Guide*. Retrieved from https://embassyofpakistanusa.org/wp-content/uploads/2021/10/Pak_Tourism_Guide-Sept_2021
Natalia, P., Clara, R. A., Simon, D., Noelia, G., & Barbara, A. (2019). Critical elements in accessible tourism for destination competitiveness and comparison: Principal component analysis from Oceania and South America. *Tourism Management*, *75*(1), 169–185. https://doi.org/10.1016/j.tourman.2019.04.012
Nazneen, S., Xu, H., & Din, N. U. (2019). Cross-border infrastructural development and residents' perceived tourism impacts: A case of China–Pakistan economic corridor. *International Journal of Tourism Research*, *21*(3), 334–343. https://doi.org/10.1002/jtr.2264
Pakistan Tourism Development Corporation. (2022). *Pakistan Tourism News*. Retrieved from https://tourism.gov.pk/publications/NEWSLETTER%20PTDC%202022.pdf.
Pasanchay, K., & Schott, C. (2021). Community-based tourism homestays' capacity to advance the sustainable development goals: A holistic sustainable livelihood perspective. *Tourism Management Perspectives*, *37*(2), 100784. https://doi.org/10.1016/j.tmp.2020.100784
Paul, I., & Roy, G. (2023). Tourist's engagement in eco-tourism: A review and research agenda. *Journal of Hospitality and Tourism Management*, *54*(3), 316–328. https://doi.org/10.1016/j.jhtm.2023.01.002
Pratama, I. G. S., & Mandaasari, I. A. C. S. (2020). The impact of tourism development on the economic, cultural and environmental aspects of local communities. *International Research Journal of Management, IT and Social Sciences*, *7*(1), 31–36. https://doi.org/10.21744/irjmis.v7n1.819
Qiao, G., Ding, L., Linlin, Z., & Yan, H. (2021). Accessible tourism: A bibliometric review (2008-2020). *Tourism Review*, *77*(3),713-730. https://doi.org/10.1108/TR-12-2020-0619
Ramkissoon, H. (2023). Perceived social impacts of tourism and quality-of-life: A new conceptual model. *Journal of Sustainable Tourism*, *31*(2), 442–459. https://doi.org/10.1080/09669582.2020.1858091
Rashid, W., Shi, J., Rahim, I. ur, Dong, S., & Sultan, H. (2020). Issues and opportunities associated with trophy hunting and tourism in Khunjerab National Park, Northern Pakistan. *Animals, 10*(4), 597. https://doi.org/10.3390/ani10040597
Rasoolimanesh, S. M., Seyfi, S., Rastegar, R., & Hall, C. M. (2021). Destination image during the COVID-19 pandemic and future travel behavior: The moderating role of past experience. *Journal of Destination Marketing & Management*, *21*(1), 100620. https://doi.org/10.1016/j.jdmm.2021.100620
Ritchie, J.R.B., & Crouch, G.I. (2003). *The competitive destination: A sustainable tourism perspective*. Cambridge: CABI Publishing.
Roxas, F. M. Y., Rivera, J. P. R., & Gutierrez, E. L. M. (2020). Framework for creating sustainable tourism using systems thinking. *Current Issues in Tourism*, *23*(3), 280–296. https://doi.org/10.1080/13683500.2018.1534805
Saluja, V., Anand, S., Kumar, H., & Peng, J. (2022). The perceived impact of tourism development and sustainable strategies for residents of Varkala, South India. *International Journal of Geoheritage and Parks*, *10*(2), 184–195. https://doi.org/10.1016/j.ijgeop.2022.03.003
Sawilowsky, S. (2009). New effect size rules of thumb. *Journal of Modern Applied Statistical Methods*, *8*(2), 597–599. https://doi.org/10.22237/jmasm/1257035100
Setini, M., Wardana, I., Sukaatmadja, I., Ekawati, N., Yasa, N., & Astawa, I. (2021). Policy models for improving ecotourism performance to build quality tourism experience and sustainable tourism. *Management Science Letters*, *11*(2), 595–608. http://dx.doi.org/10.5267/j.msl.2020.9.008
Tavitiyaman, P., Qu, H., Tsang, W. L., & Lam, C. R. (2021). The influence of smart tourism applications on perceived destination image and behavioral intention: The moderating role of information search behavior. *Journal of Hospitality and Tourism Management*, *46*(1), 476–487. https://doi.org/10.1016/j.jhtm.2021.02.003
The Nation. (2022). *Pakistan tourism industry expects to earn 4b USD in next 4 years: PTDC MD*. Retrieved from https://www.nation.com.pk/28-Sep-2022/pakistan-tourism-industry-expects-to-earn-4b-usd-in-next-4-years-ptdc-md
Thetsane, R. M. (2019). Local community participation in tourism development: The case of katse villages in Lesotho. *Athens Journal of Tourism*, *6*(2), 123–140. https://doi.org/10.30958/ajt.6-2-4
Tiwari, S., Rosak-Szyrocka, J., & Żywiołek, J. (2022). Internet of things as a sustainable energy management solution at tourism destinations in India. *Energies*, *15*(7), 7. https://doi.org/10.3390/en15072433
Tomasi, S., Paviotti, G., & Cavicchi, A. (2020). Educational tourism and local development: The role of universities. *Sustainability*, *12*(17), 6766. https://doi.org/10.3390/su12176766
Tseng, M.-L., Chang, C.-H., Lin, C.-W. R., Wu, K.-J., Chen, Q., Xia, L., & Xue, B. (2020). Future trends and guidance for the triple bottom line and sustainability: A data driven bibliometric analysis. *Environmental Science and Pollution Research*, *27*(27), 33543–33567. https://doi.org/10.1007/s11356-020-09284-0
Ullah, I., Singh, H., & Mansor, N. N. A. (2022). Impact of perception of local community and destination image on intention to visit destination: Moderating role of local community attitude. *International Journal of Academic Research in Business and Social Sciences*, *12*(5), 2006-2019. https://doi.org/10.6007/IJARBSS/v12-i5/13885
UNWTO. (2022). UNWTO | *World Tourism Organization a UN Specialized Agency*. Retrieved from https://www.unwto.org/
Uslu, A., Alagoz, G., & Güneş, E. (2020). Socio-cultural, economic, and environmental effects of tourism from the point of view of the local community. *Journal of Tourism and Services*, *11*(21), 1–21. https://doi.org/10.29036/jots.v11i21.147
V Mathew, P., & P M, N. (2021). Sustainable tourism development: Discerning the impact of responsible tourism on community wellbeing. *Journal of Hospitality and Tourism Insights*, *70*(1), 368-380. https://doi.org/10.1108/JHTI-02-2021-0052
Volgger, M., Erschbamer, G., & Pechlaner, H. (2021). Destination design: New perspectives for tourism destination development. *Journal of Destination Marketing & Management*, *19*(1), 100561. https://doi.org/10.1016/j.jdmm.2021.100561
Wang, J., Huang, X., Gong, Z., & Cao, K. (2020). Dynamic assessment of tourism carrying capacity and its impacts on tourism economic growth in urban tourism destinations in China. *Journal of Destination Marketing & Management*, *15*(2), 100383. https://doi.org/10.1016/j.jdmm.2019.100383
World Travel & Tourism Council, A. (2021). Resurgence of Pakistan's multi-billion dollar tourism industry. *Macro Pakistani*. Retrieved from https://macropakistani.com/tourism-in-pakistani-fma/

Appendix

Part A: Questionnaire for tourists

	Constructs	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Adapted from
	Accessibility of core resources and attractors						Vila et al. (2015) Dwyer et al. (2014) Gomezelj & Mihalič (2008)
1	The historic site/heritage locations are accessible to visitors, considering factors such as easy transportation options and other facilities.						
2	The natural environment surrounding the site/destination is untouched and unspoiled, providing a sense of tranquility and connection with nature.						
3	The climate of the location contributes significantly to its attractiveness for tourism, considering factors such as favorable weather conditions and seasonal variations.						
4	The area has accessible facilities for sports activities like trekking, swimming, and cricket.						
5	The area offers entertaining and enjoyable activities like campfires and fishing that are easy to access.						
	Accessibility of supporting factors and resources						Gomezelj & Mihalič (2008)
1	The residents in the area are welcoming and hospitable towards tourists with disabilities or diverse needs.						
2	There is effective communication and trust between tourists and residents in the area.						
3	The parks or protected areas are accessible in terms of trails, road signage, and information provided to visitors.						
4	The quality of hotels and restaurants in the area is satisfactory and trained staff are available to provide a seamless service to people with diverse needs.						
5	Seamless transportation alternatives like low-floor buses adapted taxis, and vehicles equipped with wheelchair ramps or lifts.						
	Accessible destination planning and management						Dwyer et al. (2014)
1	The destination has clear policies in place to support social tourism, catering to disabled or aged people.						
2	The destination actively develops and promotes new accessible tourism facilities and services. (for example, lifts in multi-story buildings).						
3	The residents in the area actively support the development of tourism.						
4	The destination's goals and plans reflect what the local community wants and needs.						
5	The tourism and hospitality businesses in the area work effectively and smoothly.						
	Accessibility of qualifying and amplifying determinants						Dwyer et al. (2014)
1	The security and safety of visitors with special needs in the area are well-maintained.						
2	The tourist providers have the necessary capabilities and knowledge to ensure accessibility for all visitors.						
3	The security and safety measures in place prioritize the needs of visitors with disabilities or special requirements.						
4	Visitors, including those with or without accessibility needs, receive good value for money in terms of shopping and accommodation options.						
5	Visitors, including those with accessibility needs, have enriching and fulfilling experiences in the destination, providing value for money.						

	Accessible destination planning and management	Dwyer et al. (2014)
	Destination image	Lee & Xue (2020)
1	The accessibility of key tourist attractions and activities within the city.	
2	The destination image effectively communicates its accessibility features and services to potential tourists.	
3	The destination is known for its commitment to accessible tourism and providing facilities for people with diverse needs.	
4	The destination reputation for being inclusive to the diverse needs of tourists enhances its image.	
5	The destination promotional materials and online platforms provide accurate and detailed information about accessibility options for tourists.	
6	The accessibility of key tourist attractions and activities within the city.	

Part B: Questionnaire for local residents

	Constructs						**Adapted from**
	Sustainability of local communities	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**	
	(In terms of economic, sociocultural, and environmental effects)						Jehan et al. (2023)
1	Inclusive tourism increases job opportunities for local people in the northern areas of Pakistan.						
2	Accessible tourism improves the quality of life of local people.						
3	Accessible tourism helps in the conservation and protection of the natural environment						Gnanapala & Sandaruwani (2016)
4	Tourism has changed the northern area's traditional culture to be more positive.						
5	Tourism provides more parks and other recreational areas and facilities for local residents.						
6	Accessible tourism creates new markets for local products.						Chahal & Devi (2016)
7	Because of accessible tourism, roads, and other tourism services are well maintained.						
8	Tourism developed in harmony with the natural and cultural environment.						

Biographical notes

Hassaan Ahmed has worked in academia and industry for over 11 years. He has been an Associate Professor and Program Manager at Salim Habib University for over five years in the Department of Business Administration, Faculty of Management Sciences. Dr. Hassaan attained his Ph.D. in Retail Management from the University of Karachi. His MBA from Anglia Ruskin University, United Kingdom, gave him international exposure and enabled him to offer greater value to student learning and mentoring. His core competencies include omnichannel retailing, brand management, marketing communication, and digital marketing. He is passionate about advancing the knowledge and practice of marketing and retailing, and has collaborated with various business stakeholders to design and deliver high-quality courses, projects, and business solutions.

Hadiqa Riaz is a lecturer at Bahria University Karachi and has over four years of teaching experience. She holds a distinction in her Masters in Marketing and is currently pursuing a Ph.D. degree in the same field. She has contributed to the academic field with her publications in reputed journals. Her research interests include digital marketing, omnichannel retailing, customer experience, and green marketing.

Authorship contribution statement

Hassaan Ahmed: Data Curation, Formal Analysis, Investigation, Methodology, Project Administration, Resources, Software, Supervision, Validation, Visualization, Writing – Original Draft, Writing – Review & Editing. **Hadiqa Riaz:** Formal Analysis, Investigation, Methodology, Project Administration, Resources, Software, Supervision, Validation, Visualization, Writing – Original Draft, Writing – Review & Editing.

Conflicts of interest

The authors declare no conflict of interest.

Citation (APA Style)

Ahmed, H., & Riaz, H. (2024). The potential of accessible tourism for sustainable development of local communities in northern Pakistan. *Journal of Entrepreneurship, Management and Innovation, 20*(3), 104-125. https://doi.org/10.7341/20242036

Table of Contents

ISBN 978-83-966591-8-7

Journal of ENTREPRENEURSHIP, MANAGEMENT and INNOVATION

pISSN - 2299-7075; eISSN - 2299-7326

JEMI