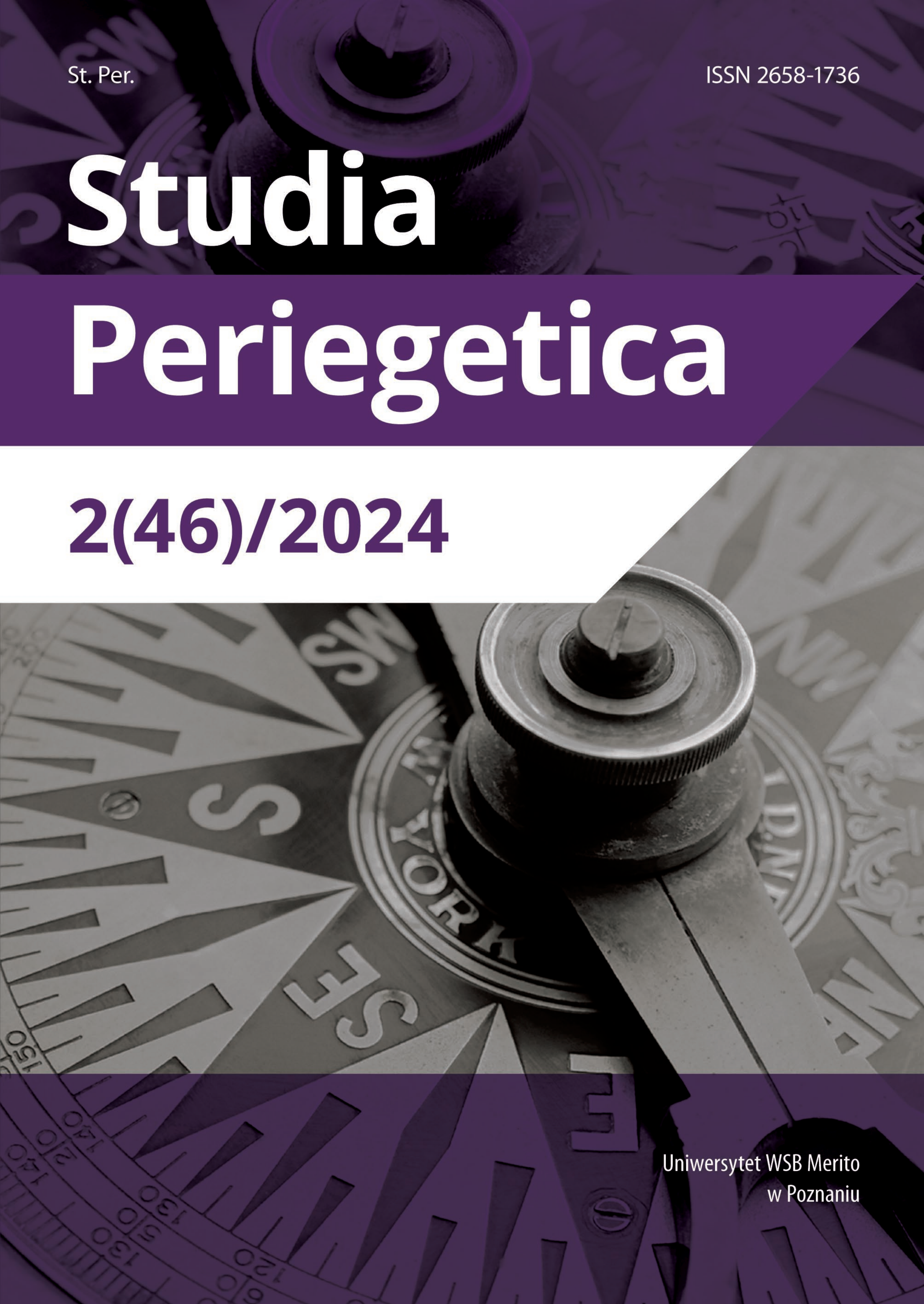
St. Per.

ISSN 2658-1736



Studia Periegetica

2(46)/2024

Uniwersytet WSB Merito
w Poznaniu

Studia Periegetica
2(46)/2024

Studia Periegetica
2(46)/2024

Special Issue on Challenges and Transformations in Contemporary Tourism and Recreation

volume editor
Marek Nowacki

WSB Merito University in Poznań
Poznań 2024

Studia Periegetica
2(46)/2024

Numer specjalny. Współczesne wyzwania i przemiany w turystyce i rekreacji

redaktor naukowy
Marek Nowacki

Uniwersytet WSB Merito w Poznaniu
Poznań 2024

Czasopismo znajduje się w wykazie czasopism naukowych Ministerstwa Edukacji i Nauki — **40 punktów** (komunikat z 1 grudnia 2021).
Czasopismo indeksowane w bazach: Index Copernicus, BazEkon, PBN, BILGINDEX, Google Scholar, DOAJ, CrossRef, ERIH Plus, EBSCO, CEON.
Czasopismo recenzowane według standardów Ministerstwa Edukacji i Nauki oraz Committee on Publication Ethics (COPE).
Lista recenzentów na stronie www.studia-periegetica.com oraz w ostatnim numerze czasopisma z danego roku.
https://journals.wsb.poznan.pl/index.php/sp/recenzenci

The journal included in the list of ranked scientific journals published by the Ministry of Education and Science — **40 points** (December, 1st 2021).
The journal indexed in: Index Copernicus, BazEkon, PBN, BILGINDEX, Google Scholar, DOAJ, CrossRef, ERIH Plus, EBSCO, CEON.
The journal reviewed in compliance with the standards set forth by the Ministry of Education and Science and Committee on Publication Ethics (COPE).
A list of referees is available at studia-periegetica.com and published in the last issue of the journal each year.

Procedura recenzowania / Review procedure
https://studia-periegetica.com/resources/html/cms/FORAUTHORS
https://journals.wsb.poznan.pl/index.php/sp/recenzja

Redaktor naukowy (tematyczny) numeru / The volume's managing editor
Marek Nowacki (WSB University in Poznań, Poland)

Redakcja językowa tekstów angielskich / English texts edited by
Grzegorz Grygiel

Redakcja i korekta tekstów w języku polskim / Polish texts edited by
Paulina Jeske-Choińska, Agnieszka Czapczyk, Lidia Kozłowska

Skład / Typeset by
Teodor Jeske-Choiński / gniazdo.pl

Projekt okładki / Cover design by
Martyna Dawidziak

Wersja pierwotna — publikacja elektroniczna / Source version — electronic publication

ISSN 2658-1736

Uniwersytet WSB Merito w Poznaniu
ul. Powstańców Wielkopolskich 5, 61-895 Poznań
tel. 61 655 33 33
e-mail: wydawnictwo@wsb.poznan.pl, journals@poznan.merito.pl
https://www.studia-periegetica.com, https://journals.wsb.poznan.pl/index.php/sp

Spis treści / Contents

Studia
Periegetica
2(46)/2024

ISSN 2658-1736, https://journals.wsb.poznan.pl/index.php/sp
s. 7–32, https://doi.org/10.58683/sp.1987

BARTOSZ SZCZECHOWICZ[a], JAKUB RYŚNIK[b], JACEK POLECHOŃSKI[c], RAJMUND TOMIK[d]

A Multi-Aspect Assessment of Experiences of People Engaging in Recreational Physical Activity in Real Life as well as Immersive and Non-Immersive VR

Abstract. The aim of the article is to identify — taking into account several dimensions described in the literature — experiences of people undertaking recreational physical activity (PA) in the form of cycling in natural conditions and riding a stationary bicycle in three settings: without any visualisations, in non-immersive visual reality (nIVR) and IVR. The empirical assessment of such experiences was carried out on a sample of 40 students, using a research questionnaire developed by the authors. Results of Friedman's analysis of variance indicate that the conditions of cycling significantly affect cyclists' experiences in the following systems: internal/external ($\chi^2 = 61.42(40;3)$; $p < 0.001$), physical/emotional ($\chi^2 = 11.90(40;3)$; $p < 0.05$), utilitarian/hedonistic ($\chi^2 = 29.38(40;3)$; $p < 0.001$), passive/active ($\chi^2 = 48.28(40;3)$; $p < 0.001$), immersion/absorption ($\chi^2 = 11.71(40;3)$; $p < 0.05$), unpleasant/pleasant ($\chi^2 = 77.14(40;3)$; $p < 0.001$), boring/stimulating ($\chi^2 = 47.70(40;3)$; $p < 0.001$). The conditions in which the participants rode a bike significantly influenced their overall experience profile, resulting from the distribution of categories within the systems indicated above. However, similarities were found in two pairs of scenarios: (1) cycling in natural conditions and in IVR, and (2) riding a cycle ergometer without any visualisation and in nIVR.

Keywords: experience, physical activity, recreation, cycling, virtual reality

Article history. Submited 2024-08-05. Accepted 2024-09-27. Published 2024-11-04.

[a] Institute of Entrepreneurship and Management, Faculty of Tourism and Leisure, University of Physical Education in Krakow, bartosz.szczechowicz@awf.krakow.pl, https://orcid.org/0000-0002-9019-9396

[b] Department of Tourism and Recreation, Academy of Physical Education in Katowice, j.rysnik@awf.katowice.pl, https://orcid.org/0000-0001-5994-2922

[c] Institute of Sport Sciences, Academy of Physical Education in Katowice, j.polechonski@awf.katowice.pl, https://orcid.org/0000-0002-3294-7800

[d] Department of Tourism and Recreation, Academy of Physical Education in Katowice, r.tomik@awf.katowice.pl, https://orcid.org/0000-0001-9603-8828

1. Introduction

Among various factors influencing opportunities and practices related to people's free time, the development of technology plays a special role. The relevance of technology can be exemplified by the growing interest of consumers in practicing physical activity (PA) in an artificial reality created using information technology, known as virtual reality (VR). The virtual environment is not only used to create original forms of PA but also digital representations of real ones. As a result, consumers have a broader choice and can decide whether they want to practice PA in the real world (real life, RL) or in a virtual environment. The latter option can additionally be accompanied by different degrees of immersion (NIVR or IVR). By analysing the relationship between the conditions in which PA is undertaken and the way people experience it one can expect to arrive at a better understanding of consumer preferences with respect to modern technologies. The following study seeks to determine whether practicing recreational PA in RL and VR differentiates user experiences defined as the overall perception of the activity itself and the resulting impressions. The authors attempt to answer this question using results of an empirical study of PA in the form of cycling.

2. Literature Review

There are many theoretical concepts developed in various fields of science that can be used to analyse experience derived from recreational PA. One concept that we refer to in this article is the idea of experience economy, which is based on the assumption that experience, like raw materials, goods and services, can also be the subject of market exchange. When such experience is staged for the consumer, it is characterised by being memorable and personal and is revealed over a certain period of time and through specific sensations (Pine II & Gilmore, 1999, p. 6).

From the perspective of the above-mentioned concept, experience as a "product" is not only the object of exchange between the seller and the buyer but is also a theoretical construct that can be used to present any means that serve to satisfy people's needs and desires (Szczechowicz, 2012). Thus, although physical activities are usually undertaken in certain conventional forms, in practice, they can be implemented in various spatial, natural, cultural, social, economic and technological conditions. Consequently, there are various ways in which physical activity can be staged.

PA can be implemented in natural conditions (RL) or in completely artificial ones (VR). In both types of reality, a person can be completely immersed in the scenery (immersion) or can perceive the created scenery incompletely. In the case of VR, the virtual world is visualised on a classic flat screen (NIVR) or a person is fully immersed in it (IVR) thanks to a head-mounted display (HMD) device (Garay-Sánchez et al., 2021). Similarly, in real life, a person can either be engaged in a full experience (cycling in natural conditions) or a partial one when using a cyclo-ergometer. It should be noted that from a strictly functional point of view, these different settings do not differ from each other in principle. Nonetheless, there may be differences in terms of broadly understood sensations, experiences, emotions, feelings, etc.

There are at least a dozen different interpretations regarding the concept of "experience" (Schmitt, 2010). In this study, experience is broadly defined as a way of perceiving an object of consumption or a subjective reaction to what is consumed. This definition is similar to the one formulated by Stephan H. Haeckel, Lewis P. Carbone and Leonard L. Berry (2004, quoted in Skowronek, 2012, p. 130) with respect to the concept of "total experience", and to what Iwona Skowronek (2012) describes as "holisticity of experiences".

There are also many categorisations of consumer experiences (Schmitt, 2003). For example, Morris B. Holbrook and Elizabeth C. Hirschman (1982) describe utilitarian experiences as oriented towards specific practical goals, and hedonistic experiences as oriented towards pleasure understood in terms of the 3 F's, i.e. fantasy, feelings and fun. Experience can also be external — resulting from sensory perception, and internal — resulting from rational or intellectual awareness and understanding of one's own feelings (Dziewanowska & Kacprzak, 2013, p. 93). Bernd Schmitt (2003, p. 105) describes consumer experience as a construct consisting of several dimensions, each constituting a certain type of experience: cognitive, sensory, affective, social and physical. Colin Shaw (2005, p. 64–68) distinguishes between experiences in which the physical aspect dominates, and those in which the emotional aspect plays the key role. From the buyer's point of view and taking into account the degree of involvement, experiences can be classified into oblivious, dispersed, engaging and captivating.

There are also typologies of experiences with a higher degree of complexity. For example, Joseph B. Pine II and James H. Gilmore (1999, p. 30–31) argue that consumers can be involved in creating their experiences in two basic dimensions: participation (active, passive) and connection with the environment (absorption, immersion). By combining the values of these dimensions, one obtains four realms of experience: entertainment (passive, absorption), aesthetics (passive, immersion), education (active, absorption) and escapism (active, immersion) (Pine II & Gilmore 1999, p. 31). When consumer behaviour is analysed in terms of emotions, it is possible to identify two key dimensions, namely pleasure and arousal, whose interactions results in four states within the emotional experience module: stress (a state of unpleasant arousal), stimulation (a state of pleasant arousal), depression (a state of unpleasant sleep) and relaxation (a state of pleasant sleep) (Solomon, 2013, quoted in Kacprzak, 2017, p. 56–57). In addition to these classifications, certain specific types of experiences can also be described, most notably, peak experiences (Maslow, 1954) and "flow" (Csikszentmihalyi, 1990).

Although there are many scientific reports regarding experiences of buyers and consumers of various products, there are relatively few studies containing theoretical reflections and, above all, results of empirical research on experiences arising as a result of undertaking PA, including recreational PA. While there are studies looking into specific aspects of experiences associated with PA, particularly, regarding the state of "flow" (Kawabata & Mallett, 2011; Ross & MacIntyre, 2020), out-of-body experiences (Alvarado, 2016) and satisfaction with PA (Baldwin et al., 2013) — there is a research gap concerning multidimensional analyses of experiences of people undertaking PA that account for the conditions in which it is performed.

The problem of experiences arising as a result of undertaking PA becomes even more interesting when one considers the fact that various forms of a given activity can be performed not only in a traditional way (in a natural environment or a deliberately staged physical space), but also in VR. Research on active video games (AVGS) enabling physical exercise in VR indicates that this form of recreation is assessed positively in both its immersive and non-immersive versions (Baños et al., 2016; Dębska et al., 2019; Polechoński et al., 2020, 2022, 2023). The few studies which identify differences in the feelings of people using VR applications in immersive and non-immersive modes suggest that the use of AVG in the immersive mode is associated with more intense impressions (Pallavicini et al., 2018, 2019; Tan et al., 2015).

In view of the above, the authors decided to empirically compare experiences of people undertaking recreational PA in real life and non-immersive and immersive VR. The study focused on PA in the form of cycling, which is one of the most available and most common forms of PA (Uczestnictwo..., p. 76). More importantly, in addition to natural conditions (RL), cycling can also be performed in immersive and non-immersive VR.

The aim of the empirical study can be expressed in the form of the following research question: How do people engaged in recreational cycling in different conditions (RL, VR) experience this activity taking into account various dimensions of experience? Two research hypotheses were also formulated with respect to this question:

HB1) Experiences of people engaged in recreational cycling differ significantly depending on whether the activity is carried out in RL or VR.
HB1) Experiences of people engaged in recreational cycling differ significantly depending on their sex.

3. Method

The purpose of the study was to identify experiences of people engaged in recreational cycling in two basic settings: 1) in a natural environment using a typical bicycle, and 2) using a cycloergometer. There were three variants of the latter setting: (a) without any visualisations, (b) in NIVR and (c) in IVR.

The research procedure consisted of the following seven stages:

1. Participants were presented with general information about the research project.
2. A participant completes "questionnaire No. 1" (cycling in natural conditions).
3. The participant completes "questionnaire No. 2" (riding a cycloergometer without visualisation).
4. The participant takes part in activity session No. 1 (riding a cycloergometer in NIVR).
5. The participant rests and completes "questionnaire No. 3" (riding a cycloergometer in NIVR).
6. The participant takes part in activity session No. 2 (riding a cycloergometer in IVR).
7. The participant rests and completes "questionnaire No. 4" (riding a cycloergometer in IVR).

It was assumed that the participants were sufficiently familiar with the first two activities ("cycling in natural conditions" and "riding a cycloergometer without any visualisations") that they could express their opinions regarding these experiences without having to perform these activities during the study. Since the other two activities ("riding a cycloergometer in NIVR" and "riding a cycloergometer in IVR") were considered to be much less common, the participants were asked to perform them in two sessions during the study. "Activity session No. 1" involved riding a cycloergometer using NIVR, during which the image of the virtual world was displayed on the screen located in front of the participant. During "Activity session No. 2" participants rode a cycloergometer wearing VR goggles to create the experience of immersion. To eliminate the possible influence of the order in which the sessions were conducted, the order was changed for each subsequent participant.

To ensure the recreational nature of both cycling sessions, it was decided that the physical activity would be carried out at a moderate intensity level, which, according to the classification developed by the *American College of Sport Medicine*, corresponds to a heart rate ranging from 64 to 77% HR_{max} (Riebe et al., 2018). Therefore, the maximum heart rate (HR_{max}) was calculated for each participant using the formula: 208 – 0.7 × age (Tanaka et al., 2001). Activity sessions lasted 10 minutes, and after each session there was a break of several minutes to allow the participants' heart rate to stabilise at the resting level.

The participants were asked to complete a questionnaire with the same set of questions about each of the four PA settings described above: riding a standard bike in natural conditions, riding a cycloergometer without any visualisations, riding a cycloergometer in NIVR, and riding a cycloergometer in IVR.

The literature does not provide examples of research tools to identify experiences of people undertaking PA that were to be examined in this study. Such tools have only been reported for specific types of experiences, such as the feeling of "flow" (Jackson et al., 2008) or the experience of "pleasure" (Mullen et al., 2011). Therefore, the authors developed a questionnaire consisting of seven sets of opposing statements relating to the classifications of experiences described in the previous section. The participants were asked to indicate the degree of agreement with these statements using a seven-point ordinal ranging from "−3" (maximum agreement with the statement on the left) to "+3" (maximum agreement with the statement on the right side, with "0" representing the middle (neutral) value (Table 1).

The study was carried out between June-July 2023 at University of Physical Education in Katowice (AWF) in a certified Laboratory of Research on Pro-Health Physical Activity (PN-EN ISO 9001: 2015, certificate validity: 7/12/2021-16/12/2024). The laboratory has a room with a stationary bike with a separate space in which the participants could fill in the questionnaires. All cycling sessions were conducted using a cycloergometer (Kettler — Ergo C10), with an external cadence sensor (Wahoo Cadence) installed on its crank mechanism. The height of the cycloergometer seat and the settings of the headband securing the VR goggles were adjusted for each participant. In addition, the cycloergometer was set to adjust the load for each participant in such a way so that their heart rate reached and maintained the moderate level of intensity at (64–77% HR_{max}).

Table 1. Statements representing different dimensions of experience described in the literature (a fragment of questionnaire No. 1)

<table>
<tr><th colspan="9">During cycling in natural conditions …</th><th></th></tr>
<tr><td>… I am fully concentrated on only how my body is carrying out the physical activity, not paying attention to the surroundings in which it is taking place.</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>… I am fully concentrated only on my surroundings in which I am undertaking the physical activity, not paying attention to how my body performs it.</td><td>Internal experience
vs.
external experience</td></tr>
<tr><td colspan="10"></td></tr>
<tr><td>… I absorb the world as it is only through the senses and I do not undertake any mental effort in order to realise or understand my own experiences.</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>… I undertake mental effort in order to realise and understand my own experiences and I do not restrict myself to reception of the world only through the senses.</td><td>Experience in which the physical aspect dominates vs. experience in which the emotional aspect dominates</td></tr>
<tr><td colspan="10"></td></tr>
<tr><td>… my attitude is passive in nature: apart from the obvious fact that “I am cycling”, I have no sense of influence on the course of my activity and the experiences resulting from it.</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>… my attitude is active in nature: I do not only “cycle”, but I also have a sense of influence on the course of my activity and the experiences resulting from it.</td><td rowspan="2">Configuration of the 4 features given here (passive vs. active and immersion vs. absorption) allows us to classify experiences as:
• entertainment (passive + absorption),
• education (active + absorption),
• aesthetics (passive + immersion)
• escapism (active + immersion)</td></tr>
<tr><td>… I totally immerse myself in the undertaken activity and the environment in which this activity is carried out — due to this, I myself become a natural, inseparable part of the reality surrounding me.</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>… I absorb the ambience of the undertaken physical activity and the environment in which I realise it, somehow, from a distance — due to which I myself am rather an observer of what I am doing and what surrounds me.</td></tr>
<tr><td colspan="10"></td></tr>
<tr><td>… I am geared towards achieving tangible and real practical objectives — and not only the pleasure derived from the undertaken activity.</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>… I am geared towards only the pleasure derived from the undertaken physical activity — and not achieving objectives with are real, tangible or practical.</td><td>Utilitarian experience
vs.
hedonistic experience</td></tr>
<tr><td colspan="10"></td></tr>
<tr><td colspan="9">Cycling in natural conditions …</td><td rowspan="3">The configuration of the 4 features given here (unpleasant vs. pleasant and boring vs. stimulating) allows us to classify experiences into the following categories:
• stress (unpleasant, stimulating),
• excitement (pleasant, stimulating),
• depression (unpleasant, boring),
• relaxation (pleasant, boring)</td></tr>
<tr><td>… I perceive as unpleasant.</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>… I perceive as pleasant.</td></tr>
<tr><td>… I perceive as boring.</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>o</td><td>… I perceive as stimulating.</td></tr>
</table>

Source: Based on: Dziewanowska & Kacprzak (2013); Shaw (2005); Pine II & Gilmore (1999); Holbrook & Hirschma (1982); Solomon et al. (2013), quoted in Kacprzak (2017, p. 56–57)

Both activity sessions were conducted at the same station (Fig. 1). During the first one, the VR image was displayed on a screen (image diagonal: 200 cm; distance from the participant: 250 cm). During the second session, the participants wore Oculus Quest 2 VR goggles to create the experience of immersion.

The experience of riding a bike in VR was simulated using the VZfit app (https://www.vzfit.com/) on one of the routes available in the application, which is called Iceland Sunset Ride (author: KenOhBee) (Fig. 2).

Fig. 1. A participant riding a stationary bike in nIVR and IVR.
Source: Own materials

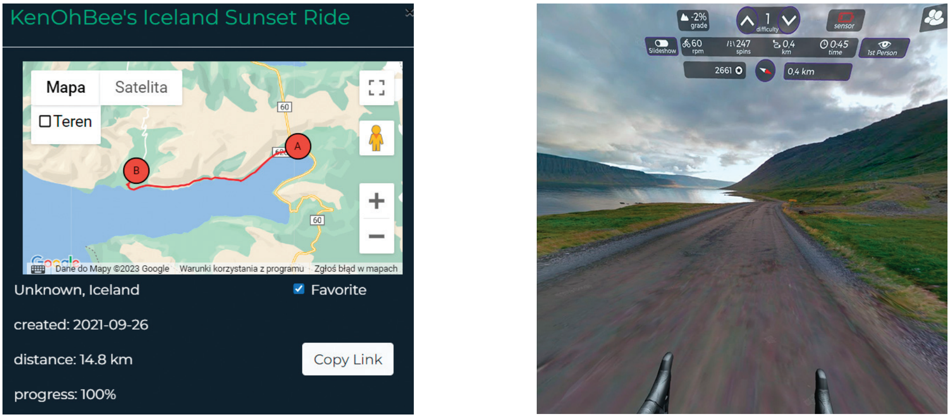


Fig. 2. The route "covered" by the participants: the map and the view from the perspective of the participant.
Source: Screenshot from VZfit app user account (https://www.vzfit.com) and from Oculus Quest 2 goggles from VZfit app

A group of 40 students from the University of Physical Education in Katowice (AWF) took party in the study (Tab. 2).

Study participants had to meet the following criteria: be healthy and physically fit, be able to ride a bicycle and practice this form of PA, including a stationary bike. Candidates who were sensitive to flashing lights, who suffered from epilepsy, had a history of motion sickness or balance disorders were disqualified from participation. Participation in the study was voluntary and it was possible to resign at any stage. The study was approved by the Research Ethics Committee of University of Physical Education in Katowice (AWF) and complied with the guidelines of the 1964 Declaration of Helsinki.

Table 2. Study group by sex and age

Study participants		*N*	Age	
			$\bar{x}$	*SD*
Total		40	22.65	2.25
Including:	women	20	22.35	2.32
	men	20	22.95	2.19

Legend: *N*: number of study participants; $\bar{x}$: arithmetic mean; *SD*: standard deviation
Source: Own elaboration

Statistical analysis, performed using Statistica and Statgraphics software, involved the calculation of the arithmetic means ($\bar{x}$) and standard deviations (*SD*), the median (M_e) and the interquartile range (*IQR*). The Shapiro-Wilk test was used to assess the normality of the distribution. Differences in the relationships between the four different settings and the nature of the participants' experiences were measured using Friedman's ANOVA and Kendall's W coefficient. In order to make intra-group comparisons, Friedman's analysis of variance was supplemented with post-hoc tests comparing absolute differences between rank means. The medians observed between women and men were compared using the non-parametric Mann-Whitney U test, supplemented with Glass's rank-biserial correlation coefficient (r_{rb}).

4. Results

Questionnaire results are presented in Table 3 (for all participants) and in Table 4 (for men and women).

Table 3. A comparison of cycling experiences in four settings taking into account different dimensions of experience (all participants)

Dimension of experience	PA settings																			
	Cycling in field				Bicycle ergometer				Bicycle ergometer in nIVR				Bicycle ergometer in IVR							
	$\bar{x}$	*SD*	M_e	*IQR*	$\bar{x}$	*SD*	M_e	*IQR*	$\bar{x}$	*SD*	M_e	*IQR*	$\bar{x}$	*SD*	M_e	*IQR*	χ^2	*df*	*p*	*W*
internal/ external	0.93	1.40	1	2	−0.75	1.19	−1	0	−0.35	1.25	−1	1	1.83	0.96	2	1.25	61.42	3	<0.001	0.51
physical/ emotional	0.93	1.40	1	2	0.45	1.69	0.5	3	−0.28	1.20	−1	2	0.65	1.89	1	3	11.90	3	<0.05	0.10
utilitarian/ hedonistic	0.35	1.55	0	3	−0.80	1.45	−1	1	−0.30	1.49	0	3	0.85	1.76	1	3	29.38	3	<0.001	0.24
passive/ active	1.83	1.30	2	2	0.18	1.80	0	3	−0.78	1.12	−1	0.5	1.45	1.54	2	2	48.28	3	<0.001	0.40
immersion/ absorption	−0.53	1.38	−1	2	0.05	1.63	0	2.5	0.48	1.55	0	3	−0.60	1.50	−1	0.25	11.71	3	<0.05	0.10
unpleasant/ pleasant	2.20	0.97	2	1	0.20	1.36	0.5	2	0.60	1.26	1	1	2.40	0.71	2.5	1	77.14	3	<0.001	0.64
boring/ stimulating	1.78	0.89	2	1	1.18	1.13	1	1	0.53	1.28	1	1	2.05	0.93	2	1	47.70	3	<0.001	0.40

Legend: $\bar{x}$: arithmetic mean; *SD*: standard deviation; M_e: median; *IQR*: interquartile range; χ^2: test statistics of Friedman's test; *df*: degrees of freedom; *p*: p value; *W*: Kendall's W coefficient.
Source: Own elaboration

4.1. "Internal" vs "External" Experience

The questionnaire results indicate that the participants paid relatively much attention to their surroundings ("external" experience) when cycling in IVR (1.83 ± 0.96 points) and in the natural environment (0.93 ± 1.40 points). They tended to pay more attention to "internal" experience while cycling in NIVR and without any visualisation. Friedman's ANOVA indicates that cycling conditions significantly influence this particular dimension of experience ($\chi^2 = 61.42(40;3)$; $p < 0.001$; $W = 0.51$), and the size of the associated effect is strong. Extended post-hoc analyses indicate that:

- the experience of cycling in natural conditions does not differ significantly from the experience of cycling in IVR, but is rated significantly higher ($p < 0.05$) than the experience in riding a cycloergometer without visualisation and cycling in NIVR;

Table 4. A comparison of cycling experiences in four settings taking into account different dimensions of experience by sex

PA setting	Dimension of experience	Women		Men				
		M_e	*IQR*	M_e	*IQR*	*U*	*p*	r_{rb}
Cycling in field	internal / external	1.5	2	1.0	3	155.5	0.220	0.22
	physical / emotional	1.0	2.25	1.0	1.25	178.5	0.561	0.11
	utilitarian / hedonistic	0.5	3	0.0	3	187.5	0.741	0.06
	passive / active	2.0	1	2.0	1.25	134.0	0.063	0.33
	immersion / absorption	−1.0	2	−1.0	1.25	187.5	0.737	0.06
	unpleasant / pleasant	2.0	1	2.0	1	182.0	0.607	0.09
	boring / stimulating	2.0	0	2.0	1	159.5	0.237	0.20
Bicycle ergometer	internal / external	−1.0	0.25	−1.0	1	152.5	0.149	0.24
	physical / emotional	0.0	3	1.0	3	190.5	0.804	0.05
	utilitarian / hedonistic	−1.0	2.5	−1.0	1	155.0	0.196	0.23
	passive / active	1.5	4	−1.0	1.25	120.0	0.028*	0.4
	immersion / absorption	0.5	3	−1.0	3	153.0	0.200	0.24
	unpleasant / pleasant	1.0	1.5	−1.0	2	135.0	0.071	0.33
	boring / stimulating	1.5	1.25	1.0	0.25	157.0	0.230	0.22
Bicycle ergometer in nIVR	internal / external	−1.0	1	0.0	1	171.5	0.430	0.14
	physical / emotional	−1.0	1	0.0	2	160.5	0.271	0.20
	utilitarian / hedonistic	0.0	2	−0.5	2	163.5	0.318	0.18
	passive / active	−1.0	1.25	−1.0	0.25	183.0	0.630	0.09
	immersion / absorption	0.0	2.25	1.0	2.25	170.0	0.417	0.15
	unpleasant / pleasant	1.0	2	1.0	0	171.0	0.408	0.15
	boring / stimulating	1.0	1	1.0	1.5	192.0	0.829	0.04
Bicycle ergometer in IVR	internal / external	2.0	1.25	2.0	1	128.5	0.041*	0.36
	physical / emotional	1.5	3.25	1.0	3.25	180.0	0.589	0.1
	utilitarian / hedonistic	1.5	3.25	1.0	3	164.5	0.335	0.18
	passive / active	2.0	2.25	2.0	1	155.0	0.214	0.23
	immersion / absorption	−1.0	1	−1.0	2	153.0	0.170	0.24
	unpleasant / pleasant	3.0	1	2.0	1	176.0	0.477	0.12
	boring / stimulating	2.5	1	2.0	1	131.0	0.048*	0.35

Legend: M_e: median; *IQR*: interquartile range; *U*: Mann-Whitney U test value; *p*: p value; *: statistically significant dependence; r_{rb}: Glass rank biserial correlation coefficient.
Source: Own elaboration

- the experience of cycling in IVR is rated significantly higher ($p < 0.05$) than the experience of riding a cycloergometer without visualisation and in nIVR.

Median ratings of cycling in IVR given by men and women are significantly different ($p = 0.041$) at the 95.0% confidence level but the effect size is moderate (r_{rb}=0.36).

4.2. "Physical" vs "Emotional" Experience

In the case of cycling in the natural environment (0.93 ± 1.40 points) and in IVR (0.65 ± 1.89 points), but also without any visualisation (0.45 ± 1.69 points), the emotional aspect is slightly more important than the physical one. The reverse relationship exists in the case of cycling in NIVR (−0.28 ± 1.20 points). Friedman's ANOVA reveals that cycling conditions significantly influence this dimension of experience ($\chi^2 = 11.90(40;3)$; $p < 0.05$; $W = 0.1$), but the effect size is weak. Extended post-hoc analyses indicate that the experience in natural conditions is rated significantly ($p < 0.05$) higher than the experience in NIVR. The significance level of the difference between the experience of cycling in IVR and in NIVR only slightly exceeds the significance level of the test.

4.3. "Utilitarian" vs "Hedonistic" Experience

Participants' answers indicate that the experience of cycling in IVR (0.85 ± 1.76 points) and in the natural environment (0.35 ± 1.55 points) tends to be perceived as "hedonistic". In contrast, cycling in NIVR (−0.30 ± 1.49 points), especially without any visualisation (−0.80 ± 1.45 points), is treated more in utilitarian terms. Friedman's ANOVA indicates that cycling conditions significantly influence this dimension of experience ($\chi^2 =29.38(40;3)$; $p < 0.001$; $W = 0.24$), but the effect size is weak. Extended post-hoc analyses indicate that:

- cycling in natural conditions is rated significantly ($p < 0.05$) higher than riding a stationary bike without visualisation;
- cycling in IVR conditions is rated significantly ($p < 0.05$) higher than riding a stationary bike without visualisation and in NIVR.

4.4. "Entertaining", "Educating", "Aesthetic" or "Escapist" Experience

The participants tended to described their attitude to cycling as "active" when riding a bike in the natural environment (1.83 ± 1.30 points) and in IVR (1.45 ± 1.54 points), while the "passive" attitude was more likely to be chosen when cycling in NIVR (−0.78 ± 1.12 points). Attitudes associated with riding a cycloergometer without any visualisations can be considered "neutral". Friedman's ANOVA suggests that the conditions of cycling significantly influence this dimension of experience ($\chi^2 = 48.28(40;3)$; $p < 0.001$; $W = 0.40$), although the effect size is moderate. Extended post-hoc analyses indicate that:

- cycling in natural conditions does not differ significantly from cycling in IVR, but is associated with significantly ($p < 0.05$) higher values than riding a cycloergometer without visualisation and in NIVR;
- cycling in IVR conditions is associated with significantly ($p < 0.05$) higher values than riding a cycloergometer without visualisation and in NIVR.

When one compares the ratings of men and women regarding riding a cycloergometer without any visualisation, the difference between the medians is statistically significant ($p < 0.05$) at the confidence level of 95%. The size of the associated effect is moderate.

The feeling of "immersion" was more likely to be reported when cycling in IVR (−0.60 ± 1.50 points) and in the natural environment (−0.53 ± 1.38 points), while the feeling of "absorption" when riding a cycloergometer in NIVR (0.48 ± 1.55 points). Riding a stationary bike without visualisation tended to be characterized as "neutral" (0.05 ± 1.63 points). Friedman's ANOVA indicates that cycling conditions significantly influence this dimension of experience ($\chi^2 = 11.71(40;3)$; $p < 0.05$; $W = 0.1$), but the size of this effect is weak. Extended post-hoc analyses indicate cycling in NIVR is associated with significantly ($p < 0.05$) higher values than the cycling in natural conditions and IVR.

The results of the above analysis can be represented graphically (Fig. 3). Thus, cycling in the natural environment and cycling in IVR tended to be described as an "escapist" experience, cyclying in NIVR was perceived as "entertaining", and riding a cycloergometer without any visualisation was perceived as "neutral".

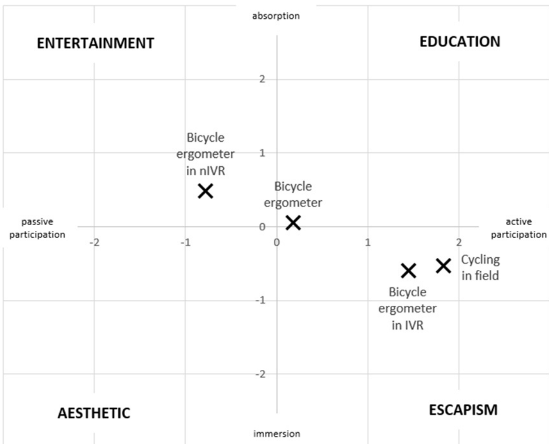


Figure 3. Four cycling settings within the space of four dimensions of experience: "passive" vs "active" participation and "immersion" vs "absorption" (according to arithmetic mean).
Source: Own elaboration based on Pine II & Gilmore (1999) and research results

4.5. "Stressful", "Exciting", "Depressing" or "Relaxing" Experience

When the cycling experience is analysed in terms of another set of dichotomies ("unpleasant" vs "pleasant" and "boring" vs "stimulating"), the results are quite clear.

Regardless of the setting, the participants rated their experience as "pleasant", although by far the highest values were reported when cycling in IVR (2.40 ± 0.71 points) and in the natural environment (2.20 ± 0.97 points). The ratings for the two remaining settings ranged from 0.20 to 0.60. Friedman's ANOVA indicates that the conditions of cycling significantly affect these dimensions of experience ($\chi^2 = 77.4(40;3)$; $p < 0.001$; $W = 0.64$) and the size of this relationship is strong. Extended post-hoc analyses lead to the following conclusions:

- the degree of pleasure derived from cycling natural conditions does not differ significantly from that experienced when cycling in IVR, but is associated with significantly ($p < 0.05$) higher values than in the case of riding a cycloergometer without visualisation and in NIVR;
- the degree of pleasure derived from cycling in IVR is rated significantly ($p < 0.05$) higher than in the case of riding a cycloergometer without visualisation and in NIVR.

Relatively small differences in the participants' ratings were observed in relation to the second pair of dimensions of experience (stimulating vs boring). All four settings were considered to be "stimulating", although in this case, the highest values were observed for cycling in IVR (2.05 ± 0.93 points) and in the natural environment (1.78 ± 0.89 points), and relatively high compared to riding a cycloergometer without visualisation (1.18 ± 1.13 points). Friedman's ANOVA suggests that the conditions of cycling significantly influence this dimension of experience ($\chi^2 = 47.70(40;3)$; $p < 0.001$; $W = 0.40$), while the size of this effect is moderate. Extended post-hoc analyses indicate that:

- the perceived level of stimulation when cycling in natural conditions is significantly ($p < 0.05$) higher than in the case of cycling in NIVR;
- the perceived level of stimulation when cycling in IVR conditions is significantly ($p < 0.05$) higher than in the case of riding a cycloergometer without visualisation and in NIVR.

When one compares the ratings of men and women regarding cycling in IVR, the difference between the medians for the two groups is statistically significant ($p < 0.05$) at the confidence level of 95%. The associated effect size is moderate.

As can be seen in Figure 4, while all four cycling settings were described as "stimulating", this assessment was particularly strong in the case of cycling in IVR and in the natural environment. Cycling in nIVR was perceived as more pleasant than stimulating, and cycling without any visualisations was assessed as more stimulating than pleasant.

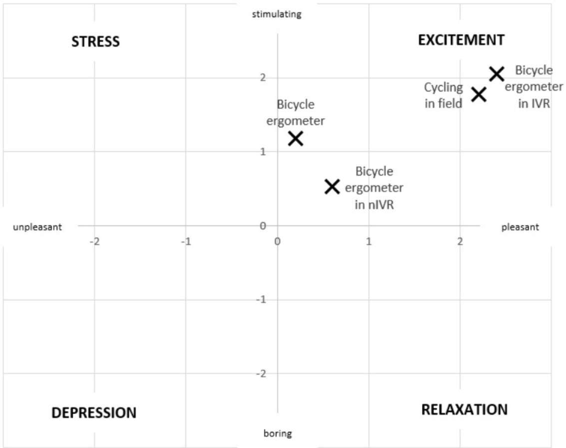


Figure 4. Four cycling settings within the space of four dimensions of experience: "pleasant" vs "unpleasant" and "boring" vs "stimulating" (according to arithmetic mean).
Source: Own elaboration based on Solomon (2013), quoted in Kacprzak (2017, p. 56–57) and research results

4.6. An Overall Comparison of Different Dimensions of the Cycling Experience

All dimensions of the cycling experience in the four settings are presented in Figure 5.

As can be seen, the degree of similarity between the patterns of relationships along the seven dimensions of experience is strongest for cycling in natural conditions and in IVR.

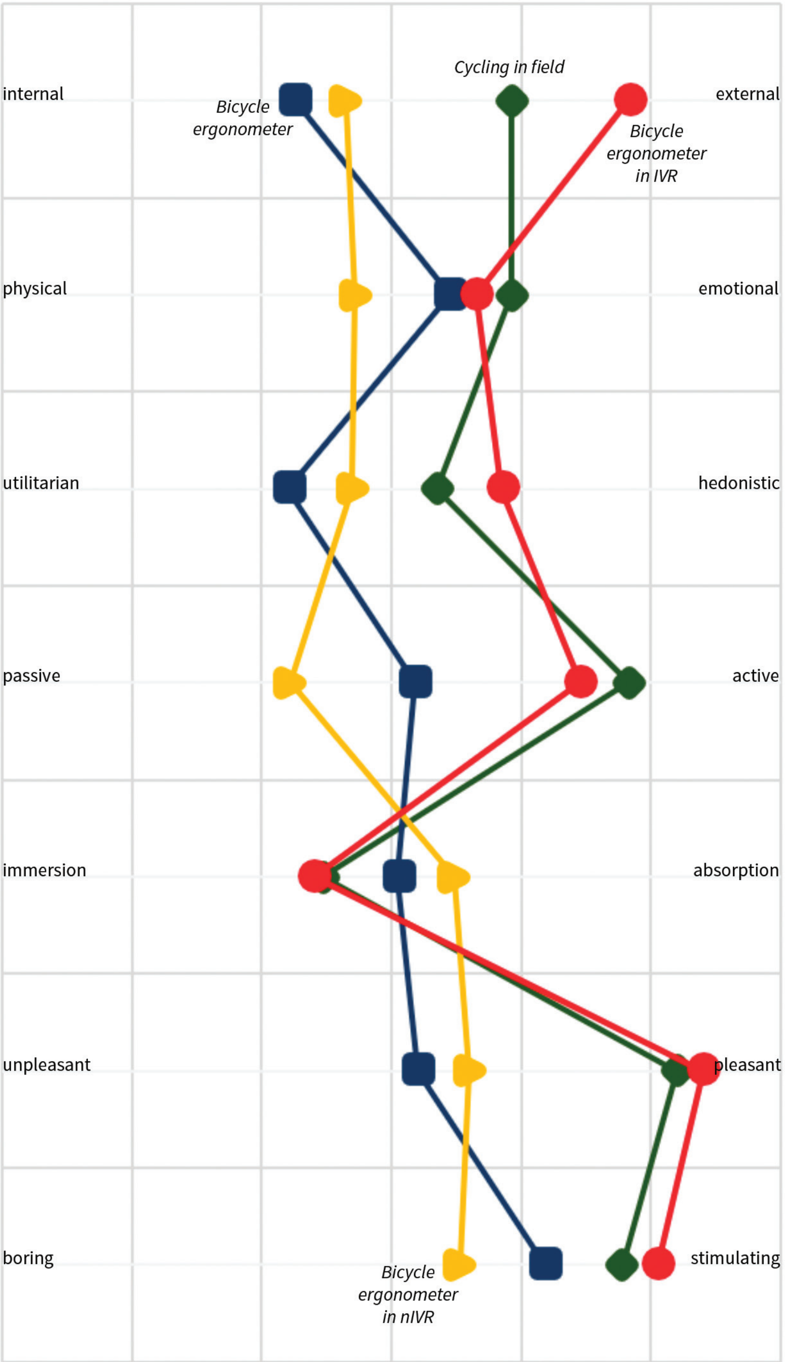


Figure 5. Dimensions of the cycling experience in the four settings (according to the arithmetic mean)
Source: Own elaboration

5. Discussion

The results presented above provide an interesting material for discussion and comparison with findings emerging from other studies into certain dimensions of experiences of people undertaking PA in various contexts. It must be remembered, however, that the results presented in this article refer to cycling undertaken by a specific group of people (students of physical education). Moreover, the study was conducted on a relatively small, non-random sample, which means that the results cannot be regarded as representative and should be interpreted with great caution.

5.1. General Nature of the Cycling Experience

As can be seen from the results in section 4, the participants experiences of cycling considering in the four different settings varied and in most cases, this variation was found to be statistically significant. It is worth emphasising that there was a great degree of similarity in the participants' assessments regarding cycling in natural conditions and in IVR.

This high degree of consistency of experiences associated with cycling in natural conditions and in IVR suggests that these two settings are largely equivalent. This is confirmed by the fact that no statistically significant differences were observed between cycling in natural conditions and in IVR for any of the seven dimensions of experience, represented by the seven questionnaire items. This observation is important not only from a theoretical point of view, but has practical significance as well — it shows that the IVR technology can provide similar experiences to traditional forms of PA, as evidenced by the fact that it is becoming an increasingly popular way of spending free time.

Let us now compare the results with the findings from other studies. For example, Kai Israel et al. (2023) concluded that the acceptance of the VR experience as a substitute for real experience is higher in the case of passive VR experiences (i.e. those in which the user is only an observer without a direct impact on the experience itself), than in the case of active VR experiences (i.e. those that require the user's participation). In that study, the researchers compared feelings of people taking a virtual walk and watching a theatre performance. Another study that investigated the relationship between VR and RL was conducted by Yoh Myeung-Sook (2001), who argued that VR is "real" and although it involves the use of information technologies, it does not create a "false" world, which stands in opposition to the "true" world, but rather expands the "ordinary" world that we are familiar with.

Statistically significant differences in the participants' assessments were observed between women and men with regard to cycling in IVR and two dimensions of experience: "external" vs "internal" and "boring" vs "stimulating". While cycling in IVR, women tended to be more focused on their surroundings, while men were more focused on themselves; the experience of cycling in IVR was assessed as more "stimulating" by women. Therefore, it can be assumed that women were more engaged when cycling in IVR than men.

5.2. Assessment Concerning Individual Dimensions of Experiences

The participants found cycling in IVR and in natural conditions to be the most pleasant, while cycling in NIVR turned out to be slightly more pleasant than cycling without visualisation (the differences between the first and last two settings was found to be statistically significant). It can therefore be concluded that an image displayed on the screen in front of the cyclist is a factor that increases the pleasure of cycling. This finding is consistent with research results indicating that the pleasure associated with exercising can be increased by audio-visual stimuli (Bigliassi et al., 2019; Bird et al., 2019; Jones et al., 2014). The experience of doing physical exercise in VR could also motivate students to undertake PA in VR in the future (Lee et al., 2020).

As already noted, cycling in IVR and in natural conditions was found to be more stimulating than cycling without visualisation and in NIVR (although not all observed differences were statistically significant). This could imply that an image displayed on the screen in front of the cyclist attracts their attention, thereby reducing their involvement in motor activities. This could explain why cycling without any visualisation was assessed as more stimulating and exciting. In a survey regarding the idea of exergaming, Aung Pyae (2021) found that people using IVR were more engaged in exercising than people performing exercises in a conventional form. This issue is addressed in more detail in the review by Brendan Mouatt et al. (2020), although their conclusions are not unambiguous.

In view of the above it can be concluded that the experience of cycling can generally be described in terms of "stimulation", especially when it is undertaken in IVR and in natural conditions. It is also appropriate to classify an experience as exciting, for example, in the case of a stay in an amusement park (Boguszewicz-Kreft, 2013, p. 239). In a somewhat similar context, a study related to cycling was also conducted by Larissa Müller et. al. (2015). They performed an experiment which demonstrated that people riding bicycles in a VR environment not only expressed certain emotions (surprise, joy, fear, disgust), but these emotions could even be provoked through technical means.

The participants in our study indicated the highest level of immersion when cycling in IVR and in natural conditions. Their assessments were neutral with respect to cycling without visualisation, and the lowest level of immersion was observed when cycling in NIVR (statistically significant differences were found between NIVR and natural conditions and IVR). It is worth noting that research conducted over the last few years confirms this assertion, which was considered controversial until recently. In particular, studies have shown that the perceived level of "flow" was higher in the case of PA undertaken in VR compared to PA done in natural conditions. This fact was demonstrated by Yu-Min Fang and Yen-Jung Huang (2021) with respect to physical exercises, by Chul Ho Bum et al. (2022), who analysed the game of golf, and in the study by Hyun Suk Lee and Junga Lee (2021) regarding football activities carried out in primary schools. The results of our study indicating a significantly higher level of perceived immersion in the case of cycling in IVR compared to that in NIVR are also consistent with observations of people playing video games (Kim & Ko, 2019; Pallavicini, Pepe & Minissi, 2019; Rutrecht et al., 2021).

When the cycling settings are ranked according to participants' assessments on the scale from the most "active" to the most "passive", cycling in natural conditions and in IVR are ranked higher than cycling without any visualisation and in NIVR (differences between the first two and the last two settings turned out to be statistically insignificant).

In view of the above it can be concluded that the experiences of cycling in natural conditions and in IVR can be described in terms of "escapism". It is worth noting that escapism is the basic motivation for many types of activity, including physical (Stenseng et al., 2023), although it can also lead to excessive loneliness (Siricharoen, 2019). Tal Laor (2020) found that escapism was one of the main needs satisfied by participating in the Pokémon Go urban game using the technology of augmented reality (AR). Interestingly, what escapism, understood as a social phenomenon, and VR have in common is the existence of "another world", which the user escapes to (Okorokova, 2018). Cycling in NIVR was also described as "entertaining". It can therefore be concluded that making PA more attractive by displaying an image on the screen introduces an element of fun for the participants (Huizinga, 1949).

When participants' assessments are ranked on the scale between "utilitarian" and "hedonistic" axis, the four settings can be arranged in the following order: no visualisation, NIVR, natural conditions, IVR (however, not all differences were found to be statistically significant). Therefore, riding a stationary bike without visualisation is treated as the most pragmatic option and is associated with a certain form of training, which does not necessarily have to be enjoyable as such. In contrast, cycling in VR and in natural conditions tends to be the most pleasant. Although motivations and feelings connected with cycling in the natural environment, including recreational activities, are already well-recognised (Kesenheimer et. al., 2023), little is still known about cycling in VR.

The results regarding the perception of different PA settings raise some interpretative difficulties. While the participants reported that it required some mental effort to become aware and understand their own experiences regarding riding a bicycle in natural conditions, in IVR and without visualisation, they said that in the case of cycling in NIVR the perception through the senses played the dominant role (the only statistically significant difference was observed between cycling in natural conditions and in NIVR). It can therefore be concluded that this last form of presenting artificially-generated content is attractive, but it is absorbed quite unconsciously, without deeper reflection about one's own experience.

The results regarding the dichotomy between "internal" and "external" system are clearer. The participants tended to concentrate on the surroundings when cycling in IVR and in natural conditions, while in the other two settings (in NIVR and without visualisation) thy tended to focus more on the cycling setting (the differences between the first two and last two settings were found to be statistically significant). In other words, the experience of artificial immersive reality and natural conditions are the type of environments that absorb participants' attention to the largest and similar degree.

5.3. Multi-dimensional Assessment of PA Experience

It seems that the multi-dimensional approach to identifying experiences of people undertaking PA can provide valuable insights that can be combined into a broad, comprehensive description of what sort of needs are satisfied when a person is engaged in PA. However, for the purpose of future research a standardised questionnaire would have to be developed that meets rigorous requirements of empirical research, especially with respect to validity and reliability.

6. Summary

Existing studies regarding experiences arising as a result of undertaking PA, also in VR, focus on very specific impressions or feelings reported by people performing physical activity. Although detailed indications are provided regarding specific types of consequences resulting from undertaking PA, these studies do not provide a complete and internally consistent description of such experiences. To bridge this research gap, the authors of this study decided to investigate experiences of people taking up PA from a multi-dimensional perspective. Rather than trying to undermine the current state of knowledge, the results of the study provide new insights into the issue, which raise questions about the relationships between various dimensions of experiences associated with PA. The authors believe that research involving the multi-aspect assessment of experiences associated with PA is well worth continuing in order to obtain a holistic view of how PA is experienced in various conditions — including the use of VR technology, which is likely to become an increasingly attractive alternative to traditional forms of PA. At the same time, it is necessary to continue work aimed at developing standardised research tools that could provide reliable and comparable empirical data about experiences of people engaged in various forms of PA.

7. Conclusions

The findings presented above indicate that experiences of young students engaged in recreational cycling in natural conditions and in IVR can be characterised as "external", "emotional" and "hedonistic", can be described as a form of "escapism", and are associated with a feeling of "stimulation". The students' experiences of riding a cycloergometer without any visualisation and in NIVR were somewhat different, although not all observed differences were found to be statistically significant. As hypothesised, the students' experiences associated with in recreational cycling differ significantly depending on the conditions in which this activity is undertaken (HB1) and on the person's sex (HB2) and these differences are associated with specific dimensions of experience.

7.1. Theoretical and Methodological Conclusions

In general, the cycling setting significantly influenced the overall experience profile of the participants. However, similarities between these experiences were found to exist in two settings: (1) cycling in natural conditions and in IVR, and (2) riding a cycloergometer without any visualisation and cycling in NIVR.

The proposed multi-dimensional approach to identifying the nature of experiences associated with PA can provide valuable insights. However, it requires the development of a standardised research questionnaire.

7.2. Practical Conclusions and Implications for Further Research

The strong similarity in the students' experiences of cycling in natural conditions and in IVR could be of interest to people and organisations offering products based on the immersive VR technology, especially when one considers future developments in this technology. Given the exploratory nature of the study, it would be a good idea to conduct similar analyses for other forms of PA and develop appropriate tools for this purpose, especially taking into account differences between demographic cohorts (generations) and other socio-demographic groups. It is worth noting that the use of VR may offer new possibilities for implementing PA in forms that will be considered attractive and, at the same time, safe for individuals with limited mobility (seniors, people with disabilities, athletes struggling with injuries, etc.).

Limitations

The main limitations of the study is the fact the sample was small and non-random. Furthermore, the participants completed the same questionnaire four times, in very short time intervals, which could have introduced a certain degree of randomness into the results. The questionnaire items were based on a set of simple measurement scales, which were developed using classifications of consumer experiences described in the literature, which in their current form do not create a complete and internally coherent multidimensional system; therefore, the reliability and validity of the questionnaire can be considered rather low. In view of the above, the results should be treated as preliminary. More reliable empirical data on this subject could be obtained by means of a more refined questionnaire.

CRediT Authorship Contribution Statement

Bartosz Szczechowicz: conceptualization, data curation, formal analysis, funding acquisition, investigation, methodology, project administration, software, supervision, validation, visualization, writing — original draft, writing — review & editing.

Jakub Ryśnik: conceptualization, data curation, formal analysis, investigation, methodology, resources, software, validation, writing — original draft, writing — review & editing.

Jacek Polechoński: conceptualization, data curation, investigation, methodology, resources, software, supervision, writing — original draft, writing — review & editing.

Rajmund Tomik: conceptualization, methodology, project administration, resources, supervision, writing — review & editing.

Declaration of Competing Interest

The authors report there are no competing interests to declare.

The authors have no relevant financial or non-financial interests to disclose.

References

Alvarado, C.S. (2016). Out-of-Body Experiences During Physical Activity: Report of Four New Cases. *Journal of the Society for Psychical Research*, *80*(1), 1–12.

Baldwin, A.S., Baldwin, S.A., Loehr, V.G., Kangasa, J.L., & Frierson, G.M. (2013). Elucidating satisfaction with physical activity: An examination of the day-to-day associations between experiences with physical activity and satisfaction during physical activity initiation. *Psychology & Health*, *28*(12), 1424–1441. http://dx.doi.org/10.1080/08870446.2013.822078

Baños, R.M., Escobar, P., Cebolla, A., Guixeres, J., Pitti, J.A., Lisón, J.F., & Botella, C. (2016). Using Virtual Reality to Distract Overweight Children from Bodily Sensations During Exercise. *Cyberpsychology, Behavior and Social Networking*, *19*(2), 115–119. https://doi.org/10.1089/cyber.2015.0283

Bigliassi, M., Karageorghis, C.I., Hoy, G.K., & Layne, G.S. (2019). The Way You Make Me Feel: Psychological and cerebral responses to music during real-life physical activity. *Psychology of Sport and Exercise*, *41*, 211–217. https://doi.org/10.1016/j.psychsport.2018.01.010

Bird, J.M., Karageorghis, C.I., Baker, S.J., & Brookes, D.A. (2019). Effects of music, video, and 360-degree video on cycle ergometer exercise at the ventilatory threshold. *Scandinavian Journal of Medicine & Science in Sports*, *29*(8), 1161–1173. https://doi.org/10.1111/sms.13453

Boguszewicz-Kreft, M. (2013). *Marketing doświadczeń. Jak poruszyć zmysły, zaangażować emocje, zdobyć lojalność klientów?* [Eng. *Experience Marketing. How to Move the Senses, Engage Emotions and Gain the Loyalty of Customers?*]. CeDeWu.

Bum, C., Yang, J., & Choi, C. (2022). Leisure benefits, flow experience, and life satisfaction comparison between players of actual and virtual golf. *Social Behavior & Personality: An International Journal*, *50*(5), 1–12.

Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience* (1st ed.). Harper & Row.

Dębska, M., Polechoński, J., Mynarski, A., & Polechoński, P. (2019). Enjoyment and Intensity of Physical Activity in Immersive Virtual Reality Performed on Innovative Training Devices in Compliance with Recommendations for Health. *International Journal of Environmental Research and Public Health*, *16*(19), 3673. https://doi.org/10.3390/ijerph16193673

Dziewanowska, K., & Kacprzak, A. (2013). *Marketing doświadczeń* [Eng. *Experience Marketing*]. Wydawnictwo Naukowe PWN.

Fang, Y., & Huang, Y. (2021). Comparison of the usability and flow experience of an exercise promotion virtual reality programme for different age groups. *Behaviour & Information Technology*, *40*(12), 1250–1264. https://doi.org/10.1080/0144929X.2021.1938680

Garay-Sánchez, A., Suarez-Serrano, C., Ferrando-Margelí, M., Jimenez-Rejano, J.J., & Marcén-Román, Y. (2021). Effects of Immersive and Non-Immersive Virtual Reality on the Static and Dynamic Balance of Stroke Patients: A Systematic Review and Meta-Analysis. *Journal of Clinical Medicine*, *10*(19), 4473. https://doi.org/10.3390/jcm10194473

Haeckel, S.H., Carbone, L.P., & Berry, L.L. (2004). How to Lead the Customer Experience. In: Ch.H. Lovelock, & J. Wirtz (Eds.), *Services Marketing* (5th ed.). Pearson Prentice Hall.

Holbrook, M.B., & Hirschman, E.C. (1982). The Experiential Aspects of Consumption: Consumer Fantasies, Feelings, and Fun. *Journal of Consumer Research*, *9*, 132–140.

Huizinga, J. (1949). *Homo Ludens. A Study of the Play-Element in Culture*. Routledge & Kegan Paul.

Israel, K., Zerres, Ch., & Tscheulin, D.K. (2023). Virtual Reality — Substitute for a Real Experience? The Role of User Motivation, Expectations and Experience Type. *International Journal of Innovation and Technology Management*, *20*(3), 1–30. https://doi.org/10.1142/S0219877023500189

Jackson, S.A., Martin, A.J., & Eklund ,R.C. (2008). Long and Short Measures of Flow: The Construct Validity of the FSS-2, DFS-2, and New Brief Counterparts. *Journal of Sport & Exercise Psychology*, *30*(5), 561–587. https://doi.org/10.1123/jsep.30.5.561

Jones, L., Karageorghis, C.I., & Ekkekakis, P. (2014). Can high-intensity exercise be more pleasant?: Attentional dissociation using music and video. *Journal of Sport & Exercise Psychology*, *36*(5), 528–541. https://doi.org/10.1123/jsep.2013-0251

Kacprzak, A. (2017). *Marketing doświadczeń w Internecie* [Eng. *Experience Marketing on the Internet*]. C.H. Beck.

Kawabata, M., & Mallett, C.J. (2011). Flow experience in physical activity: Examination of the internal structure of flow from a process-related perspective. *Motivation and Emotion*, *35*(4), 393–402. https://doi.org/10.1007/s11031-011-9221-1

Kesenheimer, J.S., Sagioglou, Ch., Kronbichler, A., Gauckler, P., & Kolbinger, F.R. (2023). Why do people cycle (a lot)? A multivariate approach on mental health, personality traits and motivation as determinants for cycling ambition. *Journal of Applied Sport Psychology*, *35*(6), 1005–1025, https://doi.org/10.1080/10413200.2023.2166157

Kim, D., & Ko, Y.J. (2019). The impact of virtual reality (VR) technology on sport spectators' flow experience and satisfaction. *Computers in Human Behavior*, *93*, 346–356. https://doi.org/10.1016/j.chb.2018.12.040

Laor, T. (2020). The race to escape: Location-based escapism and physical activity as a motivator in the consumption of the AR game Pokémon Go. Cyberpsychology. *Journal of Psychosocial Research on Cyberspace*, *14*(2), Article 6. https://doi.org/10.5817/CP2020-2-6

Lee, H.S., & Lee, J. (2021). The Effect of Elementary School Soccer Instruction Using Virtual Reality Technologies on Students' Attitudes toward Physical Education and Flow in Class. *Sustainability*, *13*(6), 3240. https://doi.org/10.3390/su13063240

Lee, J., Zang, T., West A., Karch, L.A., & Reys, J. (2020). Understanding College Students' Motivation In Virtual Reality-Based Exercise: An Expectancy-Value Approach. *Medicine & Science in Sports & Exercise*, *52*(7S), 117–118. https://doi.org/10.1249/01.mss.0000671344.68281.47

Maslow, A. (1954). *Motivation and Personality*. Harper.

Mouatt, B., Smith, A.E., Mellow, M.L., Parfitt, G., Smith, R.T., & Stanton, T.R. (2020). The Use of Virtual Reality to Influence Motivation, Affect, Enjoyment, and Engagement During Exercise: A Scoping Review. *Front. Virtual Real., Sec. Virtual Reality and Human Behaviour*, *1*. https://doi.org/10.3389/frvir.2020.564664

Mullen, S.P., Olson, E.A., Phillips, S.M., Szabo, A.M., Wójcicki, T.R., Mailey, E.L., Gothe, N.P., Fanning, J.T., Kramer, A.F., & McAuley, E. (2011). Measuring enjoyment of physical activity in older adults: Invariance of the physical activity enjoyment scale (paces) across groups and time. *The International Journal of Behavioral Nutrition and Physical Activity*, *8*(103). https://doi.org/10.1186/1479-5868-8-103

Müller, L., Zagaria, S., Bernin, A., Amira, A., Ramzan, N., Grecos, Ch., & Vogt, F. (2015). Emotion-Bike: A Study of Provoking Emotions in Cycling Exergames. In: K. Chorianopoulos, M. Divitini, J.B. Hauge, L. Jaccheri, & R. Malaka (Eds.), *Entertainment Computing — ICEC 2015. ICEC 2015. Lecture Notes in Computer Science*, vol. 9353 (p. 155–168). Springer. https://doi.org/10.1007/978-3-319-24589-8_12

Myeung-Sook, Y. (2001). The reality of virtual reality. *Proceedings Seventh International Conference on Virtual Systems and Multimedia, Berkeley, CA, USA*, 666–674. https://doi.org/10.1109/VSMM.2001.969726

Okorokova, V. (2018). Escapism of virtual reality as its personal feature. *ScienceRise*, *8*(49), 58–60. https://doi.org/10.15587/2313-8416.2018.140701

Pallavicini, F., Ferrari, A., Zini, A., Garcea, G., Zanacchi, A., Barone, G., & Mantovani, F. (2018). What Distinguishes a Traditional Gaming Experience from One in Virtual Reality? An Exploratory Study. In: T. Ahram, & Ch. Falcão (Eds.), *Advances in Human Factors in Wearable Technologies and Game Design. AHFE 2017. Advances in Intelligent Systems and Computing*, vol. 608 (p. 225–231). Springer International Publishing. https://doi.org/10.1007/978-3-319-60639-2_23

Pallavicini, F., Pepe, A., & Minissi, M.E. (2019). Gaming in Virtual Reality: What Changes in Terms of Usability, Emotional Response and Sense of Presence Compared to Non-Immersive Video Games? *Simulation & Gaming*, *50*(2), 136–159. https://doi.org/10.1177/1046878119831420

Pine II, B.J., & Gilmore, J.H. (1999). *The Experience Economy: Work is Theatre & Every Business a Stage*. Harvard Business School Press.

Polechoński, J., Kostorz, K., & Polechoński, P. (2023). Using Ankle Weights as an Effective Way to Increase the Intensity of Physical Activity While Playing Immersive Virtual Reality Games on an Omnidirectional Treadmill. *Applied Sciences*, *13*(20), 11536. https://doi.org/10.3390/app132011536

Polechoński, J., Nierwińska, K., Kalita, B., & Wodarski, P. (2020). Can Physical Activity in Immersive Virtual Reality Be Attractive and Have Sufficient Intensity to Meet Health Recommendations for Obese Children? A Pilot Study. *International Journal of Environmental Research and Public Health*, *17*(21), 8051. https://doi.org/10.3390/ijerph17218051

Polechoński, J., Zwierzchowska, A., Makioła, Ł., Groffik, D., & Kostorz, K. (2022). Handheld Weights as an Effective and Comfortable Way To Increase Exercise Intensity of Physical Activity in Virtual Reality: Empirical Study. *JMIR Serious Games*, *10*(4), e39932. https://doi.org/10.2196/39932

Pyae, A. (2021). Towards Understanding Users' Engagement and Enjoyment in Immersive Virtual Reality-Based Exercises. *Adjunct Publication of the 23rd International Conference on Mobile Human-Computer Interaction*. Article No. 9, 1–6. https://doi.org/10.1145/3447527.3474872

Riebe, D., Ehrman, J.K., Liguori, G., & Magal, M. (Eds.). (2018). *ACSM's guidelines for exercise testing and prescription*. Wolters Kluwer Health.

Ross J., & MacIntyre, P.D. (2020). Differentiating Flow Experiences in Physical Versus Mental Activities: A Sequential Explanatory Study. *Journal of Clinical Sport Psychology*, *14*(1), 20–40. https://doi.org/10.1123/jcsp.2018-0003

Rutrecht, H., Wittmann, M., Khoshnoud, S., & Igarzábal, F.A. (2021). Time Speeds Up During Flow States: A Study in Virtual Reality with the Video Game Thumper. *Timing & Time Perception*, *9*(4), 353–376. https://doi.org/10.1163/22134468-bja10033

Schmitt, B. (2003). *Customer experience management: A revolutionary approach to connecting with your customers*. John Wiley & Sons, Inc.

Schmitt, B. (2010). Experience marketing: concepts, frameworks and consumer insights. *Foundations and Trends® in Marketing*, *5*(2), 55–112. https://doi.org/10.1561/1700000027

Shaw, C. (2005). *Revolutionize Your Customer Experience*. Palgrave Macmillan.

Siricharoen, W.V. (2019). The Effect of Virtual Reality as a form of Escapism. *International Conference on Information Resources Management. Proceedings 36*. https://aisel.aisnet.org/confirm2019/36

Skowronek, I. (2012). *Marketing doświadczeń. Od doświadczeń klienta do wizerunku firmy* [Eng. *Experience Marketing. From Customer Experience to Company Image*]. Poltex.

Solomon, M.R. (2013). *Consumer Behaviour. Buying, having and being*. Pearson Education Limited.

Stenseng, F., Steinsholt, I.B., Hygen, B.W., & Kraft, P. (2023). Running to get "lost"? Two types of escapism in recreational running and their relations to exercise dependence and subjective well-being. *Front. Psychol.*, *13*, 1035196. https://www.frontiersin.org/articles/10.3389/fpsyg.2022.1035196/full

Szczechowicz, B. (2012). Use of the Concept of ‚Product' to analyze the Relationships between Tourism and Physical Culture. *Turyzm/Tourism*, *22*(2), 21–29. https://doi.org/10.2478/v10106-012-0008-x

Tan, Ch.T., Leong, T.W., Shen, S., Dubravs, Ch., & Si, Ch. (2015). Exploring Gameplay Experiences on the Oculus Rift. *Proceedings of the 2015 Annual Symposium on Computer-Human Interaction in Play*, 253–263. https://doi.org/10.1145/2793107.2793117

Tanaka, H., Monahan, K.D., & Seals, D.R. (2001). Age-predicted maximal heart rate revisited. *Journal of the American College of Cardiology*, 37(1), 153–156. https://doi.org/10.1016/S0735-1097(00)01054-8

Uczestnictwo w sporcie i rekreacji ruchowej w 2021 r. [Eng. Participation in Sport and Motor Recreation in 2021]. (2022). Główny Urząd Statystyczny, Urząd Statystyczny w Rzeszowie.

Wieloaspektowa ocena doświadczeń osób podejmujących rekreacyjną aktywność fizyczną w rzeczywistości realnej oraz immersyjnej i nieimmersyjnej rzeczywistości wirtualnej

Streszczenie. Celem artykułu była identyfikacja — w kilku opisywanych w literaturze wymiarach — doświadczeń osób podejmujących rekreacyjną aktywność fizyczną w formie jazdy na rowerze w warunkach naturalnych oraz jazdy na rowerze stacjonarnym (cykloergometrze) bez jakichkolwiek wizualizacji oraz w rzeczywistości wirtualnej nieimmersyjnej (nIVR) i immersyjnej (IVR). Empirycznej oceny doświadczeń dokonano na próbie 40 studentów, wykorzystując do tego autorski kwestionariusz badawczy. Na podstawie przeprowadzonej analizy wariancji Friedmana można stwierdzić, że warunki uprawiania kolarstwa istotnie wpływają na charakter doświadczeń w układach: wewnętrzne — zewnętrzne (χ^2 = 61,42(40;3); p < 0,001), fizyczne — emocjonalne (χ^2 = 11,90(40;3); p < 0,05), utylitarne — hedonistyczne (χ^2 =29,38(40;3); p < 0,001), postawa pasywna — postawa aktywna (χ^2 = 48,28(40;3); p < 0,001), zanurzenie — absorpcja (χ^2 = 11,71(40;3); p < 0,05), nieprzyjemne — przyjemne (χ^2 = 77,14(40;3); p < 0,001), usypiające — pobudzające (χ^2 = 47,70(40;3); p < 0,001). Warunki, w jakich podejmowana jest jazda na rowerze, istotnie wpływają na ogólny profil doświadczeń rowerzystów, powstający jako rezultat rozkładu kategorii w ramach wskazanych wyżej układów. Doświadczenia te okazują się jednak podobne do siebie w dwóch przypadkach: (1) jazdy w warunkach naturalnych i jazdy w IVR oraz (2) jazdy na cykloergometrze bez jakiejkolwiek wizualizacji i jazdy w nIVR.

Słowa kluczowe: doświadczenie, aktywność fizyczna, rekreacja, jazda na rowerze, rzeczywistość wirtualna

Studia
Periegetica
2(46)/2024

ISSN 2658-1736, https://journals.wsb.poznan.pl/index.php/sp
s. 33–58, https://doi.org/10.58683/sp.1978

MICHAEL KEMP[a], ANDREA GIAMPICCOLI[b], ANNA DŁUŻEWSKA[c]

Boosting Civic Capacity: Using Socially Oriented Business Models in Community-Based Tourism

Abstract. The potential of tourism to boost economic growth and social transformation is well researched and recognised by international organisations. Studies also show that the benefits derived from tourism are not spread equitably among local communities. As a result, there is growing doubt about tourism's actual contribution to accelerating sustainable economic, political and social development, particularly for the least privileged. To address this problem alternative forms of tourism have been implemented, such as Community Based Tourism (CBT), albeit with mixed results. The literature records the business sector's growing realisation that in order for companies to efficiently address sustainability challenges they need to develop new ways of creating, delivering, and capturing value. This paper seeks to contribute to the discourse on how to increase the impact of CBT. The author proposes using innovations from the Socially Oriented Business approach to design unique CBT models that address problems specific to a given locality.

Keywords: community-based tourism, corporate social responsibility, profit sharing partnerships, corporate social marketing, business models

Article history. Submited 2024-07-05. Accepted 2024-10-23. Published 2024-11-20.

1. Introduction

The UNWTO (2023) data on tourist arrivals reinforced the important potential role of tourism in reducing poverty, rising equality and underpinning development efforts (Harrison & Pratt, 2019; Giampiccoli & Mtapuri, 2020b). While tourism can indeed bring tangible economic benefits (Chilufya et al., 2019), it often produces

[a] Maria Curie Sklodowska University, Faculty of Earth Sciences and Spatial Management, michaelkemp10@gmail.com, https://orcid.org/0000-0002-2422-4856
[b] Durban University of Technology, Department of Hospitality and Tourism, andrea.giampiccoli@gmail.com, https://orcid.org/0000-0002-2963-2031
[c] Maria Curie Sklodowska University, Faculty of Earth Sciences and Spatial Management; Durban University of Technology, Faculty of Management Sciences, dluzewska.a@gmail.com, https://orcid.org/0000-0001-5648-2975

serious negative impacts on tourist destinations (Kuvan, 2010; Overton, 2019; Higgins-Desbiolles et al., 2019; Rahmawati et al. 2019; Gowreesunkar & Vo Thanh, 2020). It takes extra effort to facilitate equitable distribution of benefits derived from tourism (Dłużewska, 2019). Where most of the tourism sector is owned by private — often external — investors, inequality among local communities keeps growing and natural resources are being overused (Saayman & Giampiccoli, 2016). There is doubt whether international tourism has actually benefited local populations, especially those in developing countries (Ashley & Mitchell, 2010). For example, underpaid workers in Small Island Developing States continue to suffer from poverty and inequality (Giampiccoli et al., 2021; Guillaumont, 2010) and in some cases international tourism has even forced local populations to migrate (Abed & Hadi, 2023).

These challenges are reflected in sustainable development tourism policies (Hall, 2019), which increasingly recognise that sustainable tourism development is probably an unviable objective; the best we can hope for is to promote environmentally sound tourism development (Sharpley, 2020). There is a long list of positive and concrete actions that individuals and groups can do to reduce the negative footprint of human activities (Marchand & Walker, 2008).

2. Research Methods and Materials

The purpose of this article is to demonstrate that CBT, as an alternative tourism model, can better facilitate community development when combined with socially-oriented business models. With this aim in mind, the authors investigate possible connections and interactions between CBT and implemented or just conceptualised socially oriented business models (SOB). Some of these models, such as Corporate Social Responsibility (CSR), Profit Sharing Partnerships (PSP), Corporate Social Marketing (CSM), Investment Redistributive Incentive Model (IRIM), Cooperatives (COOP), can be inserted, managed, and developed within existing CBT settings. The main part of the paper includes tables showing intersections between CBT and SOB and shows ways in which CBT can exploit specific SOB characteristics.

This conceptual study relies on insights from the existing literature on local communities, grassroots participation, local assets and skills, the engagement of external actors in community development, community ownership in the tourism value chain and CBT and SOB models. The review of the literature was undertaken to develop a conceptual framework for the ownership of the tourism value chain in local communities. In order to ensure that the framework is sufficiently robust to fit specific local settings, care was taken to include studies concerning various locations around the globe, where specific solutions have been developed and tested.

3. Literature Review

According to Sachs et al. (2019), part of the reason progress towards sustainability has been rather slow are existing systems of provision and consumption. Social enterprises could change that by generating tangible social and economic benefits for individuals and communities (Wilkinson & Pickett, 2010) and scaling up social impacts at all levels to meet Sustainable Development Goals (Hudon & Huybrechts, 2017; Salustri, 2019; Tortia et al., 2020). In practice, social enterprises operate in areas where public, private and voluntary sectors overlap (Perrini & Vurro, 2006).

With the emergence of the social business model as a sustainable and innovative means to solve poverty and other social problems (Akter et al., 2020), efforts are made to develop a framework for capturing and optimising the value social enterprises can offer. By bridging the gap between for-profit and non-profit organizations and functioning like for-profit enterprises, SOB models set out to address world's ubiquitous socio-economic challenges. (Yunus, Moingeon, & Lehmann-Ortega, 2010; Wilson & Post, 2013). By employing SOB models businesses, institutional players, policy makers and, most of all, communities are better equipped to understand what they should do now and how to adapt and change their activities to create, capture, and disseminate value in the future. The SOB model can also be useful in driving processes that foster long-term commercially viable existence of tourism operations by adjusting to and driving multifaceted tourist behaviour (Dahles et al., 2020).

3.1. Community-Based Tourism

The concept of community-based tourism (CBT), first piloted in the 1970s (Reid et al., 2004), is becoming an integral part of rural and tourism development strategies, particularly in the global South (Lane & Kastenholz, 2018). While numerous definitions of CBT have been proposed in the literature, none of them has gained general acceptance (Goodwin & Santilli, 2009). Broadly speaking, the term refers to tourism experiences that are owned and managed by local communities. Well-managed CBT creates jobs, generates income and protects the local environment (Giampiccoli et al., 2020). CBT is a mechanism designed to foster the delivery of the fruits of tourism directly to local communities in developing countries (Goodwin

& Santilli, 2009). Benefits of CBT include multi-purpose employment of resources, economic development potential of tourism revenues, diversification of the economy, creation of new ventures, preservation of living culture and nature, improved jobs and livelihood, and general empowerment of communities (Boonratana, 2010; Dolezal, 2011; López-Guzmán et al. 2011; Nair & Hamzah, 2015, Lo & Janta, 2020). In addition, CBT helps to inform and inspire travellers and promotes cross-cultural understanding. Current travel trends are closely aligned with CBT.

Additional value is provided by the openness of CBT processes to learning from and building on the successes or lessons learned from other mechanisms tested in diverse settings. These complementary processes can be supplemented by Corporate Social Responsibility (CSR), Profit Sharing Partnerships (PSP), Investment Redistribution Incentives Models (IRIM), Corporate Social Marketing (CSM) in tourism (Truong & Hall, 2019), which relies on business resources to launch and operationalise behaviour changing interventions aimed at improving environment, community well-being, public health and safety (Kotler et al., 2012), and common ownership of enterprises supplying goods and services to luxury travel operators.

The literature recognises the complexity of the CBT process (de Groot & Simons, 2015), the frequent divergence of the reality on the ground from the ideals and theory (Moscardo, 2008) and numerous limits operational, structural and cultural limits to community participation in the tourism development process (Tosun, 2000). The barriers to implementation of CBT on the ground may be grouped at three levels: policy, strategy and implementation (Cooper, 2004). The first level includes high-level policy challenges associated with attempts to absorb CBT by the prevailing neoliberal milieu (Saayman & Giampiccoli, 2016), government concessions and incentives, institutional frameworks. The second one refers to the process of making strategic decisions regarding the selection of appropriate approaches to project development (participatory, capacity building or simultaneous engagement of government, business. One barrier at this level is linked to financial viability (Dodds et al., 2018). Finally, barriers at the implementation level are to do with education, training and marketing.

While many problems associated with the practical application of CBT are legitimate, according to Mtapuri & Giampiccoli (2020), it is crucial to remember that they illustrate an application of a distorted view of CBT; properly understood CBT requires a holistic approach to development, which goes beyond narrow neoliberal thinking and its milieu. To address these challenges it is necessary to radically change the way people collaborate at the global and national level by creating alternative multi-lateral fora, developing a new paradigm of thinking about global issues, institutions and laws in a way that benefits local communities and fosters genuine collaboration between the government and local communities to balance the influence of profit-oriented private investors (Giampiccoli, 2007). For the purpose of this article, CBT is defined as a type of tourism owned and controlled by local (especially disadvantaged) community members and for their own benefits, which is focused on redistribution and social justice (see Giampiccoli et al., 2021); a CBT enterprise (a community-based enterprise) is defined as a "community acting corporately as both entrepreneur and enterprise in pursuit of the common good" (Peredo & Chrisman, 2017, p. 157). Community-based enterprises "are owned, managed and governed *by the people* rather than by the government or a smaller group of individuals *on behalf* of the people. Members govern, rather than being governed" (Peredo & Chrisman, 2017, p. 158, emphasis in original). The next section presents examples of socially oriented business models that can be implemented in the context of CBT.

3.2. Corporate Social Responsibility

Solutions that combine CBT with best corporate social responsibility (CSR) practices have been warmly received (Han et al., 2020). CSR brings together a variety of stakeholders where dialog plays a vital function. These stakeholders are both benefactors as well as partners in developing and putting into action CSR projects for businesses (City Destinations Alliance, 2022). Giampiccoli & Mtapuri (2022) report that businesses in developed and in developing countries have accepted the CSR concept, but to be more effective, some aspect of CSR need to be legally binding instead of just being a voluntary action.

According to Achmad & Yulianah (2022), the main aim of CSR is the sustainable and responsible use of both natural and cultural resources by tourism businesses. CSR goals include efforts to minimize the effects of pollution and the creation of additional non-biodegradable waste, conserve natural landscapes, local biodiversity and cultural heritage (City Destinations Alliance, 2022). The European Commission defines CSR as "a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis". CSR is part of the European Commission's 2020 strategy for sustainable, smart and inclusive growth. A potential weak point of CSR is the voluntary nature of these self-regulation measures that exceed what is required by law (Blowfield & Frynas, 2005). Efforts to introduce formalization and certification are too often accompanied by weak sanctions in case of non-compliance (Gatti et al., 2019). Since 2023, some CSR reporting has become mandatory in EU member states, according to new rules of the European Sustainability Reporting Standards (Regulation 2023/2772) and Corporate Sustainability Reporting Directive (Directive 2019/904, 2019).

Another goal of CSR, partly driven by self-interest, is to ensure good treatment of workers, suppliers, guests and local communities, which are often made up of workers' families (Madanaguli et al., 2021). According to Hadj (2020), CSR also has the potential to promote the use of local products and services, strengthen the cooperation with local communities to improve their overall wellbeing and quality of livelihood and support fair trade practices.

While existing research stresses the close link between sustainability and CSR, the latter is essentially narrower in scope as it focuses on ways of doing business in such a way as to achieve economic, social and environmental sustainability. In other words, the primary goal of sustainability initiatives is to make money rather than dedicate resources to achieve the ultimate objective of indefinitely maintaining the viability of our economies and societies and the environment on which they depend (Jenkins, 2004). In contrast, CSR initiatives generally tend to focus on interventions addressing environmental challenges (Ibarnia et al., 2020).

3.3. Profit Sharing Partnerships (PSP)

Today corporations are expected to be good local and global citizens (Waddock, 2005). Talavera & Sanchis (2020) point out that while collaboration between organizations is a practice which dates back to the beginning of economic exchanges, it became strategically crucial in the context of environmental protection. Collaboration covers different types of interaction, such as the sharing of complementary competencies, co-power arrangements, the creation of fresh values, information sharing and common vision, interplay among co-equals, joint negotiation of shared objectives, joint planning, multi-organization processes and programmes, partnerships, and strategic alliances (Montiel-Overall, 2005).

While partnerships themselves are considered an essential component of a modern business strategy (Buckley et al., 2002), they are not always the optimum way to collaborate (Giesecke, 2012) and care needs to be taken to meet some critical conditions essential to their success (Kanter, 1994). Sometimes, they can take the form of corporate social responsibility (CSR) that reaches beyond mere philanthropy or compliance and integrates social goals into the core business strategy and operations (Del Baldo, 2013).

Partnerships are a major element of sustainable development by engaging stakeholders in decision-making processes regarding sustainability conditions (Koontz, 2006). Ordonez-Ponce et al. (2021) note that particularly large sustainability-focused cross-sector partnerships are effective vehicles for engaging a broad spectrum of societal actors in collaborative efforts to confront sustainability challenges both globally and locally. Examples of socially oriented partnerships for profit include public-private partnerships, social enterprises, and partnerships for CSR.

Partnerships are also a source of potential problems (see Daroń, 2017; Martinuzzi, 2023). For example, Parakash (2021) lists problems like instability of an enterprise caused by unsolved disputes between partners, which tend to be magnified when there is no formal partnership agreement or it does not cover the issue in question; or its dissolution when one of the partners decides to leave the arrangement.

3.4. Corporate Social Marketing

Corporate Social Marketing (CSM) is a set of actions in which traditional marketing principles and techniques are applied in campaigns and efforts to influence social action resulting in more robust health, improved safety, sustainable environment, strong communities and enhanced opportunities for securing financial prosperity (Lee & Kotler, 2015). CSM has been used to foster responsible tourism behaviour in various settings, e.g. to develop sustainable tourism (Gössling et. al., 2008); to enhance sustainability of tourism practices (Dinan & Sargeant, 2000), to boost ethical consumption (Gössling & Hall, 2013), and in partnerships that bring together businesses and non-profit organizations or government agencies to tackle social issues (Edwards & Porter, 2023). According to Edwards & Porter, CSM differs from CSR, which they consider a broader term stressing businesses ethical behaviour and responsibly towards society.

There is a number of areas in the tourism industry where CSM has been used. Examples include demarketing (Hall & Wood, 2021) to discourage customers from engaging in some activities, like gambling, and encouraging them to do other things, like going on local, flight-free, holidays (Beeton & Pinge, 2003); visitor management (Beeton & Benfield, 2002) in national parks (Wearing & Schweinsberg, 2016). The most significant application of CSM has been to encourage tourists' environmentally friendly behaviours (Musgrave & Henderson, 2015) and responsible business practice of tour operators (George & Frey, 2010). CSM does not require actual corporate engagement; it can be delivered primarily by non-profit organisations (Truong & Hall, 2013).

However, Hall & Lew (2009) note that tourism practitioners continue to promote technological and management interventions with the goal of improving productivity instead of imposing meaningful restrictions on tourism expansion to deal with the problem of resource over-exploitation. Thus, CSM is not considered to be particularly effective in the tourist industry as it fails to address the fundamental challenge, which is the reduction in the overall amount of emissions (Gössling

& Peeters, 2015). The same is true of the reliance on green certification and eco-labelling, which is designed to promote more environmentally conscious consumer behaviour (Villarino & Font, 2015). Truong & Hall (2019) stress that while social marketing can indeed contribute significantly to fostering environmentally sustainable tourism, the mechanism works best when it is part and not a substitute of a comprehensive approach that embraces technological and regulatory measures to address climate change.

3.5. IRIM

Another possible strategic tool for more equitable wealth redistribution is the Investment Redistributive Incentive Model (IRIM) proposed by Giampiccoli & Mtapuri (2020b). The model holds special relevance for the tourism sector, especially when tourism enterprises are owned and controlled by foreign firms, which often results in substantial overuse of natural resource and the leakage effect, which can reach as much as 80 per cent (Wiranatha et al., 2017)

The IRIM can include both fiscal and non-fiscal incentives for businesses that support local ownership and employ management systems which facilitate redistribution. Under the IRIM, it is crucial that the incentives benefit the investor, the local government and communities, both individually and collectively; the IRIM is an integrated approach that seeks to secure local control of enterprises in a given geographic area (Giampiccoli & Mtapuri, 2020a). It is a new pathway to decrease inequality in the tourism sector (in as much as the IRIM can be applied to any economic sector).

However, as Bowles & Polania-Reyes (2009) note, economic incentives are unpredictable and there is a limit to what they can achieve. Thus, incentives within the IRIM must be carefully crafted so to achieve its redistributive objectives.

3.6. Cooperatives

A cooperative is a self-governed, voluntary association of people who work together to achieve their common goals, which can be economic, cultural, social or personal (UW Center for Cooperatives, 2024). A cooperative is owned by all its members through a democratically governed enterprise (International Cooperative Alliance, 2018). Feyers et al. (2019) describe multi-stakeholder cooperatives co-owned by participants, investors or non-profits. Aktürk and Demir (2021) note that according to the International Labor Organization (ILO), cooperatives based on self-help and mutual solidarity are well placed to offer a long-term solution to crisis-affected human communities.

The cooperative model holds special relevance for the tourism sector where, in addition to being a business, it also helps to build a viable and vibrant local environment where all cooperative owners can jointly establish an appealing and inviting habitat of experiences, activities and quality of life for themselves, the local community and the visitors. While global in scale and collaboration (Williams, 2016), cooperatives engaged in tourism focus on proving an authentic local experience rooted in local culture, life and places as well as local identity and narrative (Rasmussen et al., 2023). The cooperative model is an ideal solution for CBT, which also has sustainability in its broad sense as a fundamental value.

While cooperatives are not always successful and have their own challenges (see Nor & Amran, 2013; Mayank, n.d.), they have obvious advantages as socially oriented business models, including equal voting rights for all members and a focus on providing social benefits to members and communities (see NCBA CLUSA, 2022). According to Karakas (2019), another benefit of cooperatives is that they help to address social needs not met by traditional actors (the market or the state) by empowering their members, improving their well-being, skills, and self-reliance, nurturing social cohesion, solidarity, and trust among their members and the wider community. However, some communities perceive cooperatives more as a hobby and a way to spend free time than a serious alternative to traditional business organisations.

4. Results

The researchers propose a 4-step approach to developing a framework for community development based on an optimum mix of CBT and SOB models for a particular locality:

Step 1: through desktop research, identify group barriers to growth specific to the locality in question (for examples see below column 1 of Tables 1, 2 and 3);

Step 2: group the identified barriers into three broad categories: Policy, Strategy and Implementation (see Tables 1, 2 and 3);

Step 3: carry out consultations as to the best way of overcoming the problems (columns 2); and

Step 4: engage SOB experts in dialogue with CBT stakeholders to explore the application of tools developed by one of the SOB models to fortify the responses (column 3).

Researchers further postulate that, even if specific stakeholders elect not to employ any SOB mechanisms, familiarity with SOB models could in the future help them find solutions suited to a particular CBT project/venture and locality, making the intervention potentially more effective.

A more detailed illustration of this 4-step approach is summarised in the four tables below. It should be emphasised that this approach is based on a preliminary analysis of specific CBT initiatives, opportunities and threats to their progress, and the degree to which stakeholders in a given setting are aware of SOB models that have already been implemented. Information listed in each column is based on previous research (Dodds et al., 2018; Ward et al., 2002; Cooper, 2004; Ngonya, 2015; Yanes et al., 2019; Dolezal & Novelli, 2020; Pham Hong et al., 2021; Dias et al., 2023; Roma, 2023). Tables 1–3 contain an overview of the *threats/barriers* grouped into three key areas: policy, development of strategy, and strategy implementation. Table 4 looks at ways to optimise opportunities.

Table 1. Policy: The bigger picture

Threats impeding the progress of CBT	Example of a potential remedy	Optimum SOBM-inspired solution (Sample Suggestions Only)
No/insufficient government support	Implement advocacy and lobbying strategy. Convince politicians and government officials to consider targeted support for local communities	COOP: NGOs and large firms coordinate response for government engagement
Poor governance	Widen, create/ update and manage the implementation of updated rules, laws, strategies and regulations relevant to local communities.	IRIM+CSR+PSP: train key talent to participate in the drafting of laws, regulations and policies, and their practical implementation
Weak policies and regulations	Plan soft advocacy	CSM: deliver on soft advocacy ambitions
Insufficient capacity of direct local government officials	Offer training and development of local officials	IRIM+CSR: train and engage all stakeholders within the local community
Policy incompatible with CBT	Advocate and educate the local community	IRIM: invest in public education, law and political support
Legal and fiscal framework incompatible with CBT	Connect with international best practice	COOP: cooperate with international, national and local partners/ decision makers
Lack of ownership, lack of clarity as to ownerships or access rights to the sites (more powerful and better financed private operators step in)	Secure access rights and/or increased role in resource management	PSP+COOP: build experience, skills and widen the network
Power imbalance between corporations, local operators and general climate of economic liberalisation	Build a framework and a vision for national development within the private sector that the businesses can operate	COOP: explore approaches or components of a framework to nurture long-term collaboration between the private sector and communities CSR: support the development of legal frameworks that require management of the social impact of businesses
Natural environmental degradation and reduction in biodiversity.	Develop a sustainable use plan for the natural resources of their community.	CSR: train the people in sustainable practices and in non-harmful implementation
No/insufficient support of international organisations	Engage in international and global partnerships and a varied range of programmes.	COOP: engage with other partners/ parties in order to find solutions together

Threats impeding the progress of CBT	Example of a potential remedy	Optimum SOBM-inspired solution (Sample Suggestions Only)
No/insufficient support of international business	Explore ways to link up with international business on products and services, international cooperative movement and other non-commercial forms of collaboration.	PSP: engage in partnerships that would be willing to engage in knowledge and experience exchange

Source: Dodds et al., 2018; Ward et al., 2002; Cooper, 2004; Ngonya, 2015; Yanes et al., 2019; Dolezal & Novelli, 2020; Pham Hong et al., 2021; Dias et al., 2023; Roma, 2023

Table 1 shows that there are risks to CBT without government support. There is need for a strong lobby group to advocate for the involvement of the government as an authoritative overseer of relations between entities. Rules and regulations must be upheld by training key talents in a context of IRIM for greater results. The training must involve all stakeholders for a common goal. Cooperatives engender a sense of ownership and are crucial as a platform to build experience and nurture talent. Plans should be in place for sustainable use of natural requiring interventions framed in a CSR context.

Table 2. Strategy: the process of development

Threats impeding the progress of CBT. Critical Success Factors	Example of a potential remedy	Optimum SOBM-inspired solution (Sample Suggestions Only)
No/insufficient support of local community	Encourage local government to make policies and offer support that would benefit the tourism development within the local communities	COOP: work with other bodies to find solutions to all sort of matters beyond the capabilities of local communities
No/insufficient support of local business	Strengthen local marketing promotion	CSM: build and teach better implementation of marketing skills in practical use among local population
Insufficient capacity of direct CBT participants in preparing a robust strategy: Aims and Goals, SWOT, Functional Strategies (Finance, Supply Chain, HR, Sales, Ops, Manufacturing, Warehousing), Business Process, Technology, etc.	Engage in cooperatives or partnerships to reach the destine goals	PSP: negotiate possible partnerships or cooperations that would be willing to train local people in key functions when managing a business
No/weak collaboration between CBT stakeholders	Find a common goal and work towards it	PSP+COOP: build strong and trustworthy partnerships/ cooperation for project realisation and success
Poor infrastructure (e.g. accommodation, food, water, transport, road conditions)	Cooperate with firms and professional businesses that specialize in roadworks, modern transport, accommodation and other specialized sectors	CSR+COOP: give tools and teach necessary skills to local people that are needed for working positions within the tourism and support industry, as well as cooperate with specialized businesses
Poor training	Establish a system that would allow all members of the local community to continuously upgrade their competences, experience and qualifications in their chosen sector	CSR: train local community members to take up roles and positions in workplaces within the tourism sector and services

Threats impeding the progress of CBT. Critical Success Factors	Example of a potential remedy	Optimum SOBM-inspired solution (Sample Suggestions Only)
Poor marketing and difficulties in developing products and services. Lack of funds to develop a comprehensive and cost effective marketing programs.	Develop and facilitate marketing arrangements sales desk, arrangements with taxi operators, preparation of materials)	CSM: supportive marketing programme
Poor service	Evaluate already existing service to find and identify what still needs improvement	IRIM: for evaluation of services and areas that still need improvement, such as increase the education quality for a higher chance of better future employment of the local community members.
Job/livelihood insecurity	Engage in cooperations to ensure secure and safe job positions and favourable employment conditions	PSP+COOP: engage in partnerships that are willing to train and employ people from local communities as their employees in various jobs as well as create a set of policies that would provide stable and secure livelihoods for both genders. IRIM: to develop safe and secure working conditions and workplaces for all members of the local community
Insufficient availability of workforce	Recruitment of local talent or invite (temporary) staff from outside	COOP: engage in international and national programs recruiting external and/ or internal workforce encouraged by development possibilities, working conditions and realistic promotion
Lack of production space	Consider sharing production space	PSP: engage in partnership with people/ industries with access or willing to provide access to the necessary production space, warehouses and machinery
Lack of raw materials	Improve cooperation with outside dealers if local communities have limited raw materials or are difficult to access	PSP+COOP: find partners and engage in partnerships that could supply the necessary goods, products and resources needed strongly for development, as well as set project complications. In return for long lasting cooperation between partners and shared profits
Poor perception of local CBT	Develop better sharing of access to information and news about CBT initiatives	CSM: to assist in professional marketing and efficient spread of information regarding CBT on all scales
Lack of interest in local CBT	Create and develop new activities and attractions to gain outside revenue and interests of local CBT initiatives	COOP: attract potential partners in order to spread the interest of local tourism initiatives
No/ limited access to credit	Develop new products and services	CSM: for product development, marketing and getting the final goods on the market
Communal landownership is not accepted as collateral.	Use marketing as a way to persuade the local government authorities of the importance of communal ownership of land	IRIM: build the skills to 'talk money' and set examples in taking the risks by lending money to CBT projects secured by communal property
Reserved attitude to CBT	Ask and invite the younger generation influencers to create a refreshed insight of CBT in the area	PSP+COOP: establish cooperations between all interested parties in getting a more beneficial standing of the attitude towards the CBT activities, projects and events.
Insufficient funding	Create a shared "communal" budget	IRIM: create opportunities for people to get fundings or engage in the idea of shared funds for their projects

Threats impeding the progress of CBT. Critical Success Factors	Example of a potential remedy	Optimum SOBM-inspired solution (Sample Suggestions Only)
Conflict over resources (raw materials, supplies, personnel, money etc.)	Encourage farmers to share some of their crops or products with locally runed businesses Negotiate possibilities of a financial loan with the option of a low interest rate or repayment in instalments for small local businesses	COOP+CSR: train and improve gained qualifications by local personnel while cooperating with bigger training facilities or firms. Cooperate with local farmers and producers for sharing their products or resources IRIM: create policies on prioritize use of locally grown products and crops. Lent money at realistically low interest rate from banks or larger businesses that could support the development of local companies
Poor localisation	Advertise the location on social media, websites, newspapers and other platforms to ease the reach of visitors	CSM: promote the localisation of the local community by busing modern up to date media networks
Existence of conflicting, competing local institutions	Create cooperation or partnerships for local enterprises to share both profits, experience, up's and down's and the constant training of their personnel	PSP+COOP: engage in partnerships/ cooperatives for profit and risk sharing operations.
Competition from industrial products	Promote locally made products as superior, better for the planet and environment, and as an alternative to products made by big manufactures	CSM: boost promotion of locally made products for financial benefits of the community
Presence of vibrant, diverse and competing conservation organisations	Engage in partnerships and cooperations that would help local communities to fight for their rights and identity	COOP: work with other organisations to make local communities stand out as important and visible figures
No diversification of potential tourism resources	Manufacture goods made from local products (in e.g. honey, bread, sweets, drinks, range of different alcohols etc.)	CSM: boost local promotion, product range and strengthen the marketing
No/insufficient product development	Engage in workshops on product development for all voluntary members of a local community	CSR: offer workshops and training on developing new products for all members of a local community
No/insufficient service development	Train the people in the lates customer service operations and etiquette.	CSR: training personnel from local communities

Source: Dodds et al., 2018; Ward et al., 2002; Cooper, 2004; Ngonya, 2015; Yanes et al., 2019; Dolezal & Novelli, 2020; Pham Hong et al., 2021; Dias et al., 2023; Roma, 2023

Table 2 shows that when the local community is slacking, cooperatives are ideal to address poor participation in CBT. Within the context of CSM, promotions and marketing should address cases of insufficient support to local businesses. CSM is also useful for enabling access to credit and for purposes of localization. Partnerships in the context of PSP are crucial to generate robust CBT strategies. PSP+COOP can be used to address weak collaborations between stakeholders that have a common goal as well as cases where there is a lack of raw materials.

Table 3. Implementation: the importance of education, training and marketing

Threats impeding the progress of CBT	Example of a potential remedy	Optimum SOBM-inspired solution (Sample Suggestions Only)
No/insufficient capacity to deliver key strategic goals	Collaborate with business and government on staff secondments	PSP + COOP: cooperate and share profits with business partners, collaborate with the government and all stakeholders, send staff/managers on secondments
Lack of management capacity in project administration and management, resource management, marketing and product development	Engage consultants/trainers and train the trainers (for larger programmes)	Training and technical assistance could be provided by collaborative partnerships. CSR: for project administration, management and training IRIM: management of impactful marking campaigns
Lack of knowledge/awareness of local CBT	Create places where local people meet with guests and discuss about their ideas and activities	CSM: for marketing a sustainable tourism destination

Source: Dodds et al., 2018; Ward et al., 2002; Cooper, 2004; Ngonya, 2015; Yanes et al., 2019; Dolezal & Novelli, 2020; Pham Hong et al., 2021; Dias et al., 2023; Roma, 2023

Table 3 shows that collaborations are best cultivated in the context of PSP+COOP to enable the deliverance of key strategies. CSR is crucial to assist with training in project administration and management where these skills are lacking. CBT needs to be common knowledge at the local level — this requires the creation of such meeting spaces where these conversations are held to create awareness in the community.

Table 4. Opportunities

Opportunities of CBT (Critical Success Factors)	Optimise the opportunity	Optimum SOBM-inspired solution (Sample Suggestions Only)
Hospitality of local people	Promote the unique qualities of staying with local people (access to their daily routines, learn about their traditions, eat locally made products etc.)	CSM: create better marketing promotion to encourage a potential tourist to use their infrastructure rather than the rival, bigger players and enterprises
Strategic location	A location that can satisfy both the tourist and a locals looking for a good view, access to restaurants, shops and other tourist infrastructure and facilities	CSM + COOP: build stronger bonds with local business and stakeholders. Create better and more accessible transport connections for a more easy access to remote destinations for both the tourists and locals alike (both with private as well as public mode of transportation)
Positive attitude of CBT participants towards CBT	Widen the participation and cooperate with other outside businesses to invite more potential clients to support the development of the community.	PSP + COOP: widen the network of possible partners for business opportunities and higher profit making
Positive attitude of CBT stakeholders towards CBT	Promote destination as opened for sustainable business opportunities	CSM: widen business opportunities by strong advertising of destination
Strong potential of tourism resources	Build and develop sustainable tourism infrastructures	IRIM: develop more sustainable tourism infrastructures

Opportunities of CBT (Critical Success Factors)	Optimise the opportunity	Optimum SOBM-inspired solution (Sample Suggestions Only)
Existence of supporting local institutions (e.g. indigenous democratic systems, such as Gadaa used by the Oromos in Ethiopia and northern Kenya)	Boost the potential of the existence of such structures to promote, strengthen and monitor existing and future CBT projects	IRIM: reduce the cost of investing and improve collection of debt (failure to repay harms the whole community)
Presence of vibrant, diverse and supporting conservation organisations	Help to access the following: policies, advocacy & lobbying, legal advice, funds and business development, to projects and programs, as well as to the latest technology.	CSR: join forces with bigger, more influencing players to improve the functioning and development of the local community

Source: Dodds et al., 2018; Ward et al., 2002; Cooper, 2004; Ngonya, 2015; Yanes et al., 2019; Dolezal & Novelli, 2020; Pham Hong et al., 2021; Dias et al., 2023; Roma, 2023

Table 4 shows that in order to exploit the available opportunities, CSM can be used to capitalise on the hospitality of local people to benefit local tourism by promoting the importance of homestays to learn local cultures. IRIM is crucial to support local tourism through conservation initiatives and programmes.

5. Discussion

To reiterate, the researchers propose the following a 4-step process that will enhance the CBT model by the inclusion of SOBM:.

1. Analyze threats and opportunities associated with specific CBT projects.
2. Define the nature and level of the problem or opportunity in terms of policy, strategy and implementation.
3. Propose plausible ways/remedies to address the problem or enhance the opportunity.
4. Reflect on the benefits of SOB mechanisms that can be used in order to enhance and optimize the CBT initiative.

The key issue is to account for the availability and openness of appropriate SOB models to explore collaboration with a CBT initiative. Tables 1–3 present threats faced by local communities engaged in CBT practices at three stages: policy planning; development strategy, and its implementation.

The **'policy'** stage refers to the sum of direct and direct activities undertaken by the government at all levels associated with the public policy process that affects CBT. It can include issues such as enabling laws and regulations, and activities aimed at addressing relevant economic and social problems (Lassance, 2020). The policy process involves different actors, like politicians, NGOs, international agencies, academics (Hill & Varone, 2021). Following Harold (1956) and Håkansson & Snehota (1989), in this paper a strategy is understood as a pattern of activities which has an impact on the achievement of organizational goals in relation to its environment. In this way, strategy management involves managing the process of **strategy development** (formulating the pattern of activities to be carried out), while **strategy implementation** (finding ways to ensure that these activities are actually carried out) focuses on talent and marketing (Olson et al., 2018).

Thus, **Tables 1–3** present threats impeding the progress of CBT (column 1), preliminary suggestions of potential remedies (column 2) and proposals of SOBM-inspired solutions (column 3). The same approach is used in **Table 4**, which includes examples of opportunities associated with CBT initiatives, in other words, ideas about how to strengthen existing positive factors. The columns in Table 4 present CBT opportunities (Critical Success Factors);, suggestions on how to optimize these opportunities, and suggestions regarding optimum SOBM-inspired solutions.

For example, some of the barriers listed Table 1 include legal aspects, issues related to the government and its relationship with local communities involved in CBT initiatives and activities. Top of the list of 11 problem areas in Table 1 is **"No/insufficient government support"**. CBT initiatives need government support in many areas (see Armstrong, 2012; Goodwin, 2007; Scheyvens, 2003; Ullah & Kim, 2020) for example to assist with market research and marketing via national tourism bodies (UNWTO, 2004).

The table contains three possible solutions to address this challenge: i) implement advocacy and lobbying strategies; ii) convince politicians and government officials to consider targeted support for local communities, and iii) engage in a cooperation with firms and NGOs (to boost advocacy/lobbying). As for the best SOB model, Manyara & Jones (2007) suggest joining a PSP (Profit Sharing Partnership) or a Cooperative. This would allow the local community to join forces with an NGO or a large firm to show and convince the government that they can bring something to the table and thus persuade the government to support them. In turn, IRIM could be used to work on finance-related approaches, including incentives.

Another example is taken from Table 2, which focuses on challenges specifically related to local communities. The table presents 26 problem areas together with possible solutions. One of the threats is **"Job/livelihood insecurity"**. The goal is to enable community members to fully engage in a CBT project so that they do not need to worry about how they can get a better job to sustain themselves and their families. Three solutions to this challenge are proposed: i) create a set of policies that would provide stable and secure livelihoods for both genders and members of the community; ii) join in a partnership to ensure secure, safe job positions; and iii) increase the education quality for a higher chance of better future employment of the local community members. Three SOB models could help to overcome this challenge: use PSPs and cooperatives to engage in partnerships that are willing to train and employ people from local communities as their employees in various jobs; and use IRIM to develop safe and secure working conditions and workplaces for all members of the local community.

The third example comes from Table 3. The threat in question is the **lack of management capacity in project administration and management, resource management, and marketing and product development**. As noted by Giampiccoli & Mtapuri (2012), failure to assure proper project implementation could inflict serious "damage on communities instead of serving as a development tool for which it is intended". Armstrong (2012) points out that the ability of local management, their accountability and transparency is one of the determinants of CBT projects' success or failure. The literature on CBT highlights numerous critical management tasks or success factors, such as networking, book-keeping and fair distribution of revenue, tapping into suitable type of credit, and manage impactful marketing campaigns (McGehee & Kline, 2008; Dixey, 2012; UNWTO, 2004; Townsend, 2006; Dodds et al., 2018).

According to Townsend (2006), an average CBT initiative needs about 5 years to develop an effective organisational and management structure and capacity. To address this issue, the Townsend offers six immediate solutions: i) recruit (temporary) staff from outside; ii) engage consultants/trainers; iii) train the trainers (for larger programs); iv) collaborate with business and government on staff secondments; v) offer workshops; vi) send staff/managers on secondments. Examples of selected SOB models that could help to optimize these responses include i) training and technical assistance provided by collaborative partnerships; ii) CSR — for project administration and management; iii) IRIM and iv) Cooperatives — for resource management; v) CSM — for marketing and product development (Pandey, 2011; Stone & Stone, 2020; Dahles et al., 2020).

Table 4 presents ways of optimizing seven opportunities associated with CBT projects. Making transport more accessible and easier to get to destination for tourists and locals alike (both with private as well as public mode of transportation) is **key to successful CBT development. It is also an intervention that calls for a complex support network and** assistance from public authorities, commercial firms, private funders, NGOs and even universities to ensure proper planning and implementation of activities (López-Guzmán et al., 2011). To support this process, CBT can implement such SOB models as CSM and Cooperatives — for stronger bonds with local business and stakeholders that will in the long-term facilitate (Dolezal & Novelli, 2022).

6. Conclusion

The study presented in the article is an attempt to take advantage of the considerable potential of existing SOB models to boost the effectiveness of CBT projects. Rather than inventing something new, the goal was to highlight possible areas where interactions between CBT and SOB models could be beneficial.

It can be concluded that the main goal of the majority of CBT interventions is to build capacity, for example regarding transport, which is essential to improving tourist mobility. Another conclusion is that government support is indispensable for the success of CGT projects.

Strategies described above are designed to assist tourism planners in transforming tourism into a more just and sustainable sector. This requires a shift in mentality and a reframing of SOB and tourism outside the current neoliberal milieu. This shift could be facilitated by new approaches to CBT at the stage of policy, strategy development and strategy implementation. As shown in the article, the effectiveness of these approaches could be enhanced by new forms of partnerships and collaborations with traditional and emerging SOB models and volunteer inspired forms of CSR.

CRediT Authorship Contribution Statement

Michael Kemp: Investigation, Resources, Visualization, Writing — original draft, Writing — review & editing. **Andrea Giampiccoli:** Conceptualization, Investigation, Methodology, Supervision, Visualization, Writing — review & editing. **Anna Dłużewska:** Supervision, Formal Analysis, Validation, Writing — review & editing.

Declaration of Competing Interest

None.

References

Abed, M.H., & Hadi, I.S. (2023). Tourism and its impact on the migration of indigenous peoples from historical city centers (the old city center of Najaf as a case study). *In IOP Conference Series. Earth and Environmental Science*, *1129*(1). IOP Publishing. https://doi.org/10.1088/1755-1315/1129/1/012027

Achmad, W., & Yulianah, Y. (2022). Corporate Social Responsibility of the Hospitality Industry in Realizing Sustainable Tourism Development. *Enrichment: Journal of Management*, *12*(2), 1610––1616. https://doi.org/10.35335/enrichment.v12i2.447

Akter, S., Jamal, N., Ashraf, M.M., McCarthy, G., & Varsha, P.S. (2020). The rise of the social business in emerging economies: A new paradigm of development. *Journal of Social Entrepreneurship*, *11*(3), 282–299.

Aktürk, O. & Demir, S. S. (2021). The role of cooperatives in the development of rural tourism: The example of Kuyucak. *Journal of Tourism Theory and Research*, *7*(2) , 58–69. https://doi.org/10.24288/jttr.954835

Armstrong, R. (2012). *An analysis of the conditions for success of community based tourism enterprises* (pp. 1–52). ICRT Occasional Paper (OP21).

Ashley, C., & Mitchell, J. (2010). *Tourism and poverty reduction: Pathways to prosperity*. Routledge. https://doi.org/10.4324/9781849774635

Beeton, S., & Benfield, R. (2002). Demand control: The case for demarketing as a visitor and environmental management tool. *Journal of Sustainable Tourism*, *10*(6), 497–513. https://doi.org/10.1080/09669580208667184

Beeton, S., & Pinge, I. (2003). Casting the holiday dice: Demarketing gambling to encourage local tourism. *Current Issues in Tourism*, *6*(4), 309–322. https://doi.org/10.1080/13683500308667958

Blowfield, M., & Frynas, J.G. (2005). Editorial Setting new agendas: critical perspectives on Corporate Social Responsibility in the developing world. *International Affairs*, *81*(3), 499–513. https://doi.org/10.1111/j.1468-2346.2005.00465.x

Boonratana, R. (2010). Community-based tourism in Thailand: The need and justification for an operational definition. *Kasetsart Journal of Social Sciences*, *31*(2), 280–289.

Bowles, S., & Polania-Reyes, S. (2009). Economic incentives and social preferences: A preference-based lucas critique of public policy. *SSRN Electronic Journal*, 2734. http://dx.doi.org/10.2139/ssrn.1443865

Buckley, P.J., Glaister, K.W. & Husan, R. (2002). International Joint Ventures: Partnering Skills and Cross-Cultural Issues. *Long Range Plan*, *35*, 113–135. https://doi.org/10.1016/S0024-6301(02)00034-1

Chilufya, A., Hughes, E. & Scheyvens, R. (2019). Tourists and community development: corporate social responsibility or tourist social responsibility? *Journal of Sustainable Tourism*, *27*(10), 1513–1529. https://doi.org/10.1080/09669582.2019.1643871

City Destinations Alliance. (2022). *Corporate Social Responsibility and Tourism*. https://citydestinationsalliance.eu/corporate-social-responsibility-and-tourism/

Cooper, G. (2004). *Community-based tourism initiatives in the Windward Islands: a review of their impacts*. CANARI Technical Report No. 327.

Dahles, H., Khieng, S., Verver, M., & Manders, I. (2020). Social entrepreneurship and tourism in Cambodia: Advancing community engagement. *Journal of Sustainable Tourism*, *28*(6), 816–833. https://doi.org/10.1080/09669582.2019.1706544

Daroń, M. (2017). A Verification of Advantages and Disadvantages in Partnership Relations. *Zeszyty Naukowe Politechniki Częstochowskiej. Zarządzanie*, *27*, 96–105. https://doi.org/10.17512/zn-pcz.2017.3.1.08

de Groot, E., & Simons, I. (2015). Power and empowerment in community-based tourism: opening Pandora's box? *Tourism Review*, *70*(1), 72–84. http://dx.doi.org/10.1108/TR-06-2014-0035

Del Baldo, M. (2013). *Partnerships for CSR*. In S.O. Idowu, N. Capaldi, L. Zu, A.D. Gupta (Eds.), *Encyclopedia of Corporate Social Responsibility*. Springer. https://doi.org/10.1007/978-3-642-28036-8_625

Dias, A., Silva, G.M., Patuleia, M., & González-Rodríguez, M.R. (2023). Developing sustainable business models: Local knowledge acquisition and tourism lifestyle entrepreneurship. *Journal of Sustainable Tourism*, *31*(4), 931–950. https://doi.org/10.1080/09669582.2020.1835931

Dinan, C., & Sargeant, A. (2000). Social marketing and sustainable tourism: Is there a match? *International Journal of Tourism Research*, *2*, 2–14. https://doi.org/10.1002/(SICI)1522-1970(200001/02)2:1<1::AID-JTR178>3.0.CO;2-5

Dixey, L.M. (2012). The unsustainability of community tourism donor projects: Lessons from Zambia. In A. Spenceley (Ed.), *Responsible Tourism Critical Issues for Conservation and Development* (pp. 351–370). Routledge.

Dłużewska, A.M. (2019). Well-being versus sustainable development in tourism—The host perspective. *Sustainable Development*, 27(3), 512–522. https://doi.org/10.1002/sd.1903

Dodds, R., Ali, A., & Galaski, K. (2018). Mobilizing knowledge: Determining key elements for success and pitfalls in developing community-based tourism. *Current Issues in Tourism*, *21*(13), 1547–1568. https://doi.org/10.1080/13683500.2016.1150257

Dolezal, C. (2011). Community-based tourism in Thailand: (Dis-) illusions of authenticity and the necessity for dynamic concepts of culture and power. *ASEAS-Austrian Journal of South-East Asian Studies*, *4*(1), 129–138. https://doi.org/10.4232/10.ASEAS-4.1-7

Dolezal, C., & Novelli, M. (2022). Power in community-based tourism: empowerment and partnership in Bali. *Journal of Sustainable Tourism*, *30*(10), 2352–2370. https://doi.org/10.1080/09669582.2020.1838527

Edwards, S., & Porter, D. (2023, October 3). Responsibility in Marketing. *Galactic Fed*. https://www.galacticfed.com/blog/the-role-of-corporate-social-responsibility-in-marketing

Directive 2019/904. (2019). *Directive 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment*. http://data.europa.eu/eli/dir/2019/904/oj

Regulation 2023/2772. (2023). *Commission Delegated Regulation (EU) 2023/2772 of 31 July 2023 supplementing Directive 2013/34/EU of the European Parliament and of the Council as regards sustainability reporting standards*. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202302772

Feyers, S., Stein, T., & Klizentyte, K. (2019). Bridging worlds: Utilizing a multi-stakeholder framework to create extension–tourism partnerships. *Sustainability*, *12*(1), 80. https://doi.org/10.3390/su12010080

Gatti, L., Vishwanath, B., Seele, P., & Cottier, B. (2019). Are we moving beyond voluntary CSR? Exploring theoretical and managerial implications of mandatory CSR resulting from the new Indian companies act. *Journal of Business Ethics*, *160*, 961–972. https://doi.org/10.1007/s10551-018-3783-8

George, R. & Frey, N. (2010). Responsible tourism management: the missing link between business owners' attitudes and behaviour in the Cape Town tourism industry. *Tourism Management*, *31*(5), 621–628. https://doi.org/10.1016/j.tourman.2009.06.017

Giampiccoli, A., & Mtapuri, O. (2020a). Further stages of the Investment Redistributive Incentive Model (IRIM) in Tourism: Towards Mainstreaming Community-Based Tourism. *Czasopismo Geograficzne*, *91*(1–2), 269–284.

Giampiccoli, A., & Mtapuri, O. (2020b). Introducing the Investment Redistributive Incentive Model (IRIM): A new redistribution perspective in tourism investment and beyond. *African Journal of Hospitality, Tourism and Leisure*, *9*(1), 1–16.

Giampiccoli, A., & Mtapuri, O. (2021). From Conventional to Alternative Tourism: Rebalancing Tourism towards a Community-Based Tourism Approach in Hanoi, Vietnam. *MDPI: Social Science*, *10*(5), 176. https://doi.org/10.3390/socsci10050176

Giampiccoli, A. (2007). Hegemony, globalisation and tourism policies in developing countries. In P. Burns, & M. Novelli (Eds.), *Tourism and Politics: Global Frameworks and Local Realities* (pp. 175–191). Elsevier Butterworth-Heinemann. https://doi.org/10.1016/B978-0-08-045075-9.50014-5

Giampiccoli, A., & Mtapuri, O. (2012). Community-based tourism: An exploration of the concept(s) from a political perspective. *Tourism Review International*, *16*(1), 29–43. http://dx.doi.org/10.3727/154427212X13431568321500

Giampiccoli, A., & Mtapuri, O. (2022). Going beyond corporate social responsibility: possible new directions in tourism. *International Journal of Business Governance and Ethics*, *16*(4), 481–495. https://doi.org/10.1504/IJBGE.2022.126174

Giampiccoli, A., & Saayman, M. (2017). Community-based tourism, responsible tourism, and infrastructure development and poverty. *African Journal of Hospitality, Tourism and Leisure*, *6*(2), 1–28.

Giampiccoli, A., Mtapuri, O., & Dłużewska, A. (2021). Sustainable tourism and Community-based Tourism in Small Islands: a policy analysis. *Forum Geografic. Studii și cercetări de geografie și protecția mediului*, *20*(1), 92–103. http://dx.doi.org/10.5775/fg.2021.057.i

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*(4), 444–457. https://doi.org/10.1080/14766825.2020.1743297

Giesecke, J. (2012). The value of partnerships: Building new partnerships for success. *Journal of Library Administration*, *52*(1), 36–52. https://doi.org/10.1080/01930826.2012.629964

Goodwin, H. (2007). Indigenous tourism and poverty reduction. In T. Butler, & T. Hinch (Eds.), *Tourism and Indigenous Peoples: Issues and Implications* (pp. 84–94). Routledge.

Goodwin, H., & Santilli, R. (2009). Community-based tourism: A success. *ICRT Occasional Paper*, *11*(1), 37.

Gössling, S., & Hall, C.M. (2013). *Sustainable culinary systems. Local Foods, Innovation, Tourism and Hospitality*. Routledge. https://doi.org/10.4324/9780203114070

Gössling, S., & Peeters, P. (2015). Assessing tourism's global environmental impact 1900–2050. *Journal of Sustainable Tourism*, *23*(5), 639–659. https://doi.org/10.1080/09669582.2015.1008500

Gössling, S., Hall, C. M., Lane, B., & Weaver, D. (2008). The Helsingborg Statement on Sustainable Tourism. *Journal of Sustainable Tourism*, *16*, 122–124. https://doi.org/10.2167/09669580809411813

Gössling, S., Scott, D., & Hall, C.M. (2012). *Tourism and climate change: Impacts, adaptation and mitigation*. Routledge. https://doi.org/10.4324/9780203127490

Gowreesunkar, V.G., & Vo Thanh, T. (2020). Between overtourism and under-tourism: Impacts, implications, and probable solutions. In: H. Séraphin, T. Gladkikh, & T. Vo Thanh (Eds.), *Overtourism: Causes, implications and solutions* (pp. 45–68). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-42458-9_4

Guillaumont, P. (2010). Assessing the economic vulnerability of small island developing states and the least developed countries. *Journal of Development Studies*, *46*(5), 828–854. https://doi.org/10.1080/00220381003623814

Hadj, T.B. (2020). Effects of corporate social responsibility towards stakeholders and environmental management on responsible innovation and competitiveness. *Journal of Cleaner Production*, *250*, 119490. https://doi.org/10.1016/j.jclepro.2019.119490

Håkansson, H., & Snehota, I. (1989). No business is an island: The network concept of business strategy. *Scandinavian Journal of Management*, *5*(3), 187–200. https://doi.org/10.1016/0956-5221(89)90026-2

Hall, C.M. (2019). Constructing sustainable tourism development: The 2030 agenda and the managerial ecology of sustainable tourism. *Journal of Sustainable Tourism*, *27*(7), 1044–1060. https://doi.org/10.1080/09669582.2018.1560456

Hall, C.M., & Lew, A.A. (2009). *Understanding and managing tourism impacts: An integrated approach*. Routledge. https://doi.org/10.4324/9780203875872

Hall, C.M., & Wood, K.J. (2021). Demarketing tourism for sustainability: Degrowing tourism or moving the deckchairs on the titanic?. *Sustainability*, *13*(3), 1585. https://doi.org/10.3390/su13031585

Han, S., Li, G., Lubrano, M., & Xun, Z. (2020). Lie of the weak: Inconsistent corporate social responsibility activities of Chinese zombie firms. *Journal of Cleaner Production*, *253*, 119858. https://doi.org/10.1016/j.jclepro.2019.119858

Harold, L. (1956). *The Decision Process: Seven Categories of Functional Analysis*. College Park, University of Maryland.

Harrison, D., & Pratt, S. (2019). Tourism and Poverty. In R. Sharpley, & D. Harrison (Eds.), *A Research Agenda for Tourism and Development* (pp. 109–124). Edward Elgar Pub. https://doi.org/10.4337/978178812413

Higgins-Desbiolles, F., Carnicelli, S., Krolikowski, C., Wijesinghe, G., & Boluk, K. (2019). Degrowing tourism: Rethinking tourism. *Journal of Sustainable Tourism*, *27*(12), 1926–1944, https://doi.org/10.1080/09669582.2019.1601732

Hill, M., & Varone, F. (2021). *The public policy process*. Routledge. https://doi.org/10.4324/9781003010203

Hudon, M., & Huybrechts, B. (2017). From Distant Neighbours to Bedmates: Exploring the Synergies between the Social Economy and Sustainable Development. *Ann. Public Cooperative Econ*, *88*, 141–154. https://doi.org/10.1111/apce.12170

Ibarnia, E., Garay, L., & Guevara, A. (2020). Corporate social responsibility (CSR) in the travel supply chain: A literature review. *Sustainability*, *12*(23), 10125. https://doi.org/10.3390/su122310125

International Cooperative Alliance. (2018). *Cooperative identity, values & principles*. https://ica.coop/en/cooperatives/cooperative-identity

Jenkins, H. (2004). A critique of conventional CSR theory: An SME perspective. *Journal of General Management*, *29*(4), 37–57. https://doi.org/10.1177/030630700402900403

Kanter, R.M. (1994). Collaborative advantage: The art of alliances. *Harvard Business Review*, *72*(4), 96–108.

Karakas, C. (2019). *Cooperatives: Characteristics, activities, status, challenges*. European Parliament. https://www.europarl.europa.eu

Koontz, T.M. (2006). Collaboration for sustainability? A framework for analyzing government impacts in collaborative-environmental management. *Sustainability: Science, Practice, & Policy*, *2*(1), 15–24.

Kotler, P., Hessekiel, D., & Lee, N.R. (2012). *Good works!: Marketing and corporate initiatives that build a better world… and the bottom Line*. John Wiley & Sons. https://doi.org/10.1002/9781119205210

Kuvan, Y. (2010). Mass tourism development and deforestation in Turkey. *Anatolia — International Journal of Tourism and Hospitality Research*, *21*(1), 155–168. https://doi.org/10.1080/13032917.2010.9687096

Lane, B., & Kastenholz, E. (2018). Rural tourism: the evolution of practice and research approaches–towards a new generation concept? In B. Lane, & E. Kastenholz (Eds.), *Rural Tourism: New Concepts, New Research, New Practice* (pp. 1–24). Routledge. https://doi.org/10.4324/9781315111865

Lassance, A. (2020). What is a policy and what is a government program? A simple question with no clear answer, until now. A Simple Question With No Clear Answer, Until Now. *SSRN Electronic Journal*. https://dx.doi.org/10.2139/ssrn.3727996

Lee, N.R., & Kotler, P. (2015). *Social marketing: Changing behaviors for good*. Sage Publications.

Lo, Y. C., & Janta, P. (2020). Resident's perspective on developing community-based tourism–a qualitative study of Muen Ngoen Kong Community, Chiang Mai, Thailand. *Frontiers in Psychology*, *11*, 1493.

López-Guzmán, T., Sánchez-Cañizares, S., & Pavón, V. (2011). Community-based tourism in developing countries: A case study. *Tourismos*, *6*(1), 69–84. https://doi.org/10.26215/tourismos.v6i1.196

Madanaguli, A., Srivastava, S., Ferraris, A., & Dhir, A. (2021). Corporate social responsibility and sustainability in the tourism sector: A systematic literature review and future outlook. *Special Issue: Strategic Corporate Social Responsibility in Tourism and Hospitality*, *30*(3), 447–461. https://doi.org/10.1002/sd.2258

Manyara, G., & Jones, E. (2007). Community-based tourism enterprises development in Kenya: An exploration of their potential as avenues of poverty reduction. *Journal of Sustainable Tourism*, *15*(6), 628–644. https://doi.org/10.2167/jost723.0

Marchand, A., & Walker, S. (2008). Product development and responsible consumption: designing alternatives for sustainable lifestyles. *Journal of Cleaner Production*, *16*(11), 1163–1169. https://doi.org/10.1016/j.jclepro.2007.08.012

Martinuzzi, B. (2023, June 23). The Advantages and Disadvantages of a Business Partnership. *American Express*. https://www.americanexpress.com/en-us/business/trends-and-insights/articles/what-are-the-advantages-and-disadvantages-of-a-partnership/

Mayank, A. (n.d.). Cooperatives: Advantages and Disadvantages. *Your Article Library*. https://www.yourarticlelibrary.com/business/cooperative/cooperatives-advantages-and-disadvantages/75886

McGehee, N.G., & Kline, C. (2008) Entrepreneurship and the Rural Tourism Industry: a Primer. In G. Moscardo (Ed.), *Building Community Capacity for Tourism Development*. CABI.

Montiel-Overall, P. (2005). Toward a Theory of Collaboration for Teachers and Librarians. *School Library Media Research*, *8*.

Moscardo, G. (2008). Community capacity building: An emerging challenge for tourism development. *Building Community Capacity for Tourism Development*, 1–15. https://doi.org/10.1080/09709274.2009.11906187

Mtapuri, O., & Giampiccoli, A. (2020). Toward a model of just tourism: A proposal. *Social Sciences*, *9*(4), 34. https://doi.org/10.3390/socsci9040034

Musgrave, J., & Henderson, S. (2015). Changing audience behaviour: A pathway to sustainable event management. In J. Musgrave, & S. Henderson (Eds.), *The Routledge Handbook of Tourism and Sustainability* (pp. 384–396). Routledge.

Nair, V., & Hamzah, A. (2019). A benchmarked step by step community-based tourism (CBT) toolkit for developing countries. In V. Nair, & A. Hamzah (Eds.), *Community-Based Tourism in the Developing World* (pp. 10–26). Routledge. https://doi.org/10.4324/9781351026383-2

National Cooperative Business Association Clusa International (NCBA Clusa). (2022). *Advantages of the Cooperative Business Model*. https://ncbaclusa.coop/blog/advantages-of-the-cooperative-business-model/

Ngonya, J.E. (2015). *Challenges facing Community Based Tourism in Tanzania: A case study of Arumeru District in Arusha Region* (Doctoral dissertation). The Open University of Tanzania.

Nor, H.M., & Amran, H. (2013). Tourism cooperative for scaling up community-based tourism. *Worldwide Hospitality and Tourism Themes*, *5*(4), 315–328. https://doi.org/10.1108/WHATT-03-2013-0017

Olson, E.M., Slater, S.F., Hult, G.T.M., & Olson, K.M. (2018). The application of human resource management policies within the marketing organization: The impact on business and marketing strategy implementation. *Industrial Marketing Management*, *69*, 62–73. https://doi.org/10.1016/j.indmarman.2018.01.029

Ordonez-Ponce, E., Clarke, A.C., & Colbert, B.A. (2021). Collaborative Sustainable Business Models: Understanding Organizations Partnering for Community Sustainability. *Business & Society*, *60*(5), 1174–1215. https://doi.org/10.1177/0007650320940241

Overton, J. (2019). *The Growth in Greenhouse Gas Emissions From Commercial Aviation*. Environmental and Energy Study Institute. https://www.eesi.org/papers/view/fact-sheet-the-growth-in-greenhouse-gas-emissions-from-commercial-aviation

Pandey, R.J. (2011). Capacity Building and Human Resource Development Initiatives: Community Based Tourism Development in Nepal. *Nepal Tourism and Development Review*, *1*(1), 83–101. https://doi.org/10.3126/ntdr.v1i1.7373

Parakash, P. (2021, May 25). *What Is a General Partnership? Pros, Cons & How to Form*. Nerd Wallet. https://www.nerdwallet.com/article/small-business/general-partnerships

Peredo, A.M., & Chrisman, J.J. (2017). Conceptual foundations: Community-based enterprise and community development. In R. Kleinhans, D. Reuschke, M. van Ham, C. Mason, & S. Syrett, (Eds.), *Entrepreneurial neighbourhoods* (pp. 151–178). Edward Elgar Publishing.

Perrini, F., & Vurro, C. (2006). Leveraging social change through entrepreneurship. In F. Perrini (Ed.), *The New Social Entrepreneurship. What Awaits Social Entrepreneurial Ventures?* (pp. 26–45). Edward Elgar Publishing.

Pham Hong, L., Ngo, H.T., & Pham, L.T. (2021). Community-based tourism: Opportunities and challenges a case study in Thanh Ha pottery village, Hoi An city, Vietnam. *Cogent Social Sciences*, *7*(1), 1926100. https://doi.org/10.1080/23311886.2021.1926100

Rahmawati, P.I., Jiang, M., & DeLacy, T. (2019). Framework for stakeholder collaboration in harnessing corporate social responsibility implementation in tourist destination to build community adaptive capacity to climate change. *Corporate Social Responsibility and Environmental Management*, *26*(6), 1261–1271. https://doi.org/10.1002/csr.1745

Rasmussen, L., Cooper, C., Martin, V., & Wilson, O. (2023). Equitable data governance models for the participatory sciences. *Community Science*, *2*(2), e2022CSJ000025. https://doi.org/10.1029/2022CSJ000025

Reid, D.G., Mair, H., & George, W. (2004). Community tourism planning: A self-assessment instrument. *Annals of Tourism Research*, *31*(3), 623–639. https://doi.org/10.1016/j.annals.2004.01.007

Roma, A. (2023). *How to Split Profits in a Small Business Partnership?*. Novo. https://www.novo.co/resources/partnership-profit-sharing

Saayman, M., & Giampiccoli, A. (2016). Community-based and pro-poor tourism: Initial assessment of their relation to community development. *European Journal of Tourism Research*, *12*, 145–190. https://doi.org/10.54055/ejtr.v12i.218

Sachs, J.D., Schmidt-Traub, G., Mazzucato, M., Messner, D., Nakicenovic, N., & Rockström, J. (2019). Six transformations to achieve the sustainable development goals. *Nature Sustainability*, *2*, 805––814. https://doi.org/10.1038/s41893-019-0352-9

Salustri, A. (2019). The UN 2030 Agenda and Social and Solidarity Economy: toward a structural change?. *Review of Applied Socio-Economic Research*, *18*(2), 104–117.

Scheyvens, R. (2003). Local Involvement in Managing Tourism. In S. Singh, D.J. Timothy, & R.K. Dowling (Eds.), *Tourism in Destination Communities*. CABI Publishing. https://doi.org/10.1079/9780851996110.0229

Sharpley, R. (2000). Tourism and sustainable development: Exploring the theoretical divide. *Journal of Sustainable Tourism*, *8*(1), 1–19. https://doi.org/10.1080/09669580008667346

Sharpley, R. (2020). Tourism, sustainable development and the theoretical divide: 20 years on. *Journal of Sustainable Tourism*, *28*(11), 1932–1946. https://doi.org/10.1080/09669582.2020.1779732

Stone, M.T., & Stone, L.S. (2020). Challenges of community-based tourism in Botswana: a review of literature. *Transactions of the Royal Society of South Africa*, *75*(2), 181–193. https://doi.org/10.1080/0035919X.2020.1715510

Talavera, C., & Sanchis, J.R. (2020). Alliances between for-profit and non-profit organizations as an instrument to implement the economy for the common good. *Sustainability*, *12*(22), 9511. https://doi.org/10.3390/su12229511

Tortia, E.C., Degavre, F., & Poledrini, S. (2020). Why are Social Enterprises Good Candidates for Social Innovation? Looking for Personal and Institutional Drivers of Innovation. *Annals of Public and Cooperative Economics, Wiley Blackwell*, *91*(3), 459–477. https://doi.org/10.1111/apce.12265

Tosun, C. (2000). Limits to community participation in the tourism development process in developing countries. *Tourism Management*, *21*(6), 613–633. https://doi.org/10.1016/S0261-5177(00)00009-1

Townsend, C. (2006). *Guidelines for community-based tourism in Rwanda*. UNWTO and ORTPN (unpublished).

Truong, V.D., & Hall, C.M. (2013). Social marketing and tourism: What is the evidence?. *Social Marketing Quarterly*, *19*(2), 110–135. https://doi.org/10.1177/1524500413484452

Truong, V.D., & Hall, C.M. (2019). Corporate social marketing in tourism: to sleep or not to sleep with the enemy?. In *Marketing for Sustainable Tourism* (pp. 16–34). Routledge. https://doi.org/10.1080/09669582.2016.1201093

Ullah, I., & Kim, D.Y. (2020). A model of collaborative governance for community-based trophy-hunting programs in developing countries. *Perspectives in Ecology and Conservation*, *18*(3), 145–160. https://doi.org/10.1016/j.pecon.2020.06.004

UNWTO. (2004) *Tourism and Poverty Alleviation: Recommendations for Action*. UNWTO.

UNWTO. (2023). *Tourism on Track for Full Recovery as New Data Shows Strong Start to 2023. Sustainable Development Goals*. https://www.unwto.org/news/tourism-on-track-for-full-recovery-as-new-data-shows-strong-start-to-2023

UW Center for Cooperatives. (2024). *Types of Co-ops. Board of Regents of the University of Wisconsin System*. https://uwcc.wisc.edu/about-co-ops/types-of-co-ops/#:~:text=Producer%20cooperatives%20are%20owned%20by,value%20and%20increase%20producer%20returns

Villarino, J., & Font, X. (2015). Sustainability marketing myopia: The lack of sustainability communication persuasiveness. *Journal of Vacation Marketing*, *21*(4). https://doi.org/10.1177/1356766715589428

Waddock, S. (2005). Corporate citizens: Stepping into the breach of society's broken contracts. *The Journal of Corporate Citizenship*, *19*, 20–24. http://www.jstor.org/stable/jcorpciti.19.20

Ward, H., Fox, T., & Howard, B. (2002). *Public sector roles in strengthening corporate social responsibility: A baseline study*. World Bank.

Wearing, S.L., & Schweinsberg, S. (2016). *Marketing National Parks for Sustainable Tourism*. Channel View.

Wilkinson, R., & Pickett, K. (2010). *The Spirit Level: Why Equality is Better for Everyone*. The Equality Trust.

Williams, R.C. (2016). *The cooperative movement: Globalization from below*. Routledge.

Wilson, F., & Post, J.E. (2013). Business models for people, planet (& profits): exploring the phenomena of social business, a market-based approach to social value creation. *Small Business Economics*, *40*, 715–737. https://doi.org/10.1007/s11187-011-9401-0

Wiranatha, A.S., Antara, M., & Suryawardani, IG.A.O. (2017). Impact of Tourism Leakage on the Growth of Economic Sectors, Employment and Income Distribution in Bali, Indonesia. *International Journal of Economic Research*, *14*(8), 11–27.

Yanes, A., Zielinski, S., Diaz Cano, M., & Kim, S. (2019). Community-Based Tourism in Developing Countries: A Framework for Policy Evaluation. *Sustainability*, *11*(9), 2506. https://doi.org/10.3390/su11092506

Yunus, M., Moingeon, B., & Lehmann-Ortega, L. (2010). Building Social Business Models: Lessons from the Grameen Experience. *Long Range Planning*, *43*(2/3), 308–325. https://doi.org/10.1016/j.lrp.2009.12.005

Zwiększanie potencjału społeczności lokalnych: Wykorzystanie społecznie zorientowanych modeli biznesowych w turystyce opartej na społecznościach lokalnych

Streszczenie. Potencjał turystyki, jeśli chodzi o generowanie wzrostu gospodarczego i wspieranie transformacji społecznej, jest dobrze zbadany i uznany przez organizacje międzynarodowe. Badania pokazują również, że korzyści płynące z turystyki nie są równomiernie rozłożone wśród lokalnych społeczności. W rezultacie kwestionuje się rzeczywisty wkład turystyki w przyspieszenie zrównoważonego rozwoju gospodarczego, politycznego i społecznego, szczególnie w przypadku grup najmniej uprzywilejowanych. W odpowiedzi na ten problem powstały alternatywne formy turystyki, takie jak turystyka oparta na społecznościach lokalnych (CBT), choć ich rezultaty są niejednoznaczne. Literatura wskazuje na rosnącą świadomość sektora biznesowego, że aby sprostać wyzwaniom zrównoważonego rozwoju przedsiębiorstwa potrzeba nowych sposobów tworzenia, dostarczania i przechwytywania wartości. Niniejszy artykuł stanowi wkład do dyskusji na temat sposobów zwiększania wpływu CBT. Autorzy proponują wykorzystanie innowacji wypracowanych w ramach podejścia określanego jako biznes zorientowany społecznie w celu stworzenia modeli CBT, które odnoszą się do konkretnych problemów danej lokalizacji.

Słowa kluczowe: turystyka oparta na społecznościach lokalnych, społeczna odpowiedzialność biznesu, partnerstwa w zakresie podziału zysków, marketing społeczny przedsiębiorstw, modele biznesowe

Studia
Periegetica
2(46)/2024

ISSN 2658-1736, https://journals.wsb.poznan.pl/index.php/sp
s. 59–80, https://doi.org/10.58683/sp.1990

MOHAMMADSADEGH OMIDVAR[a], ANISAH DEEN[b]

The Mediating Role of Customer Satisfaction Between Dimensions of CSR and Customer Loyalty

Abstract. Customer satisfaction and customer loyalty are essential attributes of corporate social responsibility (CSR) which build up competitive advantage. While existing research emphasizes the importance of these attributes, few studies explore how customer loyalty is affected by various dimensions of CSR. This study examines the mediating role of customer satisfaction between the CSR dimensions identified by Carroll as well as environmental responsibility and customer loyalty in the restaurant industry. The conceptual model representing these relationships was tested using a structural equation model and data collected from 247 customers visiting restaurants in the city of Tehran. Four dimensions of CSR — economic, legal, ethical and environmental — were found to significantly affect customer satisfaction. Results also show that customer satisfaction plays a mediating role in the relationship between economic responsibility, environmental responsibility and customer loyalty. This study adds the dimension of environmental responsibility to Carroll's pyramid of CSR and gives a clearer guidance to restaurant managers as to which environmental responsibilities can increase the customer satisfaction.

Keywords: corporate social responsibility, environmental responsibility, customer satisfaction, customer loyalty, restaurant industry

Article history. Submited 2024-09-03. Accepted 2024-10-07. Published 2024-10-25.

1. Introduction

Customer satisfaction has been the subject of much research (Pizam et al., 2016; Leninkumar, 2017; Ardani et al., 2019; Otto et al., 2020), especially within tourism and hospitality industry (Oh & Kim, 2017; Sanchez-Redbull et al., 2018; Deen, 2022; Rather et al., 2019). In today's competitive market and as a result of the

[a] Kharazmi University, m.sadeghomidvar@gmail.com, https://orcid.org/0000-0003-3304-2656
[b] University of South Africa (UNISA), dpathea@unisa.ac.za, https://orcid.org/0000-0002-3276-2240

Covid-19 pandemic, restaurants must focus on improving customer satisfaction to gain competitive advantage and ensure sustainability (Uslu & Eren, 2020; Biswas & Verma, 2022). Studies indicate that in order to achieve commercial success, restaurants should not only focus on attracting first time customers, but should also provide superior service quality that exceeds customer expectations in an effort to maximise repeat visits (Hwang & Lyu, 2019; Lee et al., 2020). Researchers believe that in order to survive and maintain a long-term presence, restaurants should direct their attention to customer retention (Han et al., 2018; Hwang et al., 2020). This can be achieved by prioritizing patrons' preferences and factors they find relevant when making their purchasing decisions. For example, it is important for restaurants to be attentive to customer needs (Yilmazdogan et al., 2015; Youn & Kim, 2017), which tend to change over time (Rădulescu & Hudea, 2018). Thus the primary goal for restaurants is to win their customers' loyalty (Cuesta-Valiño et al., 2019; Singh et al., 2021), which plays a vital role in achieving success today's competitive landscape. When consumers are loyal, they tend to resist offers from competitors (Servera-Francés & Piqueras-Tomás, 2019; Ing et al., 2020).

2. Literature Review

Studies have shown that customer expectations have shifted in recent times and simply offering products and services of superior quality or at lower prices is no longer sufficient to satisfy customers (Bhattacharya & Sen, 2004; Omidvar & Deen, 2024). Research indicates that customers are more likely to buy from businesses that are committed to social causes and support them (Golob et al., 2008; Omidvar & Deen, 2023; 2024), which should motivate companies to engage in activities related to corporate social responsibility (Barcelos et al., 2015; Chen et al., 2015 Sen et al., 2016).

Researchers emphasize that how companies address ethical and social concerns can play a significant role in customers' purchasing decisions (Lee et al., 2017). According to a study by Ozdemir et al. (2020), 62% of customers expect restaurants to adhere to CSR-related issues. Lo (2020) found that adherence to CSR and involvement in CSR activities attract a lot of attention from existing and potential customers of restaurants; Rhou et al. (2016) also demonstrated how CSR was linked to customer loyalty. Moreover, early research shows that consumers tend to avoid businesses that disregard social issues, laws, and societal norms when making purchases (Sen & Bhattacharya 2001; Webb et al., 2008). For example, in the early 90's, a popular shoe company faced a consumer boycott after reports of worker mistreatment at some of its suppliers in Indonesia were published (Porter & Kramer, 2006). Therefore, it is advisable that companies spend amply on CSR-related activity (Fatma et al., 2015) and engage in various CSR activities (Han et al., 2019). It can therefore be concluded that to stay competitive and gain advantage companies need to engage in CSR activities and projects.

Restaurants are part of the hospitality industry, which has a significant impact on cultural, social, economic, and environmental issues. As a result, social responsibility is becoming increasingly important for restaurants (Kim et al., 2017); many companies in the hospitality industry, including restaurants, have started to get involved in CSR activities and projects (Park et al., 2019; Han et al., 2020; Lee et al., 2020). In recent years, many studies have explored how corporate social responsibility affects consumer behaviour (Nguyen & Johnson, 2020; Oe & Yamaoka., 2020; Rathore et al., 2022). However, despite the abundance of research in this field, further investigation is necessary to understand the connection between CSR actions and customer satisfaction and loyalty (Moisescu & Beracs, 2015; Ali et al., 2021; Salam et al., 2022).

It should be emphasized that most studies exploring the effects of CSR on consumer behaviour have been carried out in developed countries (Barkakati et al., 2016; Civero et al., 2017; Popa et al., 2022), while there are relatively few studies regarding developing countries, particularly in the Middle East (Khan et al., 2013; Fatma & Rahman, 2016; Al-Ghamdi & Badawi, 2019). In addition, the topic of CSR in Iran has not been thoroughly studied, creating a research gap in terms of theory and practice (Saeidi et al., 2015). Furthermore, in general, most studies concerning the restaurant industry have focused on the overall effect of CSR on consumer loyalty (Xu, 2014; Asad & Abid, 2018; Lee et al., 2020). There is, however, a shortage of studies that have explored how each dimension of CSR affects customer loyalty. It is, therefore, unclear which aspect of CSR has a greater impact on this construct. To bridge this gap, the following study examines each dimension of Carroll's pyramid of CSR and its effect on customer loyalty. Additionally, given the growing importance of environmental responsibility and the limited research on CSR and customer loyalty in restaurants, the authors of this study extend their analysis to account for how this additional dimension of corporate responsibility impacts customer loyalty in addition to the four dimensions identified by Carroll.

Since the start of the 21st century, ensuring customer satisfaction has become a crucial aspect of marketing and has been extensively studied by researchers (Leninkumar, 2017; Sudari et al., 2019; Otto et al., 2020; Ilyas et al., 2021; Gunawan, 2022). Achieving customer satisfaction is a complex task, which encompasses various aspects influenced by multiple factors, including the quality of products and services, after-sales support, and other elements (Jap, 2001). Therefore, to ensure customer satisfaction companies must continually assess and analyse multiple factors and respond to complaints in order to be able to meet customer needs. If any issues arise in these areas, they should be promptly addressed and improved upon (Shokouhyar, Shokoohyar & Safari, 2020).

There are various classifications of CSR, but one of the most important ones is Carroll's social responsibility pyramid, consisting of four levels (Carroll, 1991; Yılmazdogan et al., 2015; Jamali & Karam, 2018; Hamid et al., 2020; Lu et al., 2020). This model has been used as the basis of many studies (Aupperle et al., 1983; Aupperle et al., 1985; Baden, 2016; Hamid et al., 2020; Lee et al., 2020; Lo, 2020; Lu et al., 2020). Currently, there is a significant focus on environmental issues and consumers now prefer to purchase from companies that try to minimise their impact on the environment (Han et al., 2019). In recent years, there has been a surge in research focused on the environmental impact in the tourism industry (Han & Hwang, 2015; Han et al., 2019; Han et al., 2020), and several studies have explored how consumers respond to companies that accept their environmental responsibility and how their commitment to protecting the environment affects customer perceptions (Aro et al., 2018; Han et al., 2019; Han et al., 2020; Han & Hwang, 2015).

2.1. Corporate Social Responsibility (CSR) and Its Effect on Customer Loyalty

2.2. Economic Responsibility

All companies need to be profitable. This enables them, for example, to purchase necessary materials and attract new investors. Furthermore, as a fundamental condition or requirement of existence, businesses have an economic responsibility to the society that has permitted them to be created and sustained (Carroll, 2016). When companies make profits, they also boost the local economy (Palihawadana et al., 2016; Han et al., 2020). Hsu (2018) demonstrated that economic responsibility has a significant effect on customer satisfaction, while Chung et al. (2015) showed that CSR has a significant impact on customer loyalty.

2.3. Legal Responsibility

Companies' legal responsibility refers to their obligation to comply with societal and governmental rules and regulations (Mohammed & Rashid, 2018). Companies are expected to observe the laws of the society in which they operate (Schwartz & Carroll, 2003; Carroll, 2016; Kim et al., 2020; Uhlig et al., 2020). Saeidi et al. (2015) show that CSR has a significant and positive influence on customer satisfaction. Hsu (2018) provide evidence confirming that the degree to which companies meet their legal obligations has a positive impact on customer loyalty.

2.4. Ethical Responsibility

Companies' ethical responsibility stems from societal expectations that businesses adhere to ethical principles or moral obligations that have not yet been established as legal requirements. (Wagner-Tsukamoto, 2019). Park and Kim (2019) showed that companies' involvement in CSR activities can enhance customer loyalty by improving consumer satisfaction and trust.

2.5. Philanthropic Responsibility

Philanthropic responsibility is motivated by societal expectations that companies are good corporate citizens (Mohammed & Rashid, 2018). This is why companies engage in philanthropic activities that go beyond ethical considerations (Hossain et al., 2017) and improve the quality of people's lives (McCain et al., 2019). In their study, Martínez & del Bosque (2013) demonstrated that customer trust and satisfaction were mediating factors in the relationship between perceived CSR and customer loyalty (Martínez & del Bosque, 2013).

2.6. Environmental Responsibility

Companies' environmental concerns have been the subject of tourism research for a number of years (Han & Hwang, 2015; Rashid et al., 2015; Han et al., 2019; Kim & Hall, 2020). More and more companies want to demonstrate their commitment to environmental progress and involvement in environmental activities is increasingly becoming a factor that customers taken into consideration when making their purchasing decisions (Han et al., 2019). Al-Ghamdi and Badawi (2019) showed that CSR activities have a strong and positive impact on customer satisfaction and loyalty.

Figure 1. The proposed conceptual model of the relationships between CSR dimensions and customer loyalty
Source: Own research

In the light of the above and building on the existing literature on CSR, the authors proposed the conceptual model shown in Figure 1. The model describes the relationships between the different dimensions of CSR and its influence on customer satisfaction and customer loyalty. The model includes five dimensions of CSR (economic, legal, ethical, philanthropic, and environmental), customer satisfaction and customer loyalty. To test the validity of the model, 5 hypotheses were formulated:

H1. Customer satisfaction mediates the relationship between economic responsibility and customer loyalty.

H2. Customer satisfaction mediates the relationship between legal responsibility and customer loyalty.

H3. Customer satisfaction mediates the relationship between ethical responsibility and customer loyalty.

H4. Customer satisfaction mediates the relationship between philanthropic responsibility and customer loyalty.

H5. Customer satifaction mediates the relationship between environmental responsibility and customer loyalty.

3. Research Method

3.1. Study Design and Sampling

The above hypotheses about the relationships between five dimensions of CSR, customer satisfaction and loyalty were tested using quantitative data collected from a convenience sample of restaurant customers in the City of Tehran, which is known as a major centre of the fast-food industry with a large population of restaurants.

The analysis involved the use of structural equation modelling. According to Nunkoo et al. (2013), SEM is a statistical procedure used for testing measurement, functional, and predictive hypotheses which approximate world realities. It is used to assess hypothesized relationships between variables (Hair et al., 2012).

According to Kline (2011), a typical sample size in studies that use structural equation modelling (SEM) should include at least 200 respondents. 247 valid questionnaires were collected in the study. According to Kline (2011), 15 observations for each predictor variable in multiple regression analysis with the standard least square method is a good rule of thumb. Given seven variables used in the study

(Figure 1), the minimum sample size, according to Kline (1990), should be 105, which means that the realised sample size was sufficient.

3.2. Questionnaire and Data Collection

Following Kline's suggestion (2015) that several questionnaire items should be used to measure one variable, the authors developed a questionnaire for the survey, relying on insights from the existing literature of CSR (Veal, 2011; Kline, 2015; Han et al., 2020). Three questionnaire items were used to measure each dimension of CSR, namely Economic CSR, Legal CSR, Ethical CSR, Philanthropic CSR and Environmental CSR. Following the works of Hennig-Thurau (2004), Leninkumar (2017) and Servera-Francés and Piqueras-Tomás (2019), three statements were used to measure the level of customer satisfaction. The last variable, i.e. customer loyalty, was measured using three questionnaire items formulated on the basis of Leninkumar (2017) and Marin et al. (2009). The entire questionnaire consisted of 21 items, listed in Table 2. Respondents were asked to express their degree of agreement with each statement on a five-point Likert scale, where 1 = strongly disagree, 2 = disagree, 3 = neither disagree nor agree, 4 = agree, 5 = strongly agree. Responses from restaurant customers were collected during face-to-face interviews conducted between February and March 2023. Editor respondents were Iranian. The original questionnaire was in Farsi and was later translated into English for the purpose of analysis. The quality of the translation was verified using blind back translation.

4. Analysis of Results

Prior to testing the conceptual model, a measurement model was evaluated using confirmatory factor analysis (CFA). The purpose of the CFA is to verify the structure of factors (21 items) within the set of variables presented Figure 1. Once CFA had been completed, SEM was applied to test the conceptual model using SPSS version 21 and the AMOS version 24 software.

4.1. Sample Description

Table 1. Demographic characteristics of the respondents

	Total (*N* = 247)	
	N	Percentage (%)
Gender		
Male	134	54.3
Female	113	45.7
Age		
less than 20 years old	13	5.3
20–29 years	94	38.1
30–39 years	91	36.8
40–49 years	38	15.4
50 years or older	11	4.5
Level of education		
Diploma	34	13.8
Bachelor's degree	95	38.5
Master's degree	101	40.9
PhD	17	6.9

Source: Own research

4.2. Confirmatory Factor Analysis

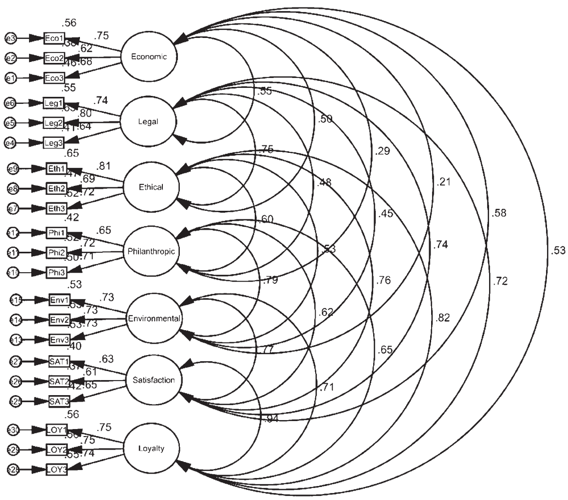


Figure 2. Results of confirmatory factor analysis (CFA)
Source: Own research

Results of CFA for the measurement model in Figure 2 showed a good fit to the data: χ^2 = 270.791, df = 168, χ^2/df =1.612, RMSEA = 0.042, PNFI = 0.730, GFI = 0.932, AGFI = 0.906, CFI = 0.964, IFI = 0.965, TLI = 0.955). This is demonstrated below in Figure 2.

Table 2 shows factor loadings of all items and values of Cronbach's α, composite reliability (CR) and average variance extracted (AVE) for the study variables. As shown in Table 2, the standardized factor loadings of the measurement model are all statistically significant and higher than 0.5, the recommended threshold value by Hair et al. (2019).

Table 2. Properties of the measurement model (*N* = 247)

Measurement items	Factor loading	Cronbach's α	CR	AVE
Economic responsibility (Han et al., 2020)		0.753	0.943	0.557
It is important for this restaurant to be committed to being as profitable as possible.	0.748			
It is important for this restaurant to maintain a strong competitive position.	0.618			
It is important for this restaurant to be defined as one that is consistently profitable	0.676			
Legal responsibility (Han et al., 2020)		0.847	0.878	0.444
It is important for this restaurant to perform in a manner consistent with the expectations of government and law.	0.742			
It is important for this restaurant to be defined as one that fulfills its legal obligations.	0.796			
It is important for this restaurant to provide goods and services that at least meet minimal legal requirements.	0.641			
Ethical responsibility (Han et al., 2020)		0.841	0.892	0.560
It is important for this restaurant to perform in a manner consistent with expectations of societal mores and ethical	0.807			
It is important for this restaurant to prevent ethical norms from being compromised in order to achieve corporate goals.	0.688			
It is important for this restaurant to be defined as good corporate citizenship and known as who does what is expected morally or ethically.	0.719			
Philanthropic responsibility (Han et al., 2020)		0.807	0.904	0.532
It is important for this restaurant to perform in a manner consistent with the philanthropic and charitable expectations of society.	0.649			
It is important for this restaurant to allocate some of its resources to philanthropic activities (e.g. fine/performing arts and sports).	0.721			
It is important for this restaurant to assist voluntarily with those projects that enhance a community's "quality of life.	0.707			
Environmental responsibility (Han et al., 2020)		0.752	0.831	0.368

Measurement items	Factor loading	Cronbach's α	CR	AVE
It is important for this restaurant to perform in a manner consistent with protecting the environment.	0.731			
It is important for this restaurant to offer environmentally friendly products/services.	0.731			
It is important for this restaurant to make every effort to protect and preserve the environment.	0.730			
Customer satisfaction		0.662	0.817	0.357
My choice to buy from this restaurant was a wise one (Leninkumar, 2017)	0.630			
Based on my experience with this restaurant, I am very satisfied with this company (Servera-Francés & Piqueras-Tomás, 2019)	0.608			
This restaurant has never disappointed me so far. (Hennig-Thurau, 2004)	0.650			
Customer loyalty		0.853	0.794	0.322
What is the probability that you will buy from this restaurant? (Marin et al., 2009)	0.748			
I say positive things about this restaurant to other people (Leninkumar, 2017)	0.746			
I consider this restaurant as the first choice to buy (Leninkumar, 2017)	0.742			

Source: Own research

Values of Cronbach's α were greater than 0.70, i.e. higher than the threshold suggested by Fornell and Larcker (1981). The lowest value of Cronbach's α was 0.662, which is higher than the threshold of 0.6 recommended by Cronbach (1951) and Hajjar (2018) when assessing reliability.

Table 2 also shows values of composite reliability (CR) and average variance extracted (AVE). According to Hair et al. (2019), CR above 0.7 indicates a high level of internal consistency. Since all CR values in Table 2 exceed this threshold, the items relating to particular indicator variables can be regarded as sufficiently consistent. Furthermore, to achieve an acceptable level of convergent validity, the AVE of each latent construct should be greater than or equal to 0.50 (Bagozzi & Yi, 2012; Nunkoo & Smith, 2013). As can be seen, AVE values of 3 variables (economic responsibility, ethical responsibility, philanthropic responsibility) are higher than 0.5, while those of the remaining 4 variables (legal responsibility, environmental responsibility, customer satisfaction, customer loyalty) are less than 0.5. Fornell and Larcker (1981) recommend that if AVE is less than 0.5, but composite reliability is higher than 0.6, the construct's convergent validity can be considered acceptable.

Table 3. Heterotrait-Monotrait Ratio (HTMT)

	ECO	LEG	ETH	PHIL	ENV	LOY
ECO						
LEG	0.550					
ETH	0.505	0.756				
PHIL	0.294	0.486	0.786			
SAT	0.208	0.449	0.584			
ENV	0.378	0.484	0.646	0.801		
LOY	0.535	0.715	0.786	0.707	0.884	

Note. ECO = economic CSR; LEG = legal CSR; ETH = ethical CSR; PHIL = philanthropic CSR; ENV = Environmental CSR; SAT: Customer Satisfaction; LOY = Customer Loyalty
Source: Own research

Table 3 shows values of Heterotrait-Monotrait Ratio, which a measure of similarity or distinction between latent variables. According to recommendations given by Henseler et al. (2016), values above 0.90 indicate that variables are similar to each other. Since all values in Table 3 are less than 0.90, it can be concluded that the variables are sufficiently distinct and discriminant validity is established.

4.3. Hypotheses Testing and SEM

After identifying a suitable measurement model, the relationships between the variables in the model (Figure 1) were tested using structural equation modelling. Results of maximum likelihood estimation confirmed a good fit of the model to the data) $\chi^2 = 270.791$; df = 168; $\chi^2/df = 1.612$, RMSEA = .042, PNFI = 0.730, GFI = 0.932; AGFI = 0.906, IFI = 0.965, TLI = 0.955, CFI = 0.964). The fitting values of these indices are all within an acceptable range.

Table 4. Hypothesis 1 testing

Relationship	Direct effect	P-value			Result
ECO → CS	0.260	0.001			statistically significant
ECO → CL	−0.079	0.619			not statistically significant
	Indirect effect	P-value	Standardized Interval		
ECO → CS → CL	0.244	0.019	Lower	Upper	H1 confirmed
			0.032	1.500	

Source: Own research

As can be seen in Table 4, the relationship between economic responsibility and customer satisfaction is positive and significant ($\beta = 0.260$, $p < 0.001$), while the relationship between economic responsibility and customer loyalty is negative but not statistically significant ($\beta = -0.079$, $p > 0.05$). Customer satisfaction mediates the effect between economic responsibility and customer loyalty ($p < 0.001$), which means that hypothesis 1 is confirmed.

Table 5. Hypothesis 2 testing

Relationship	Direct effect	P-value			Result
LEG → CS	0.228	0.044			statistically significant
LEG → CL	−0.071	0.658			not statistically significant
	Indirect effect	P-value	Standardized Interval		
LEG → CS → CL	0.214	0.103	Lower	Upper	**H2 rejected**
			−0.051	1.537	

Source: Own research

As can be seen in Table 5, the positive relationship between legal responsibility and customer satisfaction is statistically significant ($\beta = 0.228$, $p < 0.001$), while the relationship between legal responsibility and customer satisfaction is not statistically significant ($\beta = -0.071$, $p > 0.05$). In addition, customer satisfaction does not mediate the relationship between legal responsibility and customer loyalty ($p > 0.05$), which means that hypothesis 2 has to be rejected.

Table 6. Hypothesis 3 testing

Relationship	Direct effect	P-value			Result
ETH → CS	0.249	0.040			statistically significant
ETH → CL	0.208	0.228			not statistically significant
	Indirect effect	P-value	Standardized Interval		
ETH → CS → CL	0.233	0.099	Lower	Upper	**H3 rejected**
			−0.040	1.376	

Source: Own research

As can be seen in Table 6, the positive relationship between ethical responsibility and customer satisfaction is statistically significant ($\beta = 0.249$, $p < 0.001$), but its relationship with customer loyalty is not statistically significant ($\beta = 0.208$, $p > 0.05$). In addition, customer satisfaction does not mediate the relationship between ethical responsibility and customer loyalty ($p > 0.05$), which means that hypothesis 3 has to be rejected.

Table 7. Hypothesis 4 testing

Relationship	Direct effect	P-value			Result
PHIL → CS	−0.269	0.073			not statistically significant
PHIL → CL	0.168	0.381			not statistically significant
	Indirect effect	P-value	Standardized Interval		
PHIL → CS → CL			Lower	Upper	
	−0.247	0.071	−2.149	0.021	H4 rejected

Source: Own research

As can be seen in Table 7, the negative relationship between philanthropic responsibility and customer satisfaction is not statistically significant ($\beta = -0.269$, $p > 0.05$); the same is true about relationship between philanthropic responsibility and customer loyalty ($\beta = 0.168$, $p > 0.05$). In addition, customer satisfaction does not mediate the relationship between philanthropic responsibility and customer loyalty ($p > 0.05$), which means that hypothesis 4 has to be rejected.

Table 8. Hypothesis 5 testing

Relationship	Direct effect	P-value			Result
ENV → CS	0.598	0.000			statistically significant
ENV → CL	−0.221	0.622			not statistically significant
	Indirect effect	P-value	Standardized Interval		
ENV → CS → CL			Lower	Upper	
	0.650	0.017	0.143	3.741	H5 confirmed

Source: Own research

As can be seen in Table 8, the relationship between environmental responsibility and customer satisfaction is positive and statistically significant ($\beta = 0.598$, $p < 0.001$), but its relationship with customer loyalty is neither positive nor statistically ($\beta = -0.221$, $p > 0.05$). However, customer satisfaction mediates the relationship between environmental responsibility and customer loyalty ($p < 0.001$), which means that hypothesis 5 is supported.

5. Discussion and Conclusion

This study has shown how five dimensions of CSR and affect customer satisfaction and customer loyalty and how customer satisfaction plays a mediating role in the relationship between CSR dimensions and customer loyalty. The results provide a better understanding of how the five dimensions of CSR affect restaurant customers' behaviours.

It was shown that customer satisfaction mediates the relationship between economic responsibility and customer loyalty. These results confirm the fact that profitability is important to restaurants. Additionally, restaurant customers expect restaurants to be competitive since those that are more profitable are likely to attract more customers (Chung et al., 2015). Furthermore, economic responsibility was found to have a positive and significant effect on customer satisfaction but its effect on customer loyalty was found to be positive or statistically significant. These results are consistent with Hsu (2018), who found economic responsibility had a significant impact on customer satisfaction.

It was also shown that customer satisfaction does not mediate the relationship between legal responsibility and customer loyalty and legal responsibility does not have a significant effect on customer loyalty. However, legal responsibility was found to have a statistically significant effect on customer satisfaction. This means that it is important for customers that restaurants follow social rules. This finding is consistent with the results obtained by Saeidi et al. (2015).

Although customer satisfaction was not found to mediate the relationship between ethical responsibility and customer loyalty and ethical responsibility was not found to have a statistically significant effect on customer loyalty, legal responsibility was found to have a statistically significant effect on customer satisfaction. This means it matters to customers that restaurants respect ethical standards and regulations. These results are consistent with the findings of Bello et al. (2020) who found that engaging in CSR activities can increase customer satisfaction.

Customer satisfaction was not found to mediate the relationship between philanthropic responsibility and customer loyalty and ethical responsibility was not found to have a statistically significant effect on customer satisfaction or customer loyalty. One possible explanation is that Iranian customers may not have a correct understanding of humanitarian responsibility and cannot distinguish between this aspect of CSR and other aspects. These results are inconsistent with previous studies for example, Park and Kim (2019, who found that CSR had a positive effect on customer satisfaction.

Finally, while customer satisfaction was not found to mediate the relationship between environmental responsibility or customer loyalty and legal responsibility was not found to have a statistically significant effect on customer loyalty, environmental responsibility was found to have a statistically significant effect on customer satisfaction. This means that customers expect restaurants to ensure that their activities cause the least damage to the environment. This finding in line with the results of the study by Al-Ghamdi and Badawi (2019).

5.1. Theoretical Contributions

There are several theoretical implications from this study. Firstly, it investigated the impact of CSR dimensions on customer loyalty. While previous studies, particularly those concerned with the restaurant industry, have examined the impact of CSR on aspects such as customer loyalty, few studies have investigated the effect of each CSR dimension separately. Therefore, the results of this study help to understand which dimension of CSR can affect customer satisfaction and customer loyalty respectively.

Secondly, previous studies that have investigated the relationship between different aspects of CSR and consumer behaviour variables, only focused on Carroll's four dimensions of CSR, namely economic, legal, ethical, and philanthropic. This study, however, additionally accounted for environmental responsibility as the fifth dimension of CSR, which is becoming increasingly important from the perspective of research and business. These findings support the existence of a relationship between CSR dimensions, customer satisfaction and customer loyalty, and contribute to the literature on the impact of CSR on consumer behaviour.

Lastly, it should be emphasized that this study was conducted in a developing country with a unique economy and a predominantly Muslim population, which means the findings can provide new perspectives into CSR activities within the restaurant industry.

5.2. Managerial Implications

This study provides useful information to restaurant managers, such as the fact that economic responsibility directly and significantly affects customer satisfaction and mediates the relationship between economic responsibility and customer loyalty. This means that restaurants should focus their attention on economic CSR. Additionally, results indicate that customers pay special attention to environmental matters and expect companies to operate in an environmentally friendly manner. Thus, restaurants should consider implementing environmentally friendly practices to improve their customer satisfaction.

5.3. Limitations and Future Research

Although this study provides theoretical insights and has managerial implications for the restaurant industry, it should be interpreted with caution given its limitations. The first one has to do with the cross-sectional research design. As a result, it cannot account for changes in customers' attitudes over time. A longitudinal study could solve this problem. The second limitation is the fact the study only analysed opinions of restaurant customer, so its results may not be true for other sectors. The last limitation is that the survey was only conducted in the capital city, Tehran, so its findings do not necessarily reflect opinions of residents of other Iranian cities. To obtain more general results, similar studies would have to conducted in a number of countries.

CRediT Authorship Contribution Statement

Mohammadsadegh Omidvar: conceptualization, data curation, formal analysis, funding acquisition, investigation, methodology, project administration, resources, software, supervision, validation, visualization, writing — original draft, writing — review & editing. **Anisah Deen:** conceptualization, formal analysis, methodology, validation, visualization, writing — original draft, writing — review & editing.

Declaration of Competing Interest

None.

References

Ali, W., Danni, Y., Latif, B., Kouser, R., & Saleh, B. (2021). Corporate social responsibility and customer loyalty in food chains — mediating role of customer satisfaction and corporate reputation. *Sustainability*, *13*(6), 8681. https://doi.org/10.3390/su13168681

Al-Ghamdi, S.A., & Badawi, N.S. (2019). Do corporate social responsibility activities enhance customer satisfaction and customer loyalty? Evidence from the Saudi banking sector. *Cogent Business & Management*, *6*(1), 1662932. https://doi.org/10.1080/23311975.2019.1662932

Ardani, W., Rahyuda, K., Giantari, I.G.A.K., & Sukaatmadja, I.P.G. (2019). Customer satisfaction and behavioural intentions in tourism: A literature review. *International Journal of Applied Business & International Management*, *4*(3), 84–93.

Aro, K., Suomi, K., & Saraniemi, S. (2018). Antecedents and consequences of destination brand love — A case study from Finnish Lapland. *Tourism Management*, *67*, 71–78. https://doi.org/10.1016/j.tourman.2018.01.003

Asad, M., & Abid, U. (2018). CSR practices and customer's loyalty in restaurant industry: moderating role of gender. *International Journal of Business & Management*, *13*(2), 144–155.

Aupperle, K., Hatfield, J.D., & Carroll, A.B. (1983). Instrument development and application in corporate social responsibility. *Academy of Management*, *1983*(1), 369–373. https://doi.org/10.5465/ambpp.1983.4976378

Aupperle, K.E., Carroll, A.B., & Hatfield, J.D. (1985). An empirical examination of the relationship between corporate social responsibility and profitability. *Academy of Management Journal*, *28*(2), 446–463. https://doi.org/10.5465/256210

Baden, D. (2016). A reconstruction of Carroll's pyramid of corporate social responsibility for the 21st century. *International Journal of Social Responsibility*, *1*(8), 1–15. https://doi.org/10.1186/s40991-016-0008-2

Bagozzi, R.P., & Yi, Y. (2012). Specification, evaluation, and interpretation of structural equation models. *Journal of the Academy of Marketing Science*, *40*, 8–34. https://doi.org/10.1007/s11747-011-0278-x

Barcelos, E.M.B., Baptista, P.d.P., Maffezzolli, E.C.F., da Silva, V., Marchetti, R.Z., & da Veiga, C.P. (2015). Relationship between an organization evaluated as being socially responsible and the satisfaction, trust and loyalty of its clients. *Australian Journal of Basic & Applied Sciences*, *9*(7), 429–438.

Barkakati, U., Patra, R.K., & Das, P. (2016). Corporate social responsibility and its impact on consumer behaviour — a consumer's perspective. *International Journal of Sustainable Society*, *8*(4), 278–301. https://doi.org/10.1504/IJSSOC.2016.082366

Bello, K.B., Jusoh, A., & Nor, M.K. (2020). Relationships and impacts of perceived CSR, service quality, customer satisfaction and consumer rights awareness. *Social Responsibility Journal*, *17*(8), 1116–1130. https://doi.org/10.1108/SRJ-01-2020-0010

Bhattacharya, C.B., & Sen, S. (2004). Doing better at doing good: When, why, and how consumers respond to corporate social initiatives. *California Management Review*, *47*(1), 9–24.

Biswas, A., & Verma, R.K. (2022). Augmenting service quality dimensions: Mediation of image in the Indian restaurant industry. *Journal of Food Service Business Research*, *26*(3), 496–527. https://doi.org/10.1080/15378020.2022.2027198

Carroll, A.B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, *34*(4), 39–48.

Carroll, A.B. (2016). Carroll's pyramid of CSR: Taking another look. *International Journal of Corporate Social Responsibility*, *1*(3), 1–8. https://doi.org/10.1186/s40991-016-0004-6

Chen, M.H., Tai, P.N., & Chen, B.H. (2015). The relationship among corporate social responsibility, consumer-company identification, brand prestige, and purchase intention. *International Journal of Marketing Studies*, *7*(5), 33–40. http://dx.doi.org/10.5539/ijms.v7n5p33

Chung, K-H., Yu, J-E., Choi, M-G., & Shin, J-I. (2015). The effects of CSR on customer satisfaction and loyalty in China: The moderating role of corporate image. *Journal of Economics, Business & Management*, *3*(5), 542–547.

Civero, G., Rusciano, V., & Scarpato, D. (2017). Consumer behaviour and corporate social responsibility: an empirical study of Expo 2015. *British Food Journal*, *119*(8), 1826–1838. https://doi.org/10.1108/BFJ-12-2016-0601

Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*, 297––334. https://doi.org/10.1007/BF02310555

Cuesta-Valiño, P., Rodríguez, P.G., & Núñez-Barriopedro, E. (2019). The impact of corporate social responsibility on customer loyalty in hypermarkets: A new socially responsible strategy. *Corporate Social Responsibility & Environmental Management*, *26*(4), 761–769. https://doi.org/10.1002/csr.1718

Deen, A. (2022). Developing a visitor satisfaction index for national parks (Publication No. 30360531) [Doctoral Dissertation, University of Johannesburg]. ProQuest Dissertations Publishing.

Fatma, M., Rahman, Z., & Khan, I. (2015). Building company reputation and brand equity through CSR: the mediating role of trust. *International Journal of Bank Marketing*, *33*(6), 840–856. https://doi.org/10.1108/IJBM-11-2014-0166

Fatma, M., & Rahman, Z. (2016). The CSR's influence on customer responses in Indian banking sector. *Journal of Retailing & Consumer Services*, *29*, 49–57. https://doi.org/10.1016/j.jretconser.2015.11.008

Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39–50. https://doi.org/10.1177/002224378101800104

Golob, U., Lah, M., & Jancic, Z. (2008). Value orientations and consumer expectations of corporate social responsibility. *Journal of Marketing & Communications*, *14*(2), 83–96. https://doi.org/10.1080/13527260701856525

Gunawan, I. (2022). Customer loyalty: The effect customer satisfaction, experiential marketing and product quality. Kinerja. *Jurnal Manajemen Organisasi dan Industri*, *1*(1), 35–50. https://doi.org/10.37481/jmoi.v1i1.6

Hair, J.F., Sarstedt, M., Ringle, C.M., & Mena, J.A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40, 414–33. https://doi.org/10.1007/s11747-011-0261-6

Hair, J.F., Risher, J.J., Sarstedt, M., & Ringle, C.M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Hajjar, S.T.E.L. (2018). Statistical analysis: internal-consistency reliability and construct validity. *International Journal of Quantitative and Qualitative Research Methods*, *6*(1), 46–57.

Hamid, S., Riaz, Z., & Azeem, S.M.W. (2020). Carroll's dimensions and CSR disclosure: empirical evidence from Pakistan. *Corporate Governance*, *20*(3), 365–381. https://doi.org/10.1108/CG-10-2018-0317

Han, H., Yu, J., & Kim, W. (2019). Environmental corporate social responsibility and the strategy to boost the airline's image and customer loyalty intentions. *Journal of Travel & Tourism Marketing*, *36*(3), 371–383. https://doi.org/10.1080/10548408.2018.1557580

Han, H., & Hwang, J. (2015). Norm-based loyalty model (NLM): Investigating delegates' loyalty formation for environmentally responsible conventions. *International Journal of Hospitality Management*, 46, 1–14. https://doi.org/10.1016/j.ijhm.2015.01.002

Han, H., Kim, W., Lee, S., & Kim, H.R. (2018). How image congruity and satisfaction impact customer retention at luxury restaurants: A moderated mediation framework. *Social Behaviour & Personality: An International Journal*, *46*(6), 891–904. https://doi.org/10.2224/sbp.6767

Han, H., Moon, H., & Hyan, S.S. (2020). Uncovering the determinants of pro-environmental consumption for green hotels and green restaurants: A mixed-method approach. *International Journal of Contemporary Hospitality Management*, *32*(4), 1581–1603. https://doi.org/10.1108/IJCHM-04-2019-0354

Han, H., Al-Ansi, A., Chi, X., Baek, H., & Lee, K-S. (2020). Impact of environmental CSR, service quality, emotional attachment, and price perception on word-of-mouth for full-service airlines. *Sustainability*, *12*(10), 3974. https://doi.org/10.3390/su12103974

Hennig-Thurau, T. (2004). Customer orientation of service employees: Its impact on customer satisfaction, commitment, and retention. *International Journal of Service Industry Management*, *15*(5), 460–478.

Henseler, J., Ringle, C.M., & Sarstedt, M. (2016). Testing measurement invariance of composites using partial least squares. *International Marketing Review*, *33*(3), 405–431. https://doi.org/10.1108/IMR-09-2014-0304

Hossain, A., Bashar, K.B., & Noor, B. (2017). The impact of corporate social responsibility (CSR) on national and international corporations prevailing in Bangladesh: A comparison of CSR on the basis of Carroll's pyramid. *Journal of Investment & Management*, *6*(1), 6–12.

Hsu, S.L. (2018). The effects of corporate social responsibility on corporate image, customer satisfaction and customer loyalty: An empirical study on the telecommunication industry. *International Journal of Social Sciences and Humanities Invention*, *5*(5), 4693–4703.

Hwang, J., Kim, I., & Gulzar, M.A. (2020). Understanding the eco-friendly role of drone food delivery services: deepening the theory of planned behaviour. *Sustainability*, *12*(4), 1440. https://doi.org/10.3390/su12041440

Hwang, J., & Lyu, S.O. (2019). Relationships among green image, consumer attitudes, desire, and customer citizenship behavior in the airline industry. *International Journal of Sustainable Transportation*, *14*(6), 437–447. https://doi.org/10.1080/15568318.2019.1573280

Ilyas, G.B., Munir, A.R., Tamsah, H., Mustafa, H., & Yusriadi, Y. (2021). The influence of digital marketing and customer perceived value through customer satisfaction on customer loyalty. *Journal of Legal, Ethical Regulatory Issues*, *24*(8), 1–14.

Ing, P.G., Lin, N.Z. Xu, M., & Thurasamy, R. (2020). Customer loyalty in Sabah full service restaurant. *Asia Pacific Journal of Marketing & Logistics*, *32*(7), 1407–1429. https://doi.org/10.1108/APJML-07-2019-0437

Jamali, D., & Karam, C. (2016). Corporate social responsibility in developing countries as an emerging field of study. *International Journal of Management Reviews*, *20*(1), 32–61. https://doi.org/10.1111/ijmr.12112

Jap, S.D. (2001). The strategic role of the salesforce in developing customer satisfaction across the relationship lifecycle. *Journal of Personal Selling & Sales Management*, *21*(2), 95–108. https://doi.org/10.1080/08853134.2001.10754261

Khan, M., Majid, A., Yasir, M., & Arshad, M. (2013). Corporate social responsibility and corporate reputation: A case of cement industry in Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, *5*(1), 843–857.

Kim, S-H., Lee, K., & Fairhurst, A. (2017). The review of "green" research in hospitality, 2000–2014: Current trends and future research directions. *International Journal of Contemporary Hospitality Management*, *29*(1), 226–247. https://doi.org/10.1108/IJCHM-11-2014-0562

Kim, H. Rhou, Y., Topcuoglu, E., & Kim, Y.G. (2020). Why hotel employees care about corporate social responsibility (CSR): Using need satisfaction theory. *International Journal of Hospitality Management*, *87*, 102505. https://doi.org/10.1016/j.ijhm.2020.102505

Kim, M.J., & Hall, C.M. (2020). Can sustainable restaurant practices enhance customer loyalty? The roles of value theory and environmental concerns. *Journal of Hospitality & Tourism Management*, *43*, 127–138. https://doi.org/10.1016/j.jhtm.2020.03.004

Kline, R.B. (1990). Assumptions in structural equation modeling. In: R.H. Hoyle, *Handbook of Structural Equation Modeling* (p. 128–144). Guilford Publications.

Kline, R.B. (2011). *Principles and practice of structural equation modelling*. The Guilford Press.

Kline, R.B. (2015). The mediation myth. *Basic & Applied Social Psychology*, *37*(4), 202–213. https://doi.org/10.1080/01973533.2015.1049349

Lee, C-Y., Chang, W-C., & Lee, H-C. (2017). An investigation of the effects of corporate social responsibility on corporate reputation and customer loyalty — evidence from the Taiwan non-life insurance industry. *Social Responsibility Journal*, *13*(2), 355–369. https://doi.org/10.1108/SRJ-01-2016-0006

Lee, S., Han, H., Radic, A., & Tariq, B. (2020). Corporate social responsibility (CSR) as a customer satisfaction and retention strategy in the chain restaurant sector. *Journal of Hospitality & Tourism Management*, *45*, 348–358. https://doi.org/10.1016/j.jhtm.2020.09.002

Leninkumar, V. (2017). The relationship between customer satisfaction and customer trust on customer loyalty. *International Journal of Academic Research in Business & Social Sciences*, *7*(4), 450–465. http://dx.doi.org/10.6007/IJARBSS/v7-i4/2821

Lo, A. (2020). Effects of customer experience in engaging in hotels' CSR activities on brand relationship quality and behavioural intention. *Journal of Travel & Tourism Marketing*, *37*(2), 185–199. https://doi.org/10.1080/10548408.2020.1740140

Lu, J., Ren, L., Zhang, C., Wang, C., Shahid, Z., & Streimikis, J. (2020). The influence of a firm's CSR initiatives on brand loyalty and brand image. *Journal of Competitiveness*, *12*(2), 106–124.

Marin, L., Ruiz, S., & Rubio, A. (2009). The role of identity salience in the effects of corporate social responsibility on consumer behavior. *Journal of Business Ethics*, *84*, 65–78

Martínez, P., & del Bosque, I.R. (2013). CSR and customer loyalty: The roles of trust, customer identification with the company and satisfaction. *International Journal of Hospitality Management*, *35*, 89–99. https://doi.org/10.1016/j.ijhm.2013.05.009

McCain, S-L.C., Lolli, J.C., Liu, E., & Jen, E. (2019). The relationship between casino corporate social responsibility and casino customer loyalty. *Tourism Economics*, *25*(4), 569–592. https://doi.org/10.1177/1354816618808077

Mohammed, A., & Rashid, B. (2018). A conceptual model of corporate social responsibility dimensions, brand image, and customer satisfaction in Malaysian hotel industry. *Kasetsart Journal of Social Sciences*, *39*(2), 358–364. https://doi.org/10.1016/j.kjss.2018.04.001

Moisescu, O.L., & Beracs, J. (2015). Exploring the effect of perceived CSR on customer loyalty in the dairy products market. *Romanian Journal of Marketing*, *2*, 28–35.

Nguyen, N., & Johnson, L.W. (2020). Consumer behaviour and environmental sustainability. *Journal of Consumer Behaviour: An International Research Review*, *19*(6), 539–541. https://doi.org/10.1002/cb.1892

Nunkoo, R., Ramkissoon, H., & Gursoy, D. (2013). Use of structural equation modeling in tourism research: past, present, and future. *Journal of Travel Research*, *52*(6), 759–771. https://doi.org/10.1177/0047287513478503

Nunkoo, R., & Smith, S.L.J. (2013). Political economy of tourism: Trust in government actors, political support, and their determinants. *Tourism Management*, *36*, 120–132. https://doi.org/10.1016/j.tourman.2012.11.018

Oe, H., & Yamaoka, Y. (2020). Consumer perceptions of corporate social responsibility and its relationship with consumer behaviour: Scale development and validation in an emerging market context. *Journal of Customer Behaviour*, *19*(3), 202–225. https://doi.org/10.1362/147539220X16003502334208

Oh, H., & Kim, K. (2017). Customer satisfaction, service quality, and customer value: Years 2000–2015. *International Journal of Contemporary Hospitality Management*, *29*(1), 2–29. https://doi.org/10.1108/IJCHM-10-2015-0594

Omidvar, M., & Deen, A. (2023). The effect of CSR on restaurants' brand image and customers' brand attitudes as evidenced by their purchase intentions. *Studia Periegetica*, *44*(4), 113–138. https://doi.org/10.58683/sp.576

Omidvar, M., & Deen, A. (2024). Can restaurants achieve customer retention through CSR? *Journal of Applied Sciences in Travel & Hospitality*, *7*(1), 1–16. https://doi.org/10.31940/jasth.v7i1.1-16

Otto, A.S., Szymanski, D.M., & Varadarajan, R. (2020). Customer satisfaction and firm performance Insights from over a quarter century of empirical research. *Journal of the Academy of Marketing Science*, *48*, 543–564. https://doi.org/10.1007/s11747-019-00657-7

Ozdemir, O., Erkmen, E., & Kim, M. (2020). Corporate social responsibility and idiosyncratic risk in the restaurant industry: does brand diversification matter? *International Journal of Contemporary Hospitality Management*, *32*(9), 2925–2946. https://doi.org/10.1108/IJCHM-03-2020-0167

Palihawadana, D., Oghazi, P., & Liu, Y. (2016). Effects of ethical ideologies and perceptions of CSR on consumer behaviour. *Journal of Business Research*, *69*(11), 4964–4969. https://doi.org/10.1016/j.jbusres.2016.04.060

Park, E., & Kim, K.J. (2019). What drives "customer loyalty"? The role of corporate social responsibility. *Sustainable Development*, *27*(3), 304–311. https://doi.org/10.1002/sd.1901

Park, S., Song, S., & Lee, S. (2019). The influence of CEOs' equity-based compensation on restaurant firms' CSR initiatives: The moderating role of institutional ownership. *International Journal of Contemporary Hospitality Management*, *31*(9), 3664–3682. https://doi.org/10.1108/IJCHM-03-2018-0221

Pizam, A., Shapoval, V., & Ellis, T. (2016). Customer satisfaction and its measurement in hospitality enterprises: a revisit and update. *International Journal of Contemporary Hospitality Management*, *28*(1), 2–35. https://doi.org/10.1108/IJCHM-04-2015-0167

Popa, I., Nicolescu, L., Stefan, S.C., & Popa, S.C. (2022). The effects of corporate social responsibility (CSR) on consumer behaviour in online commerce: The case of cosmetics during the COVID-19 pandemics. *Electronics*, *11*(15), 2442. https://doi.org/10.3390/electronics11152442

Porter, M.E., & Kramer, M.R. (2006). The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, *84*, 78–92.

Rădulescu, C., & Hudea, O.S. (2018). Econometric modelling of the consumer's behaviour in order to develop brand management policies. *Economic Research-Ekonomska Istraživanja*, *31*(1), 576–591. https://doi.org/10.1080/1331677X.2018.1442232

Rashid, N.R.N.A., Khalid, S.A., & Rahman, N.I.A. (2015). Environmental corporate social responsibility (ECSR): Exploring its influence on customer loyalty. *Procedia Economics & Finance*, *31*, 705–713. https://doi.org/10.1016/S2212-5671(15)01159-4

Rather, R.A., Tehseen, S., Itoo, M.H., & Parrey, S.H. (2019). Customer brand identification, affective commitment, customer satisfaction, and brand trust as antecedents of customer behavioral intention of loyalty: An empirical study in the hospitality sector. *Journal of Global Scholars of Marketing Science*, *29*(2), 195–217.

Rathore, P., Saha, E., Chakraborty, S., & Tiwari, A.K. (2022). Assessing impact of consumer perceived CSR on consumer attitude and purchase behaviour in retail segment: A stakeholder theory perspective. *Society & Business Review*, *18*(2), 264–295. https://doi.org/10.1108/SBR-10-2021-0207

Rhou, Y., Singal, M., & Koh, Y. (2016). CSR and financial performance: The role of CSR awareness in the restaurant industry. *International Journal of Hospitality Management*, *57*, 30–39. https://doi.org/10.1016/j.ijhm.2016.05.007

Saeidi, S.P., Sofian, S., Saeidi, P., Saeidi, S.P., & Saaeidi, S.A. (2015). How does corporate social responsibility contribute to firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of Business Research*, *68*(2), 341–350. https://doi.org/10.1016/j.jbusres.2014.06.024

Salam, M.A., Jahed, M.A., & Palmer, T. (2022). CSR orientation and firm performance in the Middle Eastern and African B2B markets: The role of customer satisfaction and customer loyalty. *Industrial Marketing Management*, *107*, 1–13. https://doi.org/10.1016/j.indmarman.2022.09.013

Sanchez-Redbull, M-V., Rudchenko, V., & Martin, J-C. (2018). The antecedents and consequences of customer satisfaction in tourism: a systematic literature review. *Tourism & Hospitality Management*, *24*(1), 151–183. https://doi.org/10.20867/thm.24.1.3

Schwartz, M.S., & Carroll, A.B. (2003). Corporate social responsibility: A three-domain approach. *Business Ethics Quarterly*, *13*(4), 503–530. https://doi.10.5840/beq200313435

Sen, S., & Bhattacharya, C.B. (2001). Does doing good always lead to doing better? Consumer reaction to corporate social responsibility. *Journal of Marketing Research*, *38*(2), 225–243. https://doi.org/10.1509/jmkr.38.2.225.18838

Sen, S., Du, S., & Bhattacharya, C.B. (2016). Corporate social responsibility: A consumer psychological perspective. *Current Opinion in Psychology*, *10*, 70–75. https://doi.org/10.1016/j.copsyc.2015.12.014

Servera-Francés, D., & Piqueras-Tomás, L. (2019). The effects of corporate social responsibility on consumer loyalty through consumer perceived value. *Economic Research-Ekonomska Istraživanja*, *32*(1), 66–84. https://doi.org/10.1080/1331677X.2018.1547202

Shokouhyar, S., Shokoohyar, S., & Safari, S. (2020). Research on the influence of after-sales service quality factors on customer satisfaction. *Journal of Retailing & Consumer Services*, *56*, 102139. https://doi.org/10.1016/j.jretconser.2020.102139

Singh, G., Slack, N., Sharma, S., Mudaliar, K., Narayan, S., Kaur, R., & Sharma, K.U. (2021). Antecedents involved in developing fast-food restaurant customer loyalty. *The TQM Journal*, *33*(8), 1753–1769. https://doi.org/10.1108/TQM-07-2020-0163

Sudari, S.A., Tarofder, A.K., Khatibi, A., & Tham, J. (2019). Measuring the critical effect of marketing mix on customer loyalty through customer satisfaction in food and beverage products. *Management Sciences Letters*, *9*(9), 1385–1396. http://dx.doi.org/10.5267/j.msl.2019.5.012

Uslu, A., & Eren, R. (2020). Critical review of service quality scales with a focus on customer satisfaction and loyalty in restaurants. *The Central European Journal of Regional Development & Tourism*, *12*(1), 64–84.

Uhlig, M.R.H., Mainardes, E.W., & Nossa, V. (2020). Corporate social responsibility and consumer's relationship intention. *Corporate Social Responsibility & Environmental Management*, *27*(1), 313–324. https://doi.org/10.1002/csr.1807

Veal, A.J. (2011). *Research methods for leisure and tourism: a practical guide*. 4th ed. Pearson.

Wagner-Tsukamoto, S. (2019). In search of ethics: From Carroll to integrative CSR economics. *Social Responsibility Journal*, *15*(4), 469–491.

Webb, D.J., Mohr, L.A., & Harris, K.E. (2008). A re-examination of socially responsible consumption and its measurement. *Journal of Business Research*, *61*(2), 91–98. https://doi.org/10.1016/j.jbusres.2007.05.007

Xu, Y. (2014). Understanding CSR from the perspective of Chinese diners: The case of McDonald's. *International Journal of Contemporary Hospitality Management*, *26*(6), 1002–1020. https://doi.org/10.1108/IJCHM-01-2013-0051

Yilmazdogan, O.C., Secilmis, C., & Cicek, D. (2015). The effect of corporate social responsibility (CSR) perception on tourism students' intention to work in sector. *Procedia Economics & Finance*, *23*, 1340–1346. https://doi.org/10.1016/S2212-5671(15)00321-4

Youn, H., & Kim, J-H. (2017). Effects of ingredients, names and stories about food origins on perceived authenticity and purchase intentions. *International Journal of Hospitality Management*, *63*, 11–21. https://doi.org/10.1016/j.ijhm.2017.01.002

Pośrednicząca rola zadowolenia klienta w relacji między wymiarami CSR a lojalnością klienta

Streszczenie. Zadowolenie i lojalność klienta to podstawowe elementy społecznej odpowiedzialności biznesu (CSR), które przyczyniają się do budowania przewagi konkurencyjnej. Choć dotychczasowe badania podkreślają znaczenie tych czynników, niewiele uwagi poświęcono kwestii tego, w jaki sposób lojalność klienta jest uzależniona od różnych wymiarów CSR. Celem niniejszego badania była analiza sposobu, w jaki zadowolenie klientów w branży restauracyjnej pośredniczy w relacji między wymiarami CSR wymienionymi przez Carrolla oraz odpowiedzialnością środowiskową a ich lojalnością. Relacje między badanymi zmiennymi zostały przetestowane za pomocą modelowania równań strukturalnych w oparciu o dane zebrane od 247 klientów odwiedzających restauracje w mieście Teheran. Stwierdzono, że cztery wymiary CSR, tzn. odpowiedzialność ekonomiczna, prawna, etyczna i środowiskowa, znacząco wpływają na zadowolenie klientów. Wyniki wskazują również, że w przypadku odpowiedzialności ekonomicznej i środowiskowej zadowolenie odgrywa rolę pośredniczącą w związku tych zmiennych z lojalnością klienta. Nowością badania jest uwzględnienie wymiaru odpowiedzialności środowiskowej oprócz czterech wymiarów CSR zawartych w piramidzie Carrolla. Uzyskane wyniki mogą dostarczyć menedżerom restauracji wskazówek co do tego, jakie działania wpływają na poprawę zadowolenia klientów.

Słowa kluczowe: społeczna odpowiedzialność biznesu, odpowiedzialność środowiskowa, zadowolenie klienta, lojalność klienta, branża restauracyjna

Studia
Periegetica
2(46)/2024

ISSN 2658-1736, https://journals.wsb.poznan.pl/index.php/sp
s. 81–96, https://doi.org/10.58683/sp.1994

GEORGIA ZOUNI[a], IOANNIS KATSANAKIS[b],
ATHANASIOS ATHANASIADIS[c], MYRSINI SOFIA NIKA[d]

The Impact of Antecedents on Airbnb Listing Prices: Evidence from Greece

Abstract. The study investigates varied effects that price antecedents have on Airbnb listings. Using data on 31705 listings from four major Greek regions (Athens, Thessaloniki, Crete, and the South Aegean), which appeared on Airbnb in December 2022 and were recorded by Inside Airbnb, the authors apply statistical tests and regression analysis to identify key pricing determinants. The results confirm the existence of evident differences in prices depending on external variables, such as the listing's region, and internal listing qualities and host attributes. The findings offer valuable insights that individual hosts, professional listing administrators, and policymakers can use to adjust pricing strategies and regulations to changes taking place in the dynamic Airbnb market in Greece.

Keywords: sharing economy, price determinants, Airbnb

Article history. Submited 2024-09-23. Accepted 2024-11-28. Published 2024-12-30.

1. Introduction

There is much research interest in pricing techniques used by accommodation hosts because of their critical role in commercial peer-to-peer (P2P) accommodation platforms (APS), where the marginal cost is nearly zero (Roma et al., 2019). Despite substantial research on the pricing of commercial P2P APS, many consider this area of study to be in its infancy (Cai et al., 2019). Moreover, even though the pricing dynamics of short-term rental platforms like Airbnb have been extensively studied, regional disparities and the interplay of locational, structural, and trust-related factors remain underexplored. Latinopoulos (2018) underscores the criti-

[a] Department of Tourism Studies, University of Piraeus, gzouni@unipi.gr, https://orcid.org/0000-0002-3388-1591
[b] Department of Tourism Studies, University of Piraeus, ikatsana@unipi.gr, https://orcid.org/0000-0002-3603-5470
[c] Tourix, t.athanasiadis@tourix.gr
[d] Tourix, m.nika@tourix.gr

cal role of aesthetic and locational attributes in pricing decisions, particularly in coastal regions. Similarly, Arvanitidis et al. (2020) point out that professional hosts leverage institutional trust mechanisms such as the Superhost badge to command higher prices, contrasting with casual hosts, who rely more on interpersonal trust. This article draws on information from a dataset of Airbnb listings to identify factors influencing P2P accommodation prices in regions with diverse tourism characteristics, such as Greece. The authors employ the Shapley decomposition of R-squared to assess the relative importance of various groups of variables, such as listing characteristics (e.g., private rooms vs. entire homes/apartments), host characteristics, reviews, location, and seasonality.

The following hypotheses were put forward:

- **H1:** Listings in island regions command higher prices than urban listings because of a premium associated with leisure destinations.
- **H2:** Property attributes (e.g., number of bedrooms, amenities) and host characteristics (e.g., the Superhost status) significantly influence listing prices.

2. Literature Review on Price Antecedents for P2P Lodgings

Unlike other sharing economy services such as Uber, Airbnb hosts can establish their own prices (Benítez-Aurioles, 2018). Studies have employed hedonic regression models to investigate how different host and listing attributes affect prices, using large data sets including listings from various destinations worldwide (Kakar et al., 2018; Teubner et al., 2017). According to these studies, factors like positive review scores, offering an entire home (rather than shared accommodation), a higher number of bedrooms and bathrooms, a higher guest capacity, Superhost status, a longer time as a member, certain amenities (such as a parking lot), and a higher number of photos all result in higher prices. In contrast, factors like distance from the city centre, many listings, more flexible cancellation rules, fast booking availability, and a higher review count have been linked to lower prices.

However, studies have also found variations in pricing patterns across different destinations or reported results that depart from these general patterns (Gibbs et al., 2018). For instance, Kakar et al. (2018) discovered that cancellation policies had no significant impact on pricing, while neither Teubner et al. (2017) nor Chen and Xie (2017) discovered that the Superhost status had a substantial impact on pricing. Additionally, studies have revealed that certain attributes that would normally associate with higher prices, such as flexible cancellation policies, instant booking availability, and a greater review count, may actually be correlated with lower prices. Various explanations have been offered for this phenomenon: it has been argued that hosts use lower prices and more appealing booking policies to encourage demand (Benítez-Aurioles, 2018), or that commercially oriented hosts are more likely to use instant booking and lower prices (Gibbs et al., 2018), or that hosts with high review volumes are more likely to offer lower prices for listings with low rating scores (Teubner et al., 2017).

Dudás et al. (2020) found that certain factors related to the property, such as air conditioning, free internet access, free parking, the number of bedrooms, and the option to book either the full house or just a room, can influence the pricing of Airbnb accommodations. The variables used in Airbnb listings can be divided into several subgroups, including the type of listing (shared room, private room, entire home/apartment), size (area, number of bedrooms, bathrooms, and maximum occupancy), amenities (internet, cable TV, air conditioning, heating, pool, gym, free parking, etc.), and rental policies (instant booking, minimum stay, cancellation policy, security deposit, cleaning fee, and extra guest fee). The number of listings to differentiate between family and professional hosts (Deboosere et al., 2019), the number of images (Perez-Sanchez et al., 2018), membership or experience (Xie et al., 2019), response rate and time (Gunter & Önder, 2018), and verified identification (Abrate & Viglia, 2019) are all variables that can be grouped under the "superhost" label.

Moreover, pricing strategies are also affected by host attributes. Arvanitidis et al. (2020) distinguish between professional and casual hosts, showing that the former ones effectively leverage institutional trust mechanisms, such as Airbnb's Superhost badge, to command higher prices. According to Heo et al. (2019), hosts with verified identities and extensive positive reviews consistently outperform their peers in competitive urban markets. These findings align with the results reported by Chattopadhyay & Mitra (2020), who identified host experience and listing characteristics as critical determinants of pricing decisions.

Furthermore, Lorde et al. (2019) demonstrated that criteria such as location, reputation, convenience, host, and amenities had a substantial impact on pricing in the Caribbean. Lawani et al. (2019) investigated three categories of variables for their effects on the cost of a reservation: structural variables (such as the number of bedrooms and bathrooms), neighbourhood variables (such as the distance in feet to the nearest convention centre and train station), and quality-signalling variables (such as cleanliness, the number of reviews, and communication). They discovered that price was influenced by factors such as review quality, room attributes, and neighbourhood factors. Last but not least, Teubner et al. (2017) reported how host reputation might influence price.

The distinction between urban and leisure locations also significantly influences the pricing dynamics of Airbnb listings, reflecting a complex set of factors that shape host strategies and consumer behaviour. Prior research has underscored the importance of locational attributes, trust mechanisms, and host practices in determining short-term rental prices. Urban areas with rich leisure offerings tend to demand higher prices capitalising on tourists seeking proximity to attractions. For instance, Moreno-Izquierdo et al. (2019) demonstrated that listings in tourism-oriented urban environments derive added value from online reputations, which directly impact prices. Latinopoulos (2018) corroborates this finding in the Greek context by reporting the substantial influence of locational attributes, such as proximity to coastal attractions, on pricing. Similarly, Hong & Yoo (2020), used a Multiscale Geographically Weighted Regression (MGWR) approach to find that spatially heterogeneous pricing determinants were closely tied to unique characteristics of urban landscapes. The spatial distribution of Airbnb listings also plays a pivotal role in shaping pricing dynamics. Boutsioukis et al. (2019) mapped the uneven distribution of short-term rentals in Greece, finding significant concentrations in high-demand tourism regions such as the Cyclades and Crete. This regional clustering highlights the importance of locational characteristics in driving both pricing and supply disparities.

Table 1. Key studies on accommodation pricing determinants in Greece

Author(s)	Objective	Methods	Scope	Key findings
Latinopoulos (2018)	Assessing the impact of sea views on hotel pricing	Spatial hedonic pricing model	Coastal Halkidiki, Greece	Sea views significantly enhance pricing; aesthetic value varies by location.
Boutsioukis et al. (2019)	Mapping spatial distribution of short-term rentals across Greece	Spatial data analysis using Airbnb scraper	Nationwide	Listings are concentrated in touristic hubs like the Cyclades; regional disparities noted.
Arvanitidis et al. (2020)	Comparing professional and casual hosts' pricing strategies	Hedonic pricing model, Blinder–Oaxaca decomposition	Airbnb listings in Athens, Greece	Professionals leverage institutional trust (e.g., Superhost badge); casual hosts rely on interpersonal trust.

Source: Authors' own analysis

Such unique characteristics in tourism pricing can be found in the Mediterranean region, for example in Greece. Latinopoulos (2018) utilised a spatial hedonic model to quantify the impact of locational attributes such as sea views on hotel pricing, demonstrating the significant value of aesthetic characteristics in coastal tourism in Greece. Arvanitidis et al. (2020) explored the role of trust in Airbnb pricing, revealing a dichotomy between professional and casual hosts' reliance on institutional versus interpersonal trust mechanisms. Boutsioukis et al. (2019)

mapped the spatial distribution of Airbnb listings in Greece, highlighting a concentration in touristic regions and underscoring regional disparities in rental activity. Table 1 summarises these three studies:

Overall, price factors listed in the literature are often divided into two broad categories:

Category 1 – Internal price antecedents: Listing characteristics and host characteristics. Listing variables can be further subdivided into listing type, size, amenities, and rental policy. Host variables include the Superhost badge, number of listings, number of photos, membership or experience, response rate and time, and verified identity. Internal variables play a crucial role in determining Airbnb prices, as shown by studies such as Dudás et al. (2020), Lawani et al. (2019), and Teubner et al. (2017).

Category 2 – External price antecedents: Guest reviews, which are operationalised using the number of reviews and total rating (Lorde et al., 2019; Lawani et al., 2019), are the most important external variable. Other important factors include accessibility to sites of interest, distance to the city centre, and other local attractions such as beaches, conference centres, and transportation. The popularity of particular listings can also be influenced by social and economic characteristics of the destination, such as population age, population density, ethnic diversity, unemployment rate, per capita GDP, and housing value. Seasonal patterns of demand fluctuations over twelve months are also considered in some studies (Deboosere et al., 2019; Moreno-Izquierdo et al., 2019).

3. Data & Methodology

3.1. Study Area and Dataset

The following study focused on four regions of Greece – Athens, Thessaloniki, Crete, and the South Aegean, which were chosen for their representation of urban and leisure tourism markets. These regions exhibit different pricing dynamics, with urban centres characterised by year-round activity and islands marked by seasonal peaks. The dataset analysed in the study contained details of Airbnb listings from these four major tourist regions, as presented on the platform in December 2022. Of the total of 64698 listings recorded in these four regions, 31705 were included in the analysis after eliminating records containing critical missing values and outliers (e.g. extreme price points, incomplete host profiles). The finally selected subset of accommodations is characterised by the following descriptive statistics (Table 2):

Table 2. Descriptive statistics of the selected subset of accommodations

Average price per night	€119.86
Average number of visitors	4
Location distribution (%):	
– South Aegean	37.4
– Crete	33.0
– Athens	23.2
– Thessaloniki	6.4
Accommodation type distribution (%):	
– Whole houses/apartments	90.1
– Private rooms	8.4
– Hotel/shared rooms	1.6
Review data:	
– Average review score	4.79 / 5.00
– Average number of reviews per listing	35
Host profiles:	
– Superhost badge holders	33.0%
– Average years on Airbnb	Over 5
– Average number of listings	25 (including property management companies)

Source: Authors' own analysis

The goal of the analysis was to assess the impact of nine listing variables, grouped into the following categories: accommodation variables (visitors, bedrooms, beds, bathrooms, and number of specific facilities such as internet connection, appliances, etc.), type of property, location of the listing, and license type. The data were acquired from a third-party website, insideairbnb.com, which represents an organisation with the vision of highlighting the impact of Airbnb on residential communities. The website stores publicly available details of Airbnb listings from various regions around the world.

3.2. Data Analysis

In order to identify different categories of listings with different price distributions, we employed Mann-Whitney U tests for comparing two categorical groups, and Kruskal-Wallis tests for comparing three or more categorical groups. The Mann-

Whitney U test (also known as the Wilcoxon rank-sum test) is a non-parametric statistical hypothesis test, which is used to compare two independent samples with a view to determining whether two populations have the same distribution (Mann & Whitney, 1947). The Mann-Whitney U test statistic is calculated as follows:

$$U = \frac{n_1 n_2}{2} + \frac{n_1(n_2 + 1)}{2} - R_1 \quad (1)$$

where R_1 is the average rank of the observations in group 1, and n_1 and n_2 are the sample sizes of the two groups being compared.

The nonparametric Kruskal-Wallis test can be used to determine whether there are any significant differences between two or more independent groups for a continuous or ordinal dependent variable (Kruskal & Wallis, 1952).

$$H = \frac{12}{N(N+1)} + \sum_{i=1}^{k} \frac{R_i^2}{n_i} - 3(N+1) \quad (2)$$

where N represents the overall sample size, k denotes the number of groups being compared, n_1 represents the sample size for group i, R_i denotes the total rank for group i, and H represents the Kruskal-Wallis test statistic.

In the second step, the listing price served as the dependent variable, and OLS regression was used to examine correlations between the independent variables to identify the strongest price determinants. Additionally, the correlation between the listing prices and continuous variables was examined using the Pearson and Spearman correlation coefficients when they were employed as independent variables.

Ordinal least squares (OLS) regression is a popular approach for modelling the relationship between a dependent variable and one or more independent variables (Gujarati et al., 2009). The goal of this method is to minimise the sum of the squared residuals between the observed and anticipated values. The equation of OLS regression is represented as follows:

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_k x_k + \varepsilon \quad (3)$$

where y is the dependent variable, x_1, x_2, …, x_k are the independent variables, β_0, β_1, β_2, …, β_k are the regression coefficients, and ε is the error term.

The linear link between two continuous variables can be measured by the Pearson correlation coefficient (Pearson, 1895). Its value falls between –1 and 1, with

−1 denoting a perfectly negative linear relationship, 0 suggesting no linear relationship, and 1 indicating a perfectly positive linear relationship. The Pearson correlation coefficient can be calculated with the following formula:

$$r_{xy} = \frac{\sum_{i-1}^{n} (x_i - \overline{x})(y_i - \overline{y})}{\sqrt{\sum_{i-1}^{n} (x_i - \overline{x})^2 \sum_{i-1}^{n} (y_i - \overline{y})^2}} \quad (4)$$

where r_{xy} is the correlation coefficient between x and y, n is the sample size, x_i and y_i are the i-th observations of x and y, and $\overline{x}$ are $\overline{y}$ the sample means of x and y, respectively.

The monotonic relationship between two variables is measured by the Spearman correlation coefficient (Spearman, 1904). It has a range of −1 to 1, where −1 denotes a fully negative monotonic relationship, 0 denotes a lack of monotonicity, and 1 denotes a perfectly positive monotonicity relationship. The equation representing the Spearman correlation coefficient is the following:

$$H = \frac{6 \sum_{i-1}^{n} (d_i)^2}{n(n^2 - 1)} \quad (5)$$

where ρ is the Spearman correlation coefficient, n is the sample size, and d_i is the difference between the ranks of the i-th observation of the two variables.

4. Empirical Results

The results are presented in two main sections: (1) the comparative analysis of pricing across urban and island regions, and (2) the evaluation of property attributes and host characteristics as price determinants.

Initially, the analysis focused on listing location. Therefore, listings in Athens and Thessaloniki were classified as "Urban" and those situated in Crete or the South Aegean were classified as "Island". The differences in Airbnb listing prices between urban and island regions were analysed using Mann-Whitney U and Kruskal-Wallis tests. Figure 1 shows the distribution of prices depending on the urban/island distinction and the region. Listings in island regions (Crete and the South

Aegean) were significantly more expensive than those in urban centres (Athens and Thessaloniki). The Mann-Whitney U test statistic was 48.28 (p-value < 0.05), confirming a statistically significant difference in prices between urban and island listings. On average, island listings commanded a premium of €56 per night compared to urban listings (OLS regression coefficient = 56.00, p-value < 0.05). There are also statistically significant disparities in the distribution of prices across the four major regions of Greece (the Kruskal-Wallis test: H = 2726.13, p-value < 0.05). Listings in the South Aegean charged the highest average prices (€140), followed by Crete (€110), Athens (€85), and Thessaloniki (€72). Regression analysis indicated that listings in Athens and Thessaloniki were, on average, €64 and €74 cheaper than those in the South Aegean, respectively (p-value < 0.05).

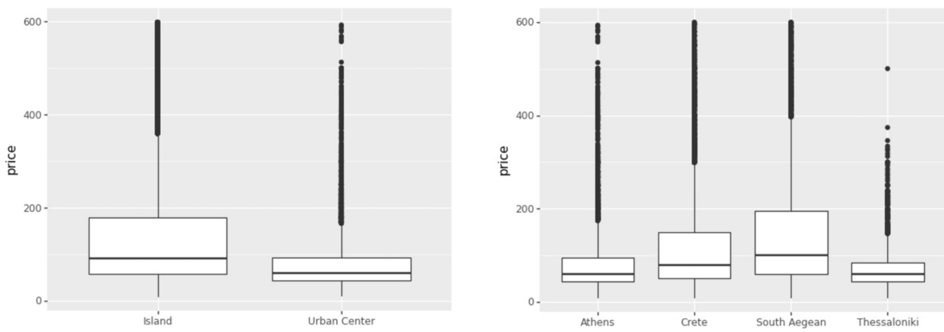


Figure 1. Price distribution of listings in urban destinations and islands in four regions of Greece
Source: Authors' own analysis

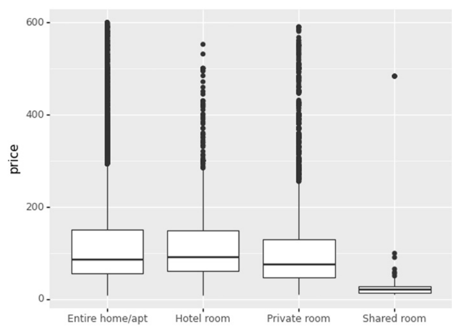


Figure 2. Price distribution of listings for different room types
Source: Authors' own analysis

Figure 2 shows price differences according to the property type, which were found to be statistically significant based on the results of the Kruskal-Wallis test

(p-value < 0.05). Results of OLS regression calculated for the property types used as independent variables and the Entire Home or Apartment serving as the reference base indicate that hotel rooms were on average cheaper by €16, private rooms by €32, and shared rooms by €104, all with p-values lower than 0.05, which means that the differences were statistical significant.

Another important group of variables that determine the price of a listing are its characteristics. Their effects are analysed below.

The number of bedrooms

Values of the Spearman and Pearson correlation coefficients, 0.21 and 0.22, respectively, with a p-value < 0.05 in both cases, indicate a statistically significant, positive but rather weak correlation between the number of bedrooms and the listing price. The coefficient of determination, or R-squared, calculated for the OLS regression model was equal to 0.32, which represents the percentage of the variance in the price that the number of bedrooms explains. According to the model, a single unit increase in the number of bedrooms would increase the price of the listing by €58.25.

The number of visitors

In this case, the positive correlation was found to be stronger, with a Pearson coefficient of 0.54 and a Spearman coefficient of 0.53 with p-value < 0.05 in both cases. Results of OLS regression, indicate that this variable explains 28.9% of the variance in the price ($r^2 = 0.289$). According to the model, with a p-value < 0.05, the addition of one visitor would raise the price by €25.

The number of bathrooms

The correlation between this variable the price was also found to be positive, with a Pearson coefficient equal to 0.59 and a Spearman coefficient of 0.50, both statistically significant with p-value < 0.05. According to the regression model, the variable explains 34.3% of the variance in the price, where 1 unit increase in the number of bathrooms would increase the price by €76.

The number of amenities

The number of amenities such as the Wi-Fi connection, parking spot, utilities, etc., was found to be positively though weakly correlated with the price, with a Pearson coefficient of 0.22 and a Spearman coefficient of 0.21, both statistically significant with a p-value of 0.00. With an average number of 35 amenities per listing, every additional amenity would increase the price of the listing by €1.5. The variable was found to explain only 5% of variation in the price.

To gain a deeper understanding of this factor, two key amenities were analysed separately: the Wi-Fi connection and free parking spot.

Wi-Fi connection

The result of the Mann-Whitney U test showed that there was a statistically significant difference between the price of listings with and without Wi-Fi connection, with a p-value < 0.05. The OLS regression model indicated, that, on average, a listing with a Wi-Fi connection was €26 more expensive per night.

Free parking spot

The value of a Mann-Whitney U test indicated a statistically significant difference in the prices of listings with and without a free parking spot, with a p-value < 0.05. A listing with a free parking spot was found to be, on average, €23 more expensive per night than a listing without a parking spot.

Review scores

In this case, there was a very weak positive correlation (a Pearson coefficient of 0.10, and a Spearman coefficient at 0.22); both values were statistically significant with p-values < 0.05 respectively. According to the OLS regression model, a 0.10 increase in the overall review score would on average increase the price per night by €2.98.

Host characteristics

A statistically significant difference (p-value < 0.05) was also found to exist between review scores of listings offered by superhosts and hosts.

In summary, prices of urban listings were found to be significantly lower than those of island ones, with the highest prices charged for listings located in the South Aegean. Listing attributes, including the number of bedrooms, bathrooms, and amenities, turned out to be strong determinants of prices, with each additional bedroom and bathroom correlated with substantially higher prices. Amenities such as Wi-Fi and free parking were also found to be associated with higher prices. Host characteristics, particularly the Superhost status and the length of presence on the platform, were also found to have an effect, highlighting the importance of institutional trust and professional management. While review scores had a modest effect, they were indicative of quality and guest satisfaction.

5. Discussion

The above findings describe the multifaceted factors influencing Airbnb pricing in Greece. As can be expected, location turned out to be a key determinant of prices, contributing to statistically significant disparities between urban and island regions. Listings in the South Aegean and Crete were substantially more expensive than those in Athens and Thessaloniki. This is consistent with the findings reported by Latinopoulos (2018), who noted that locational attributes, such as scenic views and proximity to coastal attractions, were associated with higher prices. The observed premium for island listings shows the importance of leisure-oriented demand and verifies the hypothesis that location plays a critical role in determining short-term rental prices.

Prices of listings are also strongly correlated with property attributes such as the number of bedrooms and bathrooms, which is consistent with previous research (e.g., Boutsioukis et al., 2019; Lawani et al., 2019). Our findings reveal that additional bedrooms and bathrooms significantly increase listing prices, reflecting consumer preferences for spacious and well-equipped accommodations. Similarly, additional amenities like Wi-Fi and free parking were found to be positively correlated with higher prices. While the impact of individual amenities was modest, the cumulative effect of multiple amenities was an important factor in shaping consumer preferences, though each additional amenity was found to add only €1.5 to the average price. It is worth noting, however, that the number of amenities was found to account for only 5% of the variance in prices.

Finally, host characteristics, particularly the Superhost status and the length of presence on the platform, were also significant factors affecting listing prices. Listings offered by Superhosts were more expensive, which is consistent with Arvanitidis et al. (2020), who demonstrated that professional hosts leverage institutional trust mechanisms to charge more. This shows the value of reputation and trust in peer-to-peer accommodation markets, suggesting that hosts with established credibility can capitalize on their status to increase their revenue. While the price of Airbnb listings depended on accommodation type, the type of licence did not have much effect on the price distribution. Listings exempt from licensing requirements (e.g., due to specific legal exceptions or classifications) were found to be €10 less expensive than licensed properties, and unlicensed listings were €2 less expensive. These findings can help hosts and professional listing managers adjust pricing strategies based on property and licence types. For example, hosts offering shared rooms may want to reconsider their pricing strategy to remain competitive. Similarly, hosts whose properties are exempt from licensing requirements may need to change their pricing approach in order to prevent overpricing and losing bookings.

While review scores were positively associated with higher prices, their overall impact was modest. This is consistent with the view that review scores serve as a quality signal, influencing consumer decision-making but play a secondary role compared to structural and locational factors. These results are consistent with studies like Hong & Yoo (2020) and Chen & Bi (2022), which indicate that they have limited influence on pricing.

Overall, this study demonstrates the importance of listing characteristics in pricing decisions. Our findings can help hosts, professional listing managers, and policymakers in Greece improve their pricing strategies and rules for Airbnb listings.

6. Conclusion

The above study provides a comprehensive analysis of the factors influencing Airbnb pricing in Greece, the main ones being the listing's location, its internal characteristics, and host attributes. The analysis revealed statistically significant differences between urban and island regions, with listings located in island areas being considerably more expensive. Accommodation prices were also found to be affected by property and licence type, as well as host characteristics, particularly the Superhost status. Listing attributes, such as the number of bedrooms, bathrooms, and the number of amenities were also key price determinants, reflecting consumer preferences for well-equipped and spacious accommodations. Two specific amenities, namely Wi-Fi and free parking, were found to have a significant effect on the price. In other words, both hypotheses put forward at the start were confirmed.

The study offers actionable insights for hosts and policymakers. Hosts can optimise their pricing strategies by leveraging locational advantages based on regional pricing differences, enhancing property features by adding amenities to their listings, and building trust through positive reviews and professional management practices. Policymakers can use these findings to design targeted regulations that address regional disparities and promote sustainable growth in the short-term rental market.

CRediT Authorship Contribution Statement

Georgia Zouni: conceptualization, data curation, formal analysis, funding acquisition, investigation, methodology, project administration, resources, software, supervision, validation, visualization, writing – original draft, writing – review & editing; **Ioannis Katsanakis:** conceptualization, data curation, formal analysis, funding acquisition, investigation, methodology, project administration, resources, software, supervision, validation, visualization, writing – original draft, writing – review & editing;

Athanasios Athanasiadis: conceptualization, data curation, formal analysis, funding acquisition, investigation, methodology, project administration, resources, software, supervision, validation, visualization, writing – original draft, writing – review & editing; **Myrsini Sofia Nika:** conceptualization, data curation, formal analysis, funding acquisition, investigation, methodology, project administration, resources, software, supervision, validation, visualization, writing – original draft, writing – review & editing.

Declaration of Competing Interest

None.

References

Abrate, G., & Viglia, G. (2019). Personal or product reputation? *Optimizing revenues in the sharing economy. Journal of Travel Research*, *58*(1), 136–148. https://doi.org/10.1177/0047287517741998.

Arvanitidis, P., Economou, A., Grigoriou G., & Kollias C. (2020). Trust in peers or in the institution? A decomposition analysis of Airbnb listings' pricing. *Current Issues in Tourism*, *25*(21), 3500–3517. https://doi.org/10.1080/13683500.2020.1806794

Benítez-Aurioles, B. (2018). Why are flexible booking policies priced negatively? *Tourism Management*, 67, 312–325. https://doi.org/10.1016/j.tourman.2018.02.008

Boutsioukis, G., Fasianos, A., & Petrohilos-Andrianos, Y. (2019). The spatial distribution of short-term rental listings in Greece: a regional graphic. *Regional Studies, Regional Science*, *6*(1), 455–459. https://doi.org/10.1080/21681376.2019.1660210

Cai, Y., Zhou, Y., & Scott, N. (2019). Price determinants of Airbnb listings: evidence from Hong Kong. *Tourism Analysis*, *24*(2), 227–242. https://doi.org/10.3727/108354219x15525055915554

Chattopadhyay, M., & Mitra, S.K. (2020). What Airbnb host listings influence peer-to-peer tourist accommodation price?. *Journal of Hospitality and Tourism Research*, *44*(4), 597–623. https://doi.org/10.1177/1096348020910211

Chen, D., & Bi, J. (2022). Cue congruence effects of attribute performance and hosts' service quality attributes on room sales on peer-to-peer accommodation platforms. *International Journal of Contemporary Hospitality Management*, *34*(10), 3634–3654. https://doi.org/10.1108/ijchm-10-2021-1275

Chen, Y., & Xie, K. (2017). Consumer valuation of Airbnb listings: A hedonic pricing approach. *International Journal of Contemporary Hospitality Management*, *29*(9), 2405–2424. https://doi.org/10.1108/IJCHM-10-2016-0606

Deboosere, R., Kerrigan, D. J., Wachsmuth, D., & El-Geneidy, A. (2019). Location, location and professionalization: a multilevel hedonic analysis of Airbnb listing prices and revenue. *Regional Studies, Regional Science*, *6*(1), 143–156. https://doi.org/10.1080/21681376.2019.1592699

Dudás, G., Kovalcsik, T., Vida, G., Boros, L., & Nagy, G. (2020). Price determinants of Airbnb listing prices in Lake Balaton Touristic Region, Hungary. *European Journal of Tourism Research*, 24, 2410. https://doi.org/10.54055/ejtr.v24i.412

Gibbs, C., Guttentag, D., Gretzel, U., Morton, J., & Goodwill, A. (2017). Pricing in the sharing economy: a hedonic pricing model applied to Airbnb listings. *Journal of Travel & Tourism Marketing*, *35*(1), 46–56. https://doi.org/10.1080/10548408.2017.1308292

Gujarati, D.N., Porter, D.C., & Gunasekar, S. (2009). *Basic Econometrics* (5th ed.). Tata McGraw-Hill Education.

Gunter, U., & Önder, I. (2018). Determinants of Airbnb demand in Vienna and their implications for the traditional accommodation industry. *Tourism Economics*, *24*(3), 270–293. https://doi.org/10.1177/1354816617731196

Heo, C.Y., Blal, I., & Choi, M. (2019). What is happening in Paris? Airbnb, hotels, and the Parisian market: A case study. *Tourism Management*, 70, 78–88. https://doi.org/10.1016/j.tourman.2018.04.003

Hong, I., & Yoo, C. (2020). Analyzing spatial variance of Airbnb pricing determinants using Multiscale GWR approach. *Sustainability*, *12*(11), 4710. https://doi.org/10.3390/su12114710

Kakar, V., Voelz, J., Wu, J., & Franco, J. (2018). The visible host: Does race guide Airbnb rental rates in San Francisco?. *Journal of Housing Economics*, 40, 25–40. https://doi.org/10.1016/j.jhe.2017.08.001

Kruskal, W.H., & Wallis, W.A. (1952). Use of Ranks in One-Criterion Variance Analysis. *Journal of the American Statistical Association*, *47*(260), 583–621. https://doi.org/10.1080/01621459.1952.10483441

Latinopoulos, D. (2018). Using a spatial hedonic analysis to evaluate the effect of sea view on hotel prices. *Tourism Management*, 65, 87–89. https://doi.org/10.1016/j.tourman.2017.09.019

Lawani, A., Reed, M.R., Mark, T., & Zheng, Y. (2019). Reviews and price on online platforms: Evidence from sentiment analysis of Airbnb reviews in Boston. *Regional Science and Urban Economics*, 75, 22–34. https://doi.org/10.1016/j.regsciurbeco.2018.11.003

Lorde, T., Jacob, J., & Weekes, Q. (2019). Price-setting behavior in a tourism sharing economy accommodation market: A hedonic price analysis of AirBnB hosts in the caribbean. *Tourism Management Perspectives*, 30, 251–261. https://doi.org/10.1016/j.tmp.2019.03.006

Mann, H.B., & Whitney, D.R. (1947). On a test of whether one of two random variables is stochastically larger than the other. *Annals of Mathematical Statistics*, *18*(1), 50–60. http://dx.doi.org/10.1214/aoms/1177730491

Moreno-Izquierdo, L., Rodríguez, A.B.R., Devesa, M.J.S., & Perles-Ribes, J. F. (2019). Tourist environment and online reputation as a generator of added value in the sharing economy: the case of Airbnb in urban and sun-and-beach holiday destinations. *Journal of Destination Marketing and Management*, 11, 53–66. https://doi.org/10.1016/j.jdmm.2018.11.004

Perez-Sanchez, V.R., Serrano-Estrada, L., Marti, P., & Mora-Garcia, R.T. (2018). The what, where, and why of Airbnb price determinants. *Sustainability*, *10*(12), 4596. https://doi.org/10.3390/su10124596

Pearson, K. (1895). VII. Notes on Regression and Inheritance in the Case of Two Parents. *Proceedings of the Royal Society of London*, 58, 240–242. https://doi.org/10.1098/rspl.1895.0041

Roma, P., Panniello, U., & Nigro, G.L. (2019). Sharing economy and incumbents' pricing strategy: The impact of Airbnb on the hospitality industry. *International Journal of Production Economics*, 214, 17–29. https://doi.org/10.1016/j.ijpe.2019.03.023

Spearman, C. (1904). The proof and measurement of association between two things. *The American Journal of Psychology*, *15*(1), 72–101. https://doi.org/10.2307/1412159

Teubner, T., Hawlitschek, F., & Dann, D. (2017). Price determinants on Airbnb: How reputation pays off in the sharing economy. *Journal of Self-Governance and Management Economics*, *5*(4), 53–80. http://dx.doi.org/10.22381/JSME5420173

Xie, K., Mao, Z.E., & Wu, J. (2019). Learning from peers: the effect of sales history disclosure on peer-to-peer short-term rental purchases. *International Journal of Hospitality Management*, *76*, 173–183. https://doi.org/10.1016/j.ijhm.2018.05.007

Wpływ różnych czynników na ceny noclegów oferowanych w Grecji za pośrednictwem serwisu Airbnb

Streszczenie. Celem artykułu jest analiza wpływu różnych czynników na ceny noclegów na platformie Airbnb. Opisane w artykule badanie jest oparte na danych dotyczących 31705 miejsc noclegowych oferowanych w czterech głównych regionach Grecji (Ateny, Saloniki, Kreta i południowe Morze Egejskie), które pojawiły się na platformie Airbnb w grudniu 2022 r. i zostały zarejestrowane przez Inside Airbnb. Autorzy zastosowali testy statystyczne i analizę regresji, aby zidentyfikować kluczowe czynniki wpływające na ceny. Wyniki analizy potwierdzają istnienie wyraźnych różnic w poziomie cen, które zależą od czynników zewnętrznych, takich jak region, w którym znajduje się dana oferta, czynników wewnętrznych miejsc noclegowych oraz cech gospodarza. Wyniki badania mogą pomóc gospodarzom oferującym noclegi, administratorom ofert i decydentom w dostosowywaniu strategii cenowych i przepisów do zmian zachodzącym na dynamicznym rynku Airbnb w Grecji.

Słowa kluczowe: gospodarka współdzielenia, czynniki determinujące ceny, Airbnb

Studia
Periegetica
2(46)/2024

ISSN 2658-1736, https://journals.wsb.poznan.pl/index.php/sp
s. 97–114, https://doi.org/10.58683/sp.2006

NJABULO NDLOVU[a], PORTIA PEARL SIYANDA SIFOLO[b], NDIVHUWO TSHIPALA[c]

Leveraging Online Digital Technologies for Sustainability in Community-Based Rural Tourism

Abstract. The article addresses the challenge of promoting online digital technologies in community-based rural tourism (CBRT) in sub-Saharan Africa and the region's socio-economic development. The authors explore the issue of digitalisation within the context of CBRT, which is an area that has so far received little attention. The study focuses on the efficiency and role of online digital technologies in promoting sustainable socio-economic development through CBRT initiatives. The problem is analysed in the light of ecological modernization theory and the theory of empowerment, both of which promote autonomous and digital-driven initiatives as a way of implementing sustainable socio-economic development in CBRT. The analysis is based on qualitative data collected from 22 respondents from Dinokasi (South Africa) and Binga (Zimbabwe), who participated in semi-structured, in-depth interviews. The results indicate that online digital technologies enhance CBRT sustainability and socio-economic development.

Keywords: community-based rural tourism, online digital technologies, CBRT sustainability

Article history. Submited 2024-10-08. Accepted 2024-12-19. Published 2025-01-09.

1. Introduction

The tourism sector plays a critical role in addressing socioeconomic challenges (Woyo & Musavengane, 2023). The economic benefits generated by the sector are predicted to increase in the coming years. In Africa, the number of international tourist arrivals is projected to reach 126 million by 2030 (United Nations World Tourism Organisation, 2011). The tourism agenda, particularly in the African context, is associated with fundamental developmental programs designed to

[a] Tshwane University of Technology, ndlovunj4@gmail.com, https://orcid.org/0000-0001-5008-5469
[b] Tshwane University of Technology, SifoloPS@tut.ac.za
[c] Tshwane University of Technology, TshipalaNN@tut.ac.za

improve community livelihood and limit poverty. Different national governments have decided to encourage local authorities or municipalities to undertake many community-based rural tourism projects within their jurisdictions.

Unfortunately, the efforts to promote rural socioeconomic development do not seem to be producing the expected results in the context of developing countries (Woyo & Musavengane, 2023). For instance, many CBRT initiatives are characterized by poor local governance systems, which have contributed to their current problems and made them unsustainable (Ohe, 2020). As a result, a number of these ecotourism projects have failed to improve the socio-economic situations of host communities mainly owing to the lack of their involvement in rural tourism activities (Setokoe, Ramukumba & Ferreira, 2019; Shereni & Saarinen, 2021).

These adverse developments occur in an environment endowed with vast, world-known natural resources, forest landscapes, cultural museums, and handicrafts that could potentially turn such places into very attractive tourist destinations. This explains why there are growing calls for sustainable developmental tourism initiatives that will benefit underprivileged host communities (Musavengane, 2018). Sustainable developmental tourism can take the form of conserving forestry, wildlife, and the preservation of culture and heritage places for the benefit of communities. Interestingly, CBRT-driven initiatives can lead to discoveries of other destinations, especially in poor communities in developing countries.

The visibility of CBRT initiatives undertaken by rural actors can be improved through the effective utilization of affordable online digital technologies. What CBRT and digital platforms have in common is the ability to offer personalized services that can attract and leave lasting memories for tourists (Maquera et al., 2022). These digital technologies offer many businesses, particularly SMEs an opportunity to constantly interact with their customers (Ndlovu, Ochara & Martin, 2023).

The promotion of tourism has also been a priority for governments. Socio-economic initiatives in rural tourism settings require the effective utilization of affordable digital platforms such as social media, Gmail, and Google by communities. However, in many cases, these tools are used informally and in an uncoordinated manner, which leads to the dissemination of flawed, incomplete, inaccurate, and sometimes outdated information to potential clients. Similar problems also afflict established institutions such as municipalities, whose web pages often remain outdated for long periods (Ndlovu et al., 2023). This state of affairs has only exacerbated unsustainable practices due to a lack of developmental strategies and consistent campaigns that can be launched via digital technologies.

Despite several attempts by different governments to promote tourism initiatives aimed at alleviating poverty through CBRT in Africa, the situation in many cases has not improved and prospects remain gloomy. Part of the blame these poor results can be placed on inefficiencies in the use and adoption of online digital technologies. Such inefficiencies lead to low tourist turnout. Hence, the present study aims to answer the following questions:

1. How can CBRT actors effectively use online digital technologies to enable sustainable socio-economic development of marginalised rural settings?
2. How do CBRT actors perceive the usability of online digital technologies?
3. What are the key benefits of adopting online digital technologies for CBRT actors?
4. How do digital technologies contribute to promoting sustainability in CBRT?

2. Literature Review

2.1. The Role of Community-Based Rural Tourism

The purpose of community-based rural tourism is to promote social-economic development within rural areas controlled by their inhabitants (Rosalina, Dupre, & Wang, 2021). Generally, CBRT is meant to replace traditional mass tourism, which mainly benefits the richest elites, while local communities are left impoverished and deprived of the proceeds derived from their local natural resources (Matura, 2022). CBRT is an opportunity for visitors to gain experiences associated with nature-based activities, wildlife, forestry and agricultural landscape, rural culture, heritage, sightseeing, and handicrafts (UNWTO, 2011). For some time now, CBRT has been used as a strategy for rural setting development. The goal of the strategy is to enable socio-economic growth while preserving the natural environment, culture, and heritage (Musavengane & Musakwa, 2023).

CBRT can include the likes of cultural tours, traditions, hunting, crafts centres, wildlife tracking, and heritage tourism (Maquera et al., 2022). Rural tourism helps to promote the understanding and appreciation of multicultural divides, bridging the gap between rural and urban communities (Priatmoko et al., 2021). More importantly, CBRT provides income from the sale of craft items, wild fruits, agricultural produce and the showcasing of traditional dances and wildlife tracking skills. For example, local rural communities in Zimbabwe can participate in CBRT initiatives undertaken as part of government programs such as Communal Areas Management Program For Indigenous Resources (CAMPFIRE). However, the impact of such initiatives remains relatively limited, largely because of the inefficient use of online advertising.

2.2. Sustainable Community-Based Rural Tourism

Sustainable CBRT is consistent with the sustainable development goals (SDG), especially SDG 8, which promotes "sustained, inclusive sustainable economic growth and productive employment for all" "through diversification, technological upgrading, and innovation" (Target 8.2). CBRT has been shown to contribute by stimulating socioeconomic growth, alleviating poverty, and subsequently improving living standards for rural communities (Laxmita, Setyaningsih & Purwani, 2021; Bakker et al., 2023). Sustainable development goals are embedded in the context of economic, sociocultural, leisure, and educational dimensions, which play a significant role in their implementation (Liu, Chiang & Ko, 2023; UNWTO, 2023).

The CBRT initiatives serve as an important source of economic benefits. They can create employment opportunities and ensure decent living standards to communities (Woyo & Musavengane, 2023). Rural tourism can take advantage of diverse natural resources and activities, which offer communities many business opportunities (Ngwetjana & Sifolo, 2023; Liu, Chiang, & Ko, 2023). Other benefits of CBRT initiatives include improved lifestyles, revived practice of handicrafts and local traditions, and the renewal of community identities, which are crucial in promoting and extending social exchange networks and increasing community visibility.

2.3. The Use of Online Digital Technologies in CBRT

The use of cloud-based services has become indispensable for the development of rural tourism (Suryani, 2024). Studies focusing on CBRT and cloud computing in developing countries like Zimbabwe and South Africa are limited. However, there are other studies looking at cloud computing in education in Southern Africa. For example, Mlitwa & Simbarashe (2019) identified key issues that are not adequately evident in research agendas when dealing with cloud computing such as access, connectivity, literacies, data sharing infrastructure, collaborative learning platforms (Mlitwa & Simbarashe, 2019). A study conducted by Wang, Li and Huang (2023) on cloud computing technology and big data-driven rural revitalization in China, revealed a weak link in China's digital village construction. The same paper proposed developing a big data-driven rural revitalization governance, sharing, and monitoring platform based on cloud computing technology to promote the reshaping of rural governance patterns and to provide systematic support for the implementation of rural revitalization strategies. The present article focuses on the use of cloud-based services in CBRT in Zimbabwe and South Africa.

Cloud-based computing is used to power popular tools such as social media, Gmail, and Google. Digital platforms integrate various technologies such as geographic information systems (GIS), big data analytics, and the Internet of Things, to improve the efficiency of the digital infrastructure (Xue, 2021). They are also crucial to the achievement of Sustainable Development Goals (SDG) in CBRT, which requires the effective use of online platforms and associated technologies to facilitate access to information, shared knowledge, and experiences (Target 17.8) (UNWTO, 2023). These digital technologies are very convenient for tourists, which is why they are transforming aspirations and tourist experiences (Sifolo, 2023), thanks to their flexibility and affordability, enable greater interconnectivity of tourism destinations. (Azira et al., 2024).

South Africa has experienced a significant growth in internet access, with mobile technology playing a pivotal role. The expansion of 4G and the gradual rollout of 5G networks have enhanced connectivity, facilitating greater digital inclusion. In November 2024 MTN South Africa launched an affordable 5G smartphone priced at 2,499 rand ($138), aiming to promote accessibility to mobile internet and encourage the transition from older network technologies to 4G and 5G (Reuters, 2024). In 2024, Zimbabwe had 5.48 million internet users, representing an internet penetration rate of 32.6% (Kemp, 2024). Social media usage was notably lower, with 2.05 million users accounting for 12.2% of the total population (Kemp, 2024). Adding to the ongoing phenomenon, the country saw some leading Telecommunications companies commissioning 2G base stations with some slowly moving to 4G/LTE base stations, indicative of the infancy digital infrastructure state (POTRAZ, 2024). These figures indicate substantial room for growth in digital connectivity and engagement.

Digital platforms make it possible for CBRT actors and micro-enterprises to market their services directly engage with potential tourists and deliver personalized experiences by giving them access to vast amounts of information about CBRT services, such as e-tour operators, e-destination, and e-hospitality. As already mentioned, despite their obvious advantages, the potential of digital information services remains largely unused in many rural settings in developing countries, and CBRT still largely relies on traditional forms of advertising such as radio, television, and word of mouth.

2.4. CBRT in the Light of Ecological Modernization Theory and Theory of Empowerment

As already mentioned, sustainable CBRT is a response to the culture of mass consumption, destruction, failing governments, and technological development, all of which contribute to the ongoing deterioration of the socio-economic environment of rural communities (Ngo & Creutz, 2022; Azira et al., 2024). The idea of sustainable tourism comes from ecological modernization theory (EMT), which focuses on digital innovation (Spaargaren & Mol, 1992; Fisher & Freudenburg, 2001). It is regarded as a techno-economic management strategy aimed at preserving cultural and natural preservation resources (Mol & Spaargaren, 2000).

EMT emphasizes the growing significance of socioeconomic and market dynamics and the role of economic actors in the preservation of ecological resources (Julkovski et al., 2021). It suggests that CBRT sustainability issues can be resolved through digital technology-driven initiatives enhancing rural socioeconomic development. This approach is consistent with the theory of empowerment, which focuses on the process by which people, organizations, and communities gain mastery over their lives (Perkins & Zimmerman, 1995). The theory can be used to support the notion of empowering communities through autonomous involvement and collaborative participation in CBRT initiatives.

2.5. Community-Based Rural Tourism in Zimbabwe

While urban tourism in Zimbabwe receives much government support, the same cannot be said about CBRT initiatives, which are largely neglected, with some facing extinction, leaving rural communities in poverty (Musavengane & Musakwa, 2023; Shereni & Chambwe, 2024). As a matter of fact, rural poverty levels in Zimbabwe remain relatively high, for instance, approximately 83% of 70% of the country's population living in rural areas are economically marginalised (Nyathi, Ziga & Dube, 2020; Shingirirai, 2024). Despite a 18.9 percent increase in tourist arrivals from 320 592 recorded in the second quarter of 2023 to 381 293 in the second quarter of 2024 (Zimbabwe Tourism Authority, 2024), CBRT actors remain on the periphery of national tourism and are not sufficiently benefitting from government support programs to the detriment of rural communities. In the few CBRT initiatives managed by quasi-government institutions, local communities receive insignificant shares of total revenues and they are treated as passive participants (Shereni & Saarinen, 2021). This situation undermines efforts to make CBRT sustainable because some community members tend to adopt unsustainable practices thereby causing damage to ecotourism. This is confirmed by (Xue, 2021), who found that the participation in CBRT was low, owing to ineffective information dissemination, and the lack of technical talent. According to (Xue, 2021), the lack of rural digital information sharing is detrimental to sustainable practices in CBRT. In other words, there is a massive gap in digital information input by local government in rural areas.

2.6. Community-Based Rural Tourism in South Africa

The role of community-based tourism is strongly emphasised in various national policies and instruments established over the past thirty years. They provide a step-by-step approach to developing a community-based tourism venture, which helps to understand the concept of community-based tourism offers guidance on how to establish and operate commercially viable community-based tourism ventures in South Africa in urban and rural areas.

The literature includes several studies focusing on the potential of community-based tourism to drive development in rural areas (Matiku, Zuwarimwe & Tshipala, 2020). Some studies highlight CBRT's ability to generate economic benefits for local communities through job creation, income improvement, and infrastructure development (Woyo & Musavengane, 2023). Others emphasize the need for CBRT to be recognized for its role in cultural preservation, environmental protection, and community empowerment (Gohori & Merwe, 2020). Research identifies numerous challenges, such as securing funding, developing essential skills within communities, and ensuring equitable distribution of benefits (Gohori & Merwe, 2022). Hence sustainability is viewed as a key concern in the literature. A study conducted by (Agung et al., 2020) emphasizes the importance of developing CBRT initiatives that are environmentally responsible and contribute to long-term community well-being. According to (Maquera et al., 2022), collaboration between various stakeholders, including residents, government entities, and the private sector, is identified as crucial for successful CBRT initiatives (Maquera et al., 2022).

South Africa's unique history, particularly regarding land dispossession, presents an additional layer of complexity when it comes to CBRT initiatives in rural areas. Some studies explore how CBRT can address these issues and empower previously disadvantaged communities (Agung et al., 2020). In conclusion, CBRT in South Africa is seen as a promising approach to rural development but the literature emphasizes the need for thoughtful planning, collaborative efforts, and addressing historical inequalities.

3. Research Method and Data

The empirical data for this study were collected during open-ended semi-structured interviews with 22 respondents representing various CBRT initiatives and involved in working with local municipalities and local leadership. The interviewees were selected by snowball sampling. They were divided into three groups:

1. CBRT actors taking part in different forms of rural tourism,
2. community leaders such as traditional leaders and councillors,
3. members from the local municipality or local government working on community-based tourism projects in South Africa, specifically the CAMPFIRE officer in Zimbabwe.

The interviewees came from different CBRT initiatives or projects. They were further divided into 3 categories:

1. those who were not employed but were economically active within the CBRT projects,
2. those who worked or were self-employed in craft centres and other tourism-related activities,
3. those formally employed in the tourism sector. As already mentioned, the study includes data about Binga in Zimbabwe (15 interviewees) and Dinokasi in the north of the city of Tshwane in the province of Gauteng in South Africa (7 interviewees).

All interviews were conducted in July 2023.

Since the point of data saturation had been reached, the researchers decided to finish data collection after conducting 22 interviews. The choice of a cross-national comparison was motivated by the perception that the use of digital technologies contributed to increased digital space, interaction and intensification of internationalisation.

Table 1. Interview profiles

Interview ID	Age	Sex	Group	Category	Area
Inf1	35	Male	CBRT actor	2	B
Inf2	39	Male	Community leader	1	B
Inf3	37	Male	CBRT actor	2	B
Inf4	40	Male	CBRT actor	2	B

Interview ID	Age	Sex	Group	Category	Area
Inf5	38	Female	Municipal member	3	B
Inf6	43	Male	CBRT actor	2	B
Inf7	41	Female	CBRT actor	2	B
Inf8	40	Female	Municipal member	3	B
Inf9	49	Male	Community leader	1	B
Inf10	34	Male	CBRT actor	2	D
Inf11	52	Male	Municipal member	3	B
Inf12	48	Female	CBRT actor	2	B
Inf13	42	Female	CBRT actor	2	B
Inf14	51	Female	CBRT actor	2	B
Inf15	43	Female	CBRT actor	2	D
Inf16	53	Male	CBRT actor	2	B
Inf17	23	Male	CBRT actor	2	D
Inf18	29	Female	CBRT actor	2	D
Inf19	24	Male	CBRT actor	2	D
Inf20	34	Male	CBRT actor	2	D
Inf21	36	Male	CBRT actor	2	B
Inf22	26	Male	CBRT actor	2	D

(a) Category Key: 1 — Not employed but economically active in CBRT, 2 — Self-employed in CBRT, 3 — Employed in Municipal/tourism projects; (b) Area Key: Binga (B), and Dinokasi (D)
Source: Authors

Table 2. Interview questions

Research questions	In-depth interview questions
RQ 1	[How user-friendly are the identified digital platforms/technologies in CBRT?]
RQ 2	[Could you explain what benefits CBRT players derive from using digital platforms and associated technologies?]
RQ 3	[What are the roles of digital platforms in promoting sustainable CBRT?]

Source: Authors

The data was professionally analysed using Atlas.ti software version 9 to produce a comprehensive observation report on the views expressed by the respondents.

4. Results and Discussion

Table 3 summarises the findings from the thematic analysis regarding the usability of digital platforms, the benefits they offer to CBRT actors, and the role played by technology in promoting CBRT sustainability.

Table 3. Thematic analysis summary

Theme	Sub-theme	Findings
Digital platform navigation	Ease of use	Some CBRT actors found digital platforms (social media) and related technologies usable, while others found it difficult to use digital technologies for business purposes.
	Content integration skills	Many CBRT actors also found it difficult to combine online content, videos/pictures on social media platforms
CBRT benefits from using digital platforms	Revenue generation	All CBRT actors acknowledged that digital platforms have attracted many foreign currency-spending visitors through enhanced visibility and online marketing.
	Job creation	The influx of tourists enables more youths to reengage in income-generating activities.
	Global market penetration	Reliance on social media such as Facebook, Instagram, and WhatsApp enhances global reach and tourist engagement and helps to market CBRT initiatives globally. CBRT actors share their cultures, projects, and initiatives directly with global markets.
	Middleman elimination	All CBRT actors acknowledged that they should market their initiatives on their own to increase the benefits.
	Social cohesion	Digital technologies enhance communication, thereby bringing together members of the community.
	Attracting tourists	Experiences shared online attract many local and international clients, thereby improving CBRT initiatives' performance.
Role of digital platform promoting CBRT sustainability.	Preservation of resources	All CBRT actors acknowledged that the benefits derived from CBRT initiatives gave the community a sense of conserving culture and natural resources. Thus, digital pictures and videos of the local culture and natural resources have helped to create a new tourism destination in their community, which has become a source of pride for the community.
	Socio-economic development	Digital marketing of rural tourism has attracted more tourists thereby creating more employment opportunities for local communities.

Source: Authors

Most of the interviewees perceive digital platforms as tools for communication and marketing. They use social media, such as Facebook, WhatsApp, Instagram, and TikTok, as well as other digital tools like Google, Gmail, and various cloud-based applications. These technologies and online data can be used to conduct marketing campaigns, exchange resources, and improve the efficiency of product and service sales. All interviewees agreed that digital technologies are instrumental in enabling global connectivity, thereby promoting rural socio-economic development. Responses given by the interviewees from Dinokasi suggest that they have more experience and are better at using digital technologies compared to the interviewees from Binga.

- *Using digital technologies and their applications has promoted an increase in tourist arrivals, and I can see that more recreational facilities were opened. We now have more restaurants run by locals here.* (interviewee 17)

4.1. Ease of Use

The interviewees said that they used online digital technologies for communication purposes to support their rural tourism businesses. Though some of them found these digital platforms simple to use, their use for business purposes remains limited. However, reliance on Facebook, radio, television, and WhatsApp reflects minimum engagement with a wide range of capable digital platforms. Some CBRT actors with little digital skill would delegate the role to younger ones. However, while acknowledging their usefulness and actually using some digital services particularly social media, some interviewees were not able to use them effectively for business purposes because of age and lack of digital infrastructural development. The following comments reflect the general sentiments expressed during the interviewees:

- *Digital platforms are easy to access and everyone understands it.* (Interviewee 11).
- *Digital platforms such as social media are user-friendly though it has their challenges, however, remain very effective when it comes to marketing and advertising purposes, and many people world over have turned to these platforms.* (Interviewee 13)

These views confirm the fact that digital technologies have become ubiquitous even in rural areas, where many inhabitants own mobile or smartphones (Ndlovu et al., 2023).

4.2. Content Integration Skills

All interviewees agreed that online digital technologies can help improve business performance, but they admitted their ability to use them effectively was limited, for example to design engaging business content on social media and other digital platforms. This is particularly important given the fact that nowadays most potential visitors rely on the Internet to look for destinations.

- *The problem is that some CBRT members still need to be taught how to use Facebook when marketing products.* (Interviewee 6)

4.3. Revenue Generation

Some interviewees acknowledge receiving digital feedback from customers regarding the quality of their produce. For instance, the Lubu weavers in Binga partnered with a marketing agent to market and sell their produce locally and abroad, which earned them a good name amongst European and Asian visitors.

- *The digital platforms have helped me in modifying the products. Feedback from clients about baobab and marula juice has helped the producers improve the product. Using digital platforms to market tamarind in Binga has drawn so much local and international interest in the fruit because of its associated health properties.* (Interviewee 11)
- *There is increased income for us as communities and has improved livelihoods.* (Interviewee 14)

4.4. Job Creation

All interviewees acknowledged that the use of digital services to market rural tourism initiatives has helped to create employment, particularly for the youth. Apart from individuals selling their handicrafts to visitors, some community members are actively involved in the running of community initiatives such as beekeeping, and tour guide services, with some engaged in various rural recreational activities that were made popular through digital mass marketing. For example:

- *Using digital technologies and their applications has promoted an increase in tourist arrivals, and I can see that more recreational facilities were opened. We now have more restaurants run by locals here.* (Interviewee 17)

4.5. Global Market Penetration

While acknowledging that cloud-based services enhance the visibility of rural tourism, some interviewees expressed the need for a specialised interactive digital platform dedicated exclusively to rural tourism (Maquera et al., 2022). Most of them relied mainly on social media platforms such as Facebook, Instagram, and sometimes WhatsApp to reach out to their potential customers. Unfortunately, these social media platforms are not optimised for business purposes, which makes global market penetration less effective. In some cases reaching out to the global market, the interviewees depend on agents who market and sell their services or products on their behalf, and that comes at a cost.

- *I use Facebook. Facebook is by far the most used social media used for advertising local events and projects. It reaches a big audience and is cheap, most local advertisers don't have to pay anything. Through Facebook pictures and videos can be uploaded reaching out to a large audience and creating awareness about the products and events of interest.* (Interviewee 19).

This confirms the fact that the higher demand for and supply of tourism offerings have created more interactions, with the internet becoming a key tool for mass marketing and promoting the flow of business information (Hang, Thi, & Nguyen, 2023).

4.6. Middleman Elimination

Until recently, owing to their limited online presence, many rural communities remained on the periphery of the digital space thereby creating room for intermediaries. However, thanks to ubiquitous online digital technologies, this situation is becoming a thing of the past, with more CBRT actors now engaging directly with potential clients. For instance, in Binga, particularly those involved in basket weaving and handicrafts occasionally use intermediaries such as ZimTrade organization who digitally market and sell their produce into the international marketing space.

4.7. Social Cohesion

Online digital technologies enable community members to share information any new developmental matters, and make potential visitors aware of their local customs. They can be used as a tool to educate the community about the local lifestyle or circulate information instantaneously about dark incidents taking place within the community. Community meetings can easily be coordinated and also help keep the database for tourists.

4.8. Attracting Tourists

All interviewees acknowledged the benefits derived from being present in the digital space. For instance, as the number of internet users keeps increasing, more virtual communities are being created through online digital technologies, which have facilitated the spread of information, thereby providing convenient services to tourists, who search online for leisure and attractive tourist destinations.

- *Attracting the potential tourists to Binga. We should send correct details of tourist attraction activities, for example, the only sand beach in Zimbabwe being found in Binga may not carry weight to someone who has always looked down on Binga because of its remoteness. With the picture of the sand beach being posted on Facebook, it makes it easy for someone to believe.* (Interviewee 8)
- *Social media marketing has helped us attract many tourists to our community. We use Facebook to share our beautiful places such as hot springs, our only beach, and cultural museums.* (Interviewee 21)

These insights are consistent with the findings reported by Azira et al., 2024; Sifolo, 2023; Xue, 2021.

4.9. Preservation of Resources

The interviewees acknowledged that the use of online digital technologies has given the community a sense of pride and ownership, enabling them to conserve culture and natural resources (Ndhlovu et al., 2024). Communities can sustainably preserve the environment, which is the source of their livelihood.

- *I think technology helps us keep records, and monitor the state of our heritage places.* (Interviewee 3)

These views are consistent with insights from the literature that recognise the transformative potential of cloud-based technologies in promoting sustainable rural tourism, through constant monitoring of natural resources and heritage places (Hussain et al., 2023).

4.10. Socio-Economic Development

The growing popularity of digital technologies in rural tourism can create new opportunities for rural development, especially with regard to CBRT initiatives, which are seen as a panacea for rural economic development and a social renaissance (Zhang et al., 2024). For instance, increased online engagement can generate a greater inflow of tourists, which in turn boosts employment and social community cohesion, which is necessary to promote sustainability.

5. Conclusion and Recommendations

It is evident that cloud-based services can enhance the performance of CBRT initiatives, which provide a source of revenue and create jobs. With the help of these technologies, CBRT initiatives in the global south could boost rural socioeconomic development and contribute to their sustainability. They can help to improve global market penetration, cut out the middlemen, promote social cohesion and attract more tourists.

However, as the study showed, despite their familiarity with various digital platforms, and awareness of their benefits, the interviewees admitted that their skills were not always sufficient to use these tools effectively. To become more competent users of digital technologies they need training and new skills, which requires a collaborative effort from government agencies and established players in the tourism industry. There is also a need for a dedicated digital platform for CBRT that will be accessible globally.

While, as already noted, CBRT initiatives in Zimbabwe and South Africa are at different levels of development, the results of the study indicate that they can promote sustainability. This, however, requires sufficient stakeholder engagement if such initiatives are to succeed. In Zimbabwe, the use of cloud-based services in CBRT initiatives is still at its infancy stage, which means these tools have a lot of unused potential that could make CBRT projects more sustainable.

CRediT Authorship Contribution Statement

Conceptualization: **NN**; data curation: **NN &PPSS**; formal analysis: **NN**; investigation: **NN**; methodology: **NN&PPSS&NT**; project administration: **NN**; resources: **NN&PPSS**; software: **NN**; supervision: **PPSS&NT**; validation: **NT**; visualization: **NN**; writing – original draft: **NN&PPSS&NT**; writing – review & editing: **NN&PPSS&NT**.

Declaration of Competing Interest

None.

References

Agung Prakoso, A., Pradipto, E., Sani Roychansyah, M., & Setya Nugraha, B. (2020). Community-based tourism: concepts, opportunities and challenges. *Journal of Sustainable Tourism and Entrepreneurship*, *2*(2), 95–107. https://doi.org/10.35912/joste.v2i2.563

Azira, N., Samad, A., Salehuddin, M., & Zahari, M. (2024). *Changer for Community-based Tourism (CBT) Homestay Operators : A Qualitative Investigation*. 1–21. https://doi.org/10.1177/10185291241295439

Bakker, M., van der Duim, R., Peters, K., & Klomp, J. (2023). Tourism and Inclusive Growth: Evaluating a Diagnostic Framework. *Tourism Planning and Development*, *20*(3), 416–439. https://doi.org/10.1080/21568316.2020.1850517

Fisher, D.R., & Freudenburg, W.R. (2001). Ecological Modernization and Its Critics : Assessing the Past and Looking Toward the Future Insights and Applications Ecological Modernization and Its Critics : Assessing the Past and Looking Toward the Future. *Society* & N*atural Resources*, *14*(8), 701–709. https://doi.org/10.1080/08941920119315

Gohori, O., & van der Merwe, P. (2020). Towards a tourism and community-development framework: An African perspective. *Sustainability*, *12*(13). https://doi.org/10.3390/su12135305

Gohori, O., & van der Merwe, P. (2022). Tourism and Community Empowerment: The Perspectives of Local People in Manicaland Province, Zimbabwe. *Tourism Planning and Development*, *19*(2), 81–99. https://doi.org/10.1080/21568316.2021.1873838

Hang, T., Thi, V., & Nguyen, V. (2023). *Development Virtual Community For Community-Based Rural Tourism (CRT) in Vietnam*. Conference Paper. International Conference Proceedings Green Economic Development in Vietnam.

Hussain, S., Ahonen, V., Karasu, T., & Leviäkangas, P. (2023). Sustainability of smart rural mobility and tourism: A key performance indicators-based approach. *Technology in Society*, *74*. https://doi.org/10.1016/j.techsoc.2023.102287

Julkovski, D.J., Sehnem, S., Bennet, D., & Leseure, M. (2021). Ecological Modernization Theory (EMT): Antecedents and Successors. *Indonesian Journal of Sustainability Accounting and Management*, *5*(2). https://doi.org/10.28992/ijsam.v5i2.303

Kemp, S. (2024). *Digital 2024: Zimbabwe*. https://datareportal.com/reports/digital-2024-zimbabwe?

Laxmita, N.A., Setyaningsih, W., & Purwani, O. (2021). Sustainable rural tourism development in the era of social media shape identities and discourse digital settings. *IOP Conference Series: Earth and Environmental Science*, *778*(1). https://doi.org/10.1088/1755-1315/778/1/012010

Liu, Y., Chiang, J., & Ko, P. (2023) The Benefits of Tourism for Rural Community Development. *Humanities and Social Sciences Communications*, 10, 1–12. https://doi.org/10.1057/s41599-023-01610-4

Maquera, G., da Costa, B.B.F., Mendoza, Ó., Salinas, R.A., & Haddad, A.N. (2022). Intelligent Digital Platform for Community-Based Rural Tourism—A Novel Concept Development in Peru. *Sustainability*, *14*(13), 1–18. https://doi.org/10.3390/su14137907

Matiku, S., Zuwarimwe, J., & Tshipala, N. (2020). Community-driven tourism projects' economic contribution to community livelihoods-A case of makuleke contractual park community tourism project. *Sustainability*, *12*(19). https://doi.org/10.3390/su12198230

Matura, P. (2021). Domestic tourism promotion strategies during and after the Covid-19 pandemic in Zimbabwe. *The Dyke Journal*, *15*(1), 85–103.

Mlitwa, N., & Simbarashe, M. (2019). A cloud-a Cloud-Based Architecture For A Regional Trans University Learning Management System Collaboration On Digital Content Delivery Across Southern Africa. *Edulearn19 Proceedings*. https://doi.org/10.21125/edulearn.2019.1903

Mol, A.P.J., & Spaargaren, G. (2000). Ecological Modernisation Theory in debate: A review. *Environmental Politics*, *9*(1), 17–49. https://doi.org/10.1080/09644010008414511

Musavengane, R. (2018). Toward pro-poor local economic development in Zimbabwe: The role of pro-poor tourism. *African Journal of Hospitality, Tourism and Leisure*, *7*(1), 1–14.

Musavengane, R., & Musakwa, W. (2023). Climate Change Impacts on Wildlife Protected Areas in Southern Africa: a Bibliometric Analysis. *Studia Periegetica*, *4*(44). https://doi.org/10.58683/sp.620

Ndhlovu, E., Dube, K., Shereni, N.C., Makuyana, T., & Africa, S. (2024). *Tourism and Hospitality for Sustainable Development Volume One: Technological Innovations*. Springer. https://doi.org/10.1007/978-3-031-63069-9

Ndlovu, N., Ochara, N.M., & Martin, R. (2023). Influence of digital government innovation on transformational government in resource-constrained contexts. *Journal of Science and Technology Policy Management*, *14*(5), 960–981. https://doi.org/10.1108/JSTPM-11-2021-0173

Ngwetjana, S. & Sifolo, P. (2023). Voices of local communities on sustainable tourism: A case of Capricorn district in Limpopo, South Africa. *Journal of Tourism & Development*, 41, 9–19. https://doi.org/10.34624/rtd.v41i0.30258

Nyathi, D., Ziga, M., & Dube, K. (2020). Rural Poverty Alleviation: Reflections on Zimbabwe's Experiences and Needed Strategy. *Scholars Journal of Economics, Business and Management*, *4*(8A), 493–503.

Ohe, Y. (2020). *Community-based Rural Tourism and Entrepreneurship. A Microeconomic Approach*. Springer. https://doi.org/10.1007/978-981-15-0383-2

Ngo, T.H., & Creutz, S. (2022). Assessing the sustainability of community-based tourism: a case study in rural areas of Hoi An, Vietnam. *Cogent Social Sciences*, *8*(1). https://doi.org/10.1080/23311886.2022.2116812

Perkins, D.D., & Zimmerman, M.A. (1995). Empowerment theory, research, and application. *American Journal of Community Psychology*, *23*(5), 569–579. https://doi.org/10.1007/BF02506982

POTRAZ. (2024). *Abridged Postal* & T*elecommunications Sector Performance Report. Second Quarter 2024* (pp. 1–22). https://t3n9sm.c2.acecdn.net/wp-content/uploads/2024/09/Second-Quarter-2024-Abridged-Sector-Performance-Report.pdf

Priatmoko, S. Kabil, M. Purwoko, & Y. Dávid, L.D. (2021). Rethinking Sustainable Community-Based Tourism: A Villager's Point of View and Case Study in Pampang Village, Indonesia. *Sustainability*, *13*, 3245. https://doi.org/10.3390/su13063245

Reuters. (2024). https://www.reuters.com/business/media-telecom/south-africas-mtn-launches-affordable-5g-smartphone-2024-11-26/

Rosalina, P.D., Dupre, K., & Wang, Y. (2021). Rural tourism: A systematic literature review on definitions and challenges. *Journal of Hospitality and Tourism Management*, *47*, 134–149. https://doi.org/10.1016/j.jhtm.2021.03.001

Setokoe, T.J., Ramukumba, T., & Ferreira, I.W. (2019). Community participation in the development of rural areas: A leaders' perspective of tourism. *African Journal of Hospitality, Tourism and Leisure*, *8*(1), 1–15.

Shereni, N.C., & Chambwe, M. (2024). Nature-based Tourism in Zimbabwe: Sustainability Issues. *Geographies of Tourism and Global Change*, *Part F2881*, 59–70. https://doi.org/10.1007/978-3-031-57252-4_5

Shereni, N.C., & Saarinen, J. (2021). Community perceptions on the benefits and challenges of community-based natural resources management in Zimbabwe. *Development Southern Africa*, *38*(6), 879–895. https://doi.org/10.1080/0376835X.2020.1796599

Shingirirai, M. (2024). *Urban Proximity and Spatial Pattern of Rural Poverty and Livelihoods in Zimbabwe (English)*. World Bank Group. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099061424064642877/p1760801a271230b18c49161b5f86afc56

Sifolo, P.P.S. (2023). Digital Technology Adaptability: Insights from Destination Network Practices for Tourism Businesses in South Africa. *African Journal of Hospitality, Tourism and Leisure*, *12*(4), 1425–1436. https://doi.org/10.46222/ajhtl.19770720.440

Spaargaren, G., & Mol, A.P.J. (1992). Sociology, environment, and modernity: Ecological modernization as a theory of social change. *Society & Natural Resources: An International Journal*, *5*(4), 323–344. http://dx.doi.org/10.1080/08941929209380797

Suryani, W. (2024). *Cultural and Heritage Tourism Trends for Sustainable Tourism* (pp. 1–15). IGI Global. https://doi.org/10.4018/979-8-3693-5903-7.ch001

UNWTO. (2011). *Tourism Towards 2030/Global Overview*. UNWTO. https://www.e-unwto.org/doi/book/10.18111/9789284414024

UNWTO. (2023). I*nternational Tourism Highlights, 2023 Edition – The Impact of COVID-19 on Tourism (2020–2022). Revised and updated, October 2023*. UNWTO. https://www.e-unwto.org/doi/book/10.18111/9789284424986

Wang, P., Li, C., & Huang, C. (2023). The Impact of Digital Village Construction on County-Level Economic Growth and Its Driving Mechanisms: Evidence from China. *Agriculture*, *13*(10), 1917. https://doi.org/10.3390/agriculture13101917

Woyo, E., & Musavengane, R. (2023). Has Community-Based Tourism Been a Useful Tool for Poverty Eradication in Southern African Rural Destinations? *African Journal of Hospitality, Tourism and Leisure*, *12*(2), 251–534. https://doi.org/10.46222/ajhtl.19770720.383

Xue, F. (2021). The Development Of Rural Tourism Under Digital Economy. *Social Values and Society (SVS)*, *3*(2), 51–53. https://doi.org/10.26480/svs.02.2021.51.53

Zhang, Z., Zhang, H., Lin, M. S., & Jia, W. (2024). Is more rural digitization always better for tourism? An innovative multiscale spatial perspective. *Tourism Economics*, *0*(0), 1–24. https://doi.org/10.1177/13548166241273607

Zimbabwe Tourism Authority. (2024). *Tourism Trends and Statistics, first half*. https://zimbabwetourism.net/download-category/tourism-trends-and-statistics-quarterly-reports/

Wykorzystanie cyfrowych technologii sieciowych do wspierania zrównoważonego rozwoju turystyki z udziałem społeczności wiejskich

Streszczenie. Artykuł porusza kwestię wykorzystania cyfrowych technologii sieciowych do wspierania turystyki z udziałem społeczności wiejskich w Afryce Subsaharyjskiej oraz rozwoju społeczno-gospodarczego w tym regionie. Rola cyfryzacji w turystyce z udziałem społeczności wiejskich to zagadnienie, które do tej pory nie budziło większego zainteresowania. Autorzy skupiają się na efektywności i roli cyfrowych technologii sieciowych w promowaniu zrównoważonego rozwoju społeczno-gospodarczego poprzez inicjatywy turystyki z udziałem społeczności wiejskich. Problem jest analizowany w świetle teorii modernizacji ekologicznej i teorii umacniania (*empowerment*), które promują inicjatywy autonomiczne i cyfrowe jako sposób realizacji zrównoważonego rozwoju społeczno-gospodarczego w turystyce z udziałem społeczności wiejskich. Rozważania oparte są na danych jakościowych zebranych od 22 respondentów z Dinokasi (RPA) i Binga (Zimbabwe), którzy uczestniczyli w wywiadach pogłębionych. Wyniki wskazują, że cyfrowe technologie sieciowe przyczyniają się do zrównoważonego rozwoju turystyki z udziałem społeczności wiejskich i rozwoju społeczno-gospodarczego tych obszarów.

Słowa kluczowe: turystyka wiejska oparta na społeczności, platformy cyfrowe oparte na chmurze, zrównoważony rozwój w turystyce z udziałem społeczności wiejskich

Studia
Periegetica
2(46)/2024

ISSN 2658-1736, https://journals.wsb.poznan.pl/index.php/sp
s. 115–134, https://doi.org/10.58683/sp.2028

THANDIWE R. NYATHI[a], LOGISTIC MAKONI[b], KEVIN MEARNS[c]

Unraveling the Fabric of Johannesburg's Informal Food Vending Sector

Abstract. This article investigates the informal food vending sector in Johannesburg. The analysis is based on empirical data obtained during interviews with 25 food vendors operating in the city. Information provided by the respondents reveal a complex web of informal food activities that take place in urban spaces, especially different locations chosen by informal food vending, such as transit hubs and public areas. The authors highlight key issues of urban governance and advancing sustainable urban development, which should be taken into account by urban planners in order to create more inclusive strategies that promote food vendors' livelihoods by acknowledging the vitality and significance of the informal food economy.

Keywords: informal food vending, urban spaces, Johannesburg, South Africa

Article history. Submited 2024-11-26. Accepted 2025-01-10. Published 2025-01-23.

1. Introduction

The informal sector is increasingly being recognized as a major component of the economy in developing countries, particularly in Africa (Masuku & Nzewi, 2021). The sector is responsible for approximately 83% of total employment and between 40% and 60% of intra-regional trade globally (United Nations Conference on Trade and Development, 2021). In South Africa, the informal economy employs over 2.5 million people (Statistics South Africa, 2021). The sector plays a crucial role by providing livelihoods and an essential source of household income for many families (Makoni & Tichaawa, 2021). Typical of Africa, the informal economy is

[a] University of Johannesburg, College of Business and Economics, School of Tourism and Hospitality, 219017172@uj.ac.za, https://orcid.org/0000-0002-2096-5067
[b] Corresponding Author, University of South Africa, College of Agriculture and Environmental Sciences (CAES), Department of Environmental Sciences, logism@unisa.ac.za, https://orcid.org/0000-0003-4279-821X
[c] University of South Africa, College of Agriculture and Environmental Sciences, Department of Environmental Sciences, mearnkf@unisa.ac.za, https://orcid.org/0000-0001-5874-3542

prevalent in urban spaces, especially in capital cities or commercial hubs such as Harare in Zimbabwe, and Johannesburg in South Africa (Moyo & Gumbo, 2021; Tawodzera, 2022; Makoni, Shereni & Mearns, 2024). Most people living in these cities rely on the informal economy for survival (Makoni & Rogerson, 2023). However, the African urbanscape is faced with many challenges, such as increasing unemployment rates, the rapid growth of urban populations due to migration from rural areas, excessive bureaucracy associated with the process of starting a business, a depreciating formal sector, and complex requirements for formal employment (Mthiyane, Wissink & Chiwawa, 2022).

Despite these difficulties, the informal economy continues to thrive in Africa, with South Africa being one of many examples. Johannesburg's Informal Trading Policy recognizes the fact that the city is dominated by vendors operating in most of its urban spaces, such as pavements, open markets, public areas, taxi ranks, bus terminal areas, and informal shops (City of Joburg, 2022). These informal vendors sell second-hand clothing, fruit and vegetables, operate as taxi rank marshals and run spaza shops[1], beauty parlors, or brothels (Hikam, 2011; Selwyn, 2018; Wegerif, 2020; Khumalo & Ntini, 2021; Kushitor, Alimohammadi & Currie, 2022; Sepadi & Nkosi, 2023). The literature on the informal sector is rather scant, especially with respect to the way it evolves within urban spaces and the role it plays in the livelihoods of the vendors (Wegerif, 2020; Kushitor et al., 2022).

Despite ample research on the informal sector in developing countries, comparatively little is known about the dynamics of this sector and its impact on urban space development. Specifically, there is a research gap concerning policies and strategies targeted at fostering sustainable economies within the urban areas, particularly with regards to the livelihoods of informal vendors (Azunre et al., 2022). The purpose of the following study was therefore to bridge this gap by exploring the intersections of informality, city space and sustainability to provide practical insights into the development of policies that can improve the resilience of informal economies while simultaneously promoting sustainable urban development. In this way, the authors hope to contribute to the development of more inclusive and comprehensive policies and strategies for including informal activities into the mainstream developmental frameworks for urban planning and sustainable growth. The study focuses on Johannesburg, the commercial hub of South Africa, since it represents a dynamic urban context where informality is profoundly

[1] Spaza shops, also known as tuck shops, are micro-convenience stores operated by owners from their homes to meet the daily needs of their communities. This form of informal entrepreneurship originated during Apartheid-era South Africa when historically disadvantaged individuals were restricted from owning formal businesses.

interconnected with both urban development and economic survival (Rogerson, Malovha & Rogerson, 2024). As one of the largest and most rapidly growing cities in Southern Africa, Johannesburg offers a unique perspective on the challenges and opportunities of integrating informal economies into urban planning, making it a representative case for understanding the complexities of informal sector dynamics in the broader Southern African context.

2. Literature Review

2.1. Informal Economy in Urban Spaces

Cities are major business and economic activity hubs of any country. Urban spaces, in this regard, enable city dwellers, visitors and users to move around and engage in different activities that transpire within different urban environments (Thomas, 2016). As major gateways, cities offer visitors and developers access to economic development centers, political administration, shopping and social engagements (Cobbinah, 2023). Nowadays, in addition to various formal activities, African cities are experiencing a rapid development of informal economic activity, which is particularly vibrant in the political and commercial capital cities (Makoni et al., 2024). Urban spaces in Africa are also dynamic business environments that attract local survivalists[2] who supply city dwellers with goods and services, such as food, medicines or electronics (Timothy & Teye, 2005; Moyo & Gumbo, 2021; Makoni et al., 2023). It is estimated that one in three goods purchased in city centers are sold in informal markets scattered within various urban spaces in Africa (Cunningham et al., 2024). According to Zack and Landau (2022), some of these activities include roadside boutiques, mobile kitchens and informal marketplaces. Studies on informal business activity in African urban spaces ((Rogerson, 2018; Makoni et al., 2023) report that the informal economy currently accounts for over 80% of all economic activity that takes place in urban spaces. This phenomenon can be observed in urban spaces of many African countries, for example in Johannesburg (Rogerson, 2015), Harare in Zimbabwe (Chikanda & Tawodzera, 2017), and Maseru in Lesotho (Rogerson & Letsie, 2013).

[2] Also known as survivalist entrepreneurs. The term refers to individuals who engage in small-scale, often low-profit, economic activities primarily to meet immediate personal or household needs. These businesses typically operate outside formal regulatory frameworks and may lack access to formal financial services, training, and support. They tend to focus on earning day-to-day income rather than growth or expansion.

2.2. Informal Food Vending in Urban Spaces

The most common informal activity taking place in urban spaces is undoubtedly food vending. Street food is the prevalent source of food for city dwellers and a tourism experience in numerous urban spaces (Quintero-Angel, Mendoza-Salazar & Martinez-Giron, 2022). Informal food vending is part of creative tourism and food tourism (Etim & Daramola, 2020; Nickanor et al., 2021; Gamira, 2021; Kamalipour & Peimani, 2021; Zondi & Magwaza, 2022). It provides affordable food options, particularly for low-income individuals working in cities (Tawodzera, 2023). The influx of informal food vendors into major cities is not a new phenomenon; food vending is one of the key informal economic activities that marked the emergence and evolvement of the informal sector in urban spaces across the globe (Blekking et al., 2022). South Africa is estimated to have over one million food vendors across the country's major cities (Arias, 2019). Food vendors typically sell fresh fruits, snacks, fast food, and cooked meals with versatile menus (Ekobi, 2022; Lemomo, 2022). As Tawodzera and Crush (2019) observe, informal food vending comprises a diverse network of small businesses and individuals such as suppliers, informal markets, delivery, mobile traders, hawkers, retailers, and street food vendors. Food vendors strategically occupy areas surrounding heavy foot traffic, e.g. outside shopping centers, schools, transportation hubs such as taxi ranks and train stations, marketplaces, and sporting venues, where consumers can easily purchase a snack or meal while traveling (Amir, Salman, & Fahmid, 2018; Kushitor et al., 2022).

The phenomenon is defined as an activity in which hawkers or stallholders prepare, cook, or process food and sell it in urban spaces (Wegerif & Kissoly, 2022; Sinyolo, Jacobs & Maila, 2022; Roa, 2023). Tawodzera and Crush (2019) note that informal food vending in South Africa is either criminalized or ignored. However, it should not be viewed as illegal or unlawful, since it is a legitimate practice of selling legally produced goods and operating with legally purchased raw materials in environments that exist outside formal business frameworks. This mode of commerce is essential for many individuals who face barriers to formal business operation, lacking land, capital, or the necessary skills, yet it also attracts people with strong academic backgrounds and solid business acumen, who choose the informal sector for its profit potential.

According to Skinner & Watson, 2021, informal food vendors play a crucial role in providing for the needs of impoverished communities that are commonly found in developing and less developed countries. Informal food vending in developing countries plays an important role in creating jobs and sustaining local livelihoods (Rogerson, 2018; Benjamin et al., 2020; ILO, 2022). Particularly in Africa, it is believed that the rapid urban population expansion, high unemployment, and slow industrial and economic growth are factors that motivate individuals to seek opportunities in the informal sector to escape living in poor conditions (Magidi & Mahiya, 2021; Masuku & Nzewi, 2021). According to ILO data (2022), approximately 85% of the urban working population in Sub-Saharan Africa is employed in the informal economy. By focusing on the spatial dynamics of the informal food economy in Johannesburg, the following study offers valuable insights into this sector, which can help inform more equitable urban policies to improve the livelihoods of the food vendors.

3. Methods and Data

Empirical data for the study were collected through semi-structured interviews with 25 food vendors operating in Johannesburg. Respondents were selected by snowball sampling. The sampling process was stopped after reaching data saturation, where further interviews were unlikely to yield new insights. Rather than selecting individual food vendors, the researchers interviewed representatives of informal food vending businesses to obtain a more diverse sample of this sector. This approach was chosen to enable a more nuanced exploration of the informal food economy, considering aspects such as economic sustainability, urban governance, and potential implications for inclusive urban planning and development. Basic information about the interviewees is presented in Table 1.

Table 1. Basic information about the interviewees

Id	Sex	Age	Education	Country of origin	Years in business
FV1	Male	42	Certificate completed	South Africa	7
FV2	Female	30	Completed secondary school	Zimbabwe	8
FV3	Female	30	Completed secondary school	Zimbabwe	11
FV4	Male	44	No formal education	South Africa	25
FV5	Female	25	Completed secondary school	South Africa	6
FV6	Female	29	Some form of primary school	Malawi	10
FV7	Female	28	Completed secondary school	South Africa	8
FV8	Female	40	Completed secondary school	South Africa	19
FV9	Male	34	Diploma certificate completed	South Africa	9
FV10	Male	25	Completed secondary school	South Africa	6
FV11	Female	27	Certificates completed	Zimbabwe	7

Id	Sex	Age	Education	Country of origin	Years in business
FV12	Female	30	Diploma certificated completed	Zimbabwe	5
FV13	Female	51	No formal education	Zimbabwe	26
FV14	Male	32	No formal education	Mozambique	10
FV15	Female	26	No formal education	Mozambique	7
FV16	Male	31	No formal education	South Africa	8
FV17	Female	34	Diploma completed	Congo	11
FV18	Female	55	No form of formal education	South Africa	32
FV19	Male	31	No form of formal education	Mozambique	12
FV20	Male	30	No form of formal education	Mozambique	10
FV21	Male	29	Completed secondary school	South Africa	7
FV22	Female	59	No formal education	eSwatini	17
FV23	Female	35	Some form of formal education	South Africa	15
FV24	Female	27	Certificate completed	Zimbabwe	7
FV25	Female	30	Diploma completed	South Africa	11

Source: Authors

4. The Findings

The interview questions focused on the following main topics: (1) the socio-economic characteristics of food vendors; (2) their business activities and organization, and (3) challenges and opportunities associated with their activities.

4.1. The Socio-Economic Situation of Informal Food Vendors

Table 2. Socio-economic characteristics of the interviewees

Economic status	Total number	Total (%)
Number of dependants		
0–3	9	36
4–6	12	48
over 7	4	16
Income per week from business		
ZAR 1000–ZAR 5000	1	4
ZAR 5001–ZAR 10000	3	12
ZAR 10 001–ZAR 15 000	10	40
ZAR 15 001–ZAR 20 000	9	36
over ZAR 20 001	2	8

Economic status	Total number	Total (%)
Revenue streams		
Food vending is the sole source of income	21	84
Additional revenue streams	4	16
Main expenses besides the business expenses (NB: This was a multiple-response question)		
Food and groceries	25	100
Rent payments	18	72
Debt payments	18	72
School fees	15	60
Savings and investments	12	48
Family support (sending money)	10	40
Entertainment	9	36

Source: Authors

The ethnic diversity among informal food vendors in Johannesburg (Table 1) reflects the broader demographic fabric of Johannesburg. Vendors from various racial backgrounds operate within the city, enriching the culinary landscape and contributing to inclusivity in entrepreneurial ventures. While the sector has been dominated by women (Matinga et al., 2018; Arias, 2019), there is a growing number of men in the informal food economy of Johannesburg. This is largely the result of the shifting socio-economic realities of Johannesburg and South Africa as a whole, especially in the post Covid-19 period. The sector also reflects Johannesburg's status as a cosmopolitan city, which is a melting pot of cultures and nationalities (Nyuke, 2021). According to Masuku & Nzewi, (2021), non-South African informal food vendors constitute a significant portion of food vendors in the urban spaces, with many of them originating from neighboring countries such as Congo, Malawi, Mozambique, Eswatini and Zimbabwe. This contributes to the sector's diversity and economic dynamics.

> The situation in my country is unbearable, I cannot go back there to try and survive. I am honestly better off here in Johannesburg and the business really helps me survive and also send money home (FV11).
>
> It's better to stay in streets that offer you food than being in big building 24/7 but with nothing to take home. Such is the situational comparison between Johannesburg streets and my country's formal job sector. To start with, we do not even have currency in my country. I will starve my family if I stay there. But here in Johannesburg if I come here in this street what I get through selling from 6am to 9am alone I will raise enough money for sending home to buy groceries and other necessities (FV13).

Young people often view informal food vending as a pathway to economic independence and employment opportunities, using innovative strategies to attract customers and navigating urban challenges such as unemployment (Dube, 2021).

> This business was a quick way for me to start earning money because I spent over three years looking for a job which I could not find. After I started this business, I became comfortable, and I am not interested of job hunting anymore (FV10).

For the older vendors, this activity is the main source of household income.

> We must keep the family running, you know. For over 12 years I have been managing to take care of my dependents and this business has really helped me with that (FV17).

The interviews indicate that food vendors have various forms of capital that are outside formal means:

> I also do hairdressing. I got the money to start this from my income on doing people's hair (FV15).
> My source of income to start this business is my 3 kids' social grant money I receive from the government (FV23).
> Yes, I sell Tupperware which is a business I run on WhatsApp (FV24).
> I got my capital from my stokvel[3] money (FV25).

The economy of food vending in Johannesburg is essential for the livelihoods of many vendors, and sometimes is their only source of income.

> My children and I travel from Alexandra to here in town, they school here, and their school fees is R1500 they are two so R3000 their transport and mine per day is R100 per day (FV15).
> Yes, I do have expenses that I pay with the money I earn here, there are house expenses because I want to build a house back at home, furthermore there are children, there are children that I am supporting. And I am renting where I am staying (FV7).
> I can support both my children with the money that I make here in the street. They are both in school. one is in primary school and the other is in pre-school. I can support them well (FV3).
> There are expenses that I pay for with the money I earn here, yes, there are house ex-

[3] An informal savings collaboration between two or more people, in which funds are contributed in rotation, allowing participants lump sums for family needs

penses because I want to build a house back at home, furthermore there are children, there are children that I am supporting. And I am renting where I stay (FV7).

I do not have any other job or source of income. This is what I do every day to survive (FV14).

I am only the breadwinner since I lost my husband about 12 years ago and this is the only thing I do. Everyone else is still young to work and support and you know us African families, the relatives who can help have their own lives to manage so I cannot burden them. But I am managing well with this business (FV18).

The way my work is so busy I cannot afford to have another second source of income. I only rest Sundays in the Afternoon and that time I am already too tired and preparing for Monday. Mondays are very profitable so I cannot miss that. This business alone is enough for me, and I can afford (FV21).

Selling cooked meals is a full-time job and I don't think there is anyone who can be able to manage to do something else unless they have other people to work for them. When I'm home I am preparing the food or managing the kids or resting. Then during the day, I am selling the food. It is difficult to juggle (FV23).

As can be seen, many interviewees have turned to street vending when faced with difficulties to obtain formal employment and unbearable economic conditions, which is especially true in the case of migrant entrepreneurs who come to the city to escape the economic realities of their countries.

4.2. Business Organization and Activities of Informal Food Vendors

Informal food vendors operate in various locations across Johannesburg, including markets, street corners, transportation hubs, public parks, and near educational institutions (Park-Ross, 2018). Table 3 presents the main locations used by the interviewees.

Table 3. Main locations of Johannesburg used by the interviewees

Location	%
Transport Hubs & Taxi Ranks	28
Popular Street Corners & Intersections	22
Commercial and business areas	15
Cultural & Historical Centers	13
Market & Mall Adjacent Spaces	12
Urban regeneration areas	10

Source: Authors

The choice of a particular location is mainly influenced by factors such as foot traffic, consumer demand, proximity to potential customers, and accessibility to suppliers and resources.

> I chose this location because it's busy with many passersby to go catch taxis, and trains, and it suits my business (FV22).
> I would say it is because the area is busy and it is surrounded by many stores and people who come here to buy stock, so I know that whilst they buy stock, they also come to buy food from me (FV4).
> I sell to people who are just passing by and people who stay in these flats (FV15).

Fig. 1. Typical food vending spaces in Johannesburg city
Source: Authors

The biggest advantage of this business is that we are very flexible in changing menus to suit what people want. I have noticed on hot days people get hungry and they need heavy meals and when it's cold or raining they prefer light meals and we can quickly adapt to that. Sometimes I even see the other guys making food and copy what they are doing, its all about our customers (FV4).

My specialty is cooked meals, especially pap, rice and stews and gills. But I must check what people are buying the most and focus on that. Pap and beef stew sells most, that is what most of my customers want and I focus most on that (FV16).

I think people buy our food because they can afford it. With only 35 rands two people can share a meal we sell and can be full. So I think we have a big advantage because people do not want to spent so much money only on food (FV24).

The choice of suitable locations not only enhances sales opportunities but also fosters customer loyalty and satisfaction, contributing to the long-term sustainability of business operations. Various types of food and vegetables are sold in Johannesburg, as shown below.

Fig. 2. Sit in spaces [informal restaurants] for informal food vendors in Johannesburg.
Source: Authors

I sell spinach, various types of spinach, tomatoes, pumpkin, and onions (FV22).

I sell potatoes, onions, tomatoes, peppers, and chilies, or mixed vegetables with all of them (FV19).

Apple, banana, grapes, pears, orange, nartjies (FV14).

I sell simple food, pap, braai meat, and vegetables (FV3).

I am selling intestines, spleen, and pap (FV4).

We sell, steak, wors, heart, liver, chicken, and ox head (FV7).
It is pap, chicken, tripe, cow throttles, boerewors, steak as well as rice (FV10).
Chicken, beef, tripe and pap (FV18).
Yes. I'm selling pap, liver, chicken, steak, ox heart and tripe, as well as steak (FV1).

It turned out that *uphutu*[4] *ne*[5] *nyama yenhloko*[6] is the most frequently sold and consumed food product in Johannesburg. This can be attributed to its affordability, cultural significance, and its role in informal food economies where accessibility and low-cost meals are prioritized. Recognizing the widespread consumption of ox head is crucial for understanding the dynamics of Johannesburg's informal food sector, as it highlights both the economic and social factors driving food choices within urban spaces, directly influencing the sustainability and growth of informal food markets.

Fig. 3. Pap and ox head menu in Johannesburg city
Source: Authors

The interviewees also pointed out that they cater for various groups of customers, who are part of the heavy foot traffic in the city:

I sell my food to school kids (FV24).

[4] A traditional South African dish made of maize, which is prepared into a crumbly or grainy porridge. It is also known as pap.

[5] and

[6] *Inyama yenhloko* or *yentloko* or *skopo*, *iskopo* or *skop* is ox head meat, which is traditionally boiled with salt, spices or beef stock and served with *uphuthu*.

> We sell to people who like having fun around entertainment areas (FV8).
> People that want to have a different variety of what's being offered, foodies, adventurous people, other caterers (FV9).
> I don't really have specific customers really, everyone that passes has a chance of buying my food (FV25).

It was also noted that the vendors select local suppliers such as local butcheries as their main suppliers due to affordability and cos-efficiency they offer.

> I buy my stock at big local markets (FV23).
> I buy my meat at Meat Express [a local butchery] (FV2).
> We buy from the butchery at MTN (Noord) at Steve Butchery [a local butchery] (FV6).
> We buy it, there is a butchery that we buy our meat from Express and Steve Butchery (FV7).
> Yes it is affordable I know that when I buy steak for R100 it will make R100 on top of that, it is better that way (FV3).
> I choose these suppliers because they have what I need (translated from SiSwati Language) (FV22).

4.3. Push and Pull Factors of the Informal Food Vending Economy

The informal food vending activities are a major pull factor for people seeking income and survival opportunities.

> I did a catering certificate, wedding planning from scratch. But you know that that one is seasonal. So, this one is throughout (FV1).
> There are no jobs. I saw that there were jobs, and I started selling snacks. Then I saw that the profit was too low; I could not even afford to pay for my children's school fees. Then I started to buy pots. I started this business in 1991. I saw it necessary to start a food business (FV18).

Other pull factors are largely associated with opportunities for freedom and independence,

> I like to work alone. No one can control me; sometimes you find the boss with attitude and all that other stuff (FV11).
> I am unable to work for someone, that is why I chose to be self-employed (FV3).
> What I like about selling is that there is no way I can be controlled by anyone, you can decide what you want to do, when you want to do it, and how much you want to make

> and what you are going to do with it. You do as you please, that's why I like selling (FV2).
> I manage my own time, I get to travel, I get to be anywhere, anytime if I want to, to see. Not anywhere, anytime I get to give the service to people that can. instead of me being behind the restaurant behind the kitchen 24/7. I can host in the balcony, in the backyard or in the pool side you. I can go to a festival, so if I have to add up whatever that I'm making per month and compared to a person who's at a restaurant, it is probably the same amount, but I'm doing it different. Like, yeah, I am doing stuff to be here (FV9).
> I like that I pay myself. That is the one which I like, and then secondly, I just enjoy seeing like being of service to other people, you understand, because seeing people enjoy their food eating as well, it's quite satisfying to understand, beyond the money. It is satisfying, but at the end of the day (FV10).
> I am happy here, it is nice to sell, you laugh with customers, you get used to different customers and it's a good thing. It is nice here and I will not be able to look for another job (FV3).

The interviewees revealed other socio-economic benefits of informal food vending; this form of activity generates employment and income, helps to diversify forms of livelihood, particularly for vulnerable groups such as women, youth, migrants, and low-skilled workers.

> It is not a secret that millions of South African graduates are unemployed. And I chose not to sit and wait for the government. This business has provided me with much-needed employment and source of income (FV7).
> This business is awesome because truth be told, I make more money than many people who have normal jobs (FV11).
> The biggest benefit of this business is that you can take care of family needs with income, and you don't have to owe anyone (FV22).
> This is the biggest source of employment and you don't need any authority to ask for permission (FV25).

Despite the benefits, the interviews reported many challenges:

> The challenges are that some days I sell less and must go back with stock which causes losses, another thing is during loadshedding it affects me because I don't have a generator (FV23).
> And then another thing is also cooking the food because you must prepare the food at home and then bring the food here you understand. So sometimes you have load shedding [powercuts] and water shortages — so in the past week, we did not have water.

We did not have electricity, so it was a problem. The food came late, that is one of the challenges (FV10).

Yes, so prices the prices went up. So, the money that we get went down, our profit is down due to Corona since. Because ox head was the cheapest meat ever. It was the cheapest, cheapest when I started selling ox head was 8 Rand one. 8 Rand one and now I am buying it. Ox head was 8 Rand and my plate was 8 Rand, so my plate was the same price with the price of ox head. So, it went like that it went like that until after corona the price went up to three hundred. So now as I'm talking the ox head is four hundred and I cannot sell a plate for four rand, so which means my profit is dropped much, because of the rising of the price for ox head (FV13).

You know, business is not stable all the time, you know, ups and downs, you know, especially on the around 15 you know that's when the business goes down all kind of things are you know (FV1).

Prices are getting more and more expensive. So, we are trying to maintain, but at the end of the day, I think we're playing a losing game (FV16).

The problems that we face here are the boys that are thieves, especially after selling here on the streets they watch when the stall is busy after we finish for the day, they ask for the money that we made for the day around the corner. There are many problems that we encounter here but we persevere. It is part of life (FV3).

As you can see, our location we are not well covered. Another thing we are on the streets we are not indoors; weather plays a big role. You understand when it is cold no customers when is too hot sometimes customers cannot sit and enjoy meals properly because they are burning (FV16).

I have a lot of challenges; I wish that my business can grow so that I can be alright and see myself with a store or something like that and be well off and sit down. You see here we get rained on; Metro Police chase us things like that. I just wish my business can grow so that I can get a store (FV20).

Migrant vendors from other countries faced challenges of their own:

It's very challenging being a foreign national here doing this business. Every time I have to come here with my passport because police can come at anytime and ask for papers. They don't care even if I am serving a customer I must stop and listen to them. This is very bad for my business (FV12).

The challenges that we encounter are many here in the streets are many, Metro police harass us, we meet criminals that take the money that we sold items for (FV19).

5. Conclusion and Study Limitations

Overall, the findings of this study show that Johannesburg's informal food selling industry is diversified, with a range of experiences, difficulties, and motives. While migrant vendors see informal food vending in urban spaces as a means of escaping financial difficulties from their respective countries of origin, for South African vendors it is a means of providing for their families. While elder vendors place a higher value on stability and family support, younger vendors aim for financial independence. Location (high foot traffic areas), resilience and adaptability were found to be critical factors for the success of informal food vending activities in urban spaces. The interviewees reported common problems, such as growing food prices, legal restrictions, and security threats, highlighting the need for inclusive legislation. The findings demonstrate how crucial informal food vendors are to Johannesburg's economy and the pressing need for stronger support networks and regulatory frameworks.

The implications of this study extend beyond the scope of urban economics to areas such as tourism and hospitality, where a better understanding of the role of informal food vending can inform policy development and urban planning strategies. By examining the intersection of informal food vending with tourism, policymakers and stakeholders can identify opportunities for sustainable economic growth, inclusive tourism, and job creation, particularly in developing nations. The authors believe that in order to maximize the potential of informal food vending it is crucial to foster collaborative relationships between formal and informal sectors, improve urban infrastructure, and promote inclusive governance frameworks. By facilitating the assimilation of informal food vending activities into mainstream strategies for the sustainability of urban spaces, Johannesburg and similar destinations can harness the full potential of this thriving and vibrant economic activity.

The main limitation of the study is the fact it only relies on qualitative data, which cannot be used to provide a more accurate spatial picture of informal food vending in Johannesburg. Without representative quantitative data it was also not possible to conduct a detailed analysis of differences between local versus migrant food vendors that could offer useful insights into the different entrepreneurial strategies, opportunities and challenges experienced by different groups within this sector.

Acknowledgements

This paper is a component of an Honors Dissertation completed at the University of Johannesburg, South Africa. The financial support of the University of Johannesburg is acknowledged.

CRediT Authorship Contribution Statement

Conceptualization: **TRN**, **LM** and **KM**, data curation: **TRN**, **LM** and **KM**, formal analysis: **TRN**, **LM** and **KM**, writing: **TRN**, **LM** and **KM**, review & editing: **TRN**, **LM** and **KM**. All authors have read and agreed to the published version of the manuscript.

Declaration of Competing Interest

None.

References

Amir, A., Salman, D., & Fahmid, I.M. (2018). Social Space Occupation by Street Vendors In Makassar City. *IOSR Journal Of Humanities And Social Science*, *23*(7), 16–21.

Arias, J. (2019). *Informal vendors in Johannesburg, South Africa — University of Pennsylvania*. Penn IUR Series On Informality. https://penniur.upenn.edu/uploads/media/05_Arias.pdf

Azunre, G.A., Amponsah, O., Takyi, S.A., Mensah, H., & Braimah, I. (2022). Urban informalities in sub-Saharan Africa (SSA): A solution for or barrier against sustainable city development. *World Development*, *152*, 1–15. https://doi.org/10.1016/j.worlddev.2021.105782

Benjamin, N.C., Gueye, F., Haughton, D., Mbaye, A.A., Tchakouté, R., & Yepdo, J.M.T. (2020). The Informal Sector in Cameroon: Practices and Productivity. In A.A. Mbaye, S.S. Golub, & F. Gueye (Eds.), *Formal and Informal Enterprises in Francophone Africa: Moving Toward a Vibrant Private Sector* (pp. 209–232). University of Cape Town Press.

Blekking, J., Giroux, S., Waldman, K., Battersby, J., Tuholske, C., Robeson, S.M., & Siame, G. (2022). The impacts of climate change and urbanization on food retailers in urban sub-Saharan Africa. *Current Opinion in Environmental Sustainability*, *55*, 101169. https://doi.org/10.1016/j.cosust.2022.101169

Chikanda, A., & Tawodzera, G. (2017). Front Matter. In A. Chikanda, & G. Tawodzera (Eds.), *Informal Entrepreneurship and Cross-Border Trade between Zimbabwe and South Africa* (p. [i]–[ii]). Southern African Migration Programme. https://doi.org/10.2307/j.ctvh8qz72

City of Joburg. (2022). *Economy and infrastructure*. https://joburg.org.za/about_/Pages/About%20the%20City/About%20the%20City%202/Economy-and-infrastructure.aspx

Cobbinah, P.B. (2023). City in Africa I: Urbanism and informality. *Journal of Urban Affairs*, *45*(3), 297–301. https://doi.org/10.1080/07352166.2023.2171616

Cunningham, W., Newhouse, D., Ricaldi, F., Seuyong, F.T., Viollaz, M., & Edochie, I. (2024). Urban Informality in Sub-Saharan Africa: Profiling Workers and Firms in an Urban Context. *Policy Research Working Paper*, 10703. World Bank Group.

Dube, E.E. (2021). Motivations and livelihood dynamics in the urban informal economy: the case of Dire Dawa City, Eastern Ethiopia. *Bulletin of Geography. Socio-economic Series*, *51*(51), 61–74. https://doi.org/10.2478/bog-2021-0005

Ekobi, G.A. (2022). Street Food Vending on Poverty and Unemployment in the Mahikeng Local Municipality, South Africa. *African Journal of Development Studies*, *12*(4), 289.

Etim, E., & Daramola, O. (2020). The informal sector and economic growth of South Africa and Nigeria: A comparative systematic review. *Journal of Open Innovation: Technology, Market, and Complexity*, *6*(4), 134. https://doi.org/10.3390/joitmc6040134

Gamira, T. (2021). *Informal sector business tourism of Gaborone*. University of Johannesburg.

Hikam, A.S.M. (2011). *An exploratory study on the Somali immigrants' involvement in the informal economy of Nelson Mandela Bay*. Doctoral dissertation. Nelson Mandela Metropolitan University.

International Labour Organisation (ILO). 2022. *World Employment and Social Outlook-Trends 2022*. https://www.ilo.org/research-and-publications/world-employment-and-social-outlook/world-employment-and-social-outlook-trends-2022

Kamalipour, H., & Peimani, N. (2021). Informal urbanism in the state of uncertainty: Forms of informality and urban health emergencies. *Urban Design International*, 26, 122–134. https://doi.org/10.1057/s41289-020-00145-3

Khumalo, N.P., & Ntini, E. (2021). The Challenges Faced by Women Street Vendors in Warwick Junction, Durban. *African Journal of Gender, Society & Development*, *10*(3), 263. https://doi.org/10.31920/2634-3622/2021/v10n3a13

Kushitor, S.B., Alimohammadi, S., & Currie, P. (2022). Narrative explorations of the role of the informal food sector in food flows and sustainable transitions during the COVID-19 lockdown. *PLOS Sustainability and Transformation*, *1*(12), e0000038. https://doi.org/10.1371/journal.pstr.0000038

Lemomo, C.P. (2022). Street Food Vendors and Food Access: a *Comparative Study of Viwandani and Buru-buru Residential Areas in Nairobi, Kenya*. Doctoral dissertation. University of Nairobi.

Magidi, M. & Mahiya, I.T. (2021). Rethinking training: The role of the informal sector in skills acquisition and development in Zimbabwe. *Development Southern Africa*, *38*(4), 509–523. https://doi.org/10.1080/0376835X.2020.1799759

Makoni, L. & Tichaawa, T. (2021). Impact Analysis of the COVID-19 Pandemic on the Informal Sector Business Tourism Economy in Zimbabwe. *African Journal of Hospitality, Tourism and Leisure*, *10*(1), 165–178. https://doi.org/10.46222/ajhtl.19770720-93

Makoni, L., & Rogerson, C.M. (2023). Business tourism in an African city: Evidence from Harare, Zimbabwe. *Studia Periegetica*, *43*(3), 25-48. https://doi.org/10.58683/sp.596

Makoni, L., Rogerson, C.M., & Tichaawa, T.M. (2023), Harare as a Destination For Informal Business Tourism: Perspectives Of The Cross-Border Traders. *GeoJournal of Tourism and Geosites*, *50*(4), 1555–1562. https://doi.org/10.30892/gtg.50434-1152

Makoni, L., Shereni, N.C. and Mearns, K. (2024). Mugabe's policy legacies on urban poverty and informality in Harare, Zimbabwe. *Revista română de geografie politică*, *26*(2), 108-123.

Masuku, B., & Nzewi, O. (2021). The South African informal sector's socio-economic exclusion from basic service provisions: A critique of Buffalo City Metropolitan Municipality's approach to the informal sector. *Journal of Energy in Southern Africa*, *32*(2), 59–71. https://doi.org/10.17159/2413-3051/2021/v32i2a5856

Matinga, M.N., Mohlakoana, N., de Groot, J., Knox, A., & Bressers, H. (2018). Energy use in informal food enterprises: A gender perspective. *Journal of Energy in Southern Africa*, *29*(3), 1–9. https://doi.org/10.17159/2413-3051/2018/v29i3a4357

Moyo, I. & Gumbo, T. (2021). *Urban Informality in South Africa and Zimbabwe*. Springer Nature.

Mthiyane, D.B., Wissink, H., & Chiwawa, N. (2022). The impact of rural–urban migration in South Africa: A case of KwaDukuza municipality. *Journal of Local Government Research and Innovation*, *3*, 9.

Nickanor, N., Kazembe, L.N., Crush, J., & Wagner, J. (2021). Revisiting the African supermarket revolution: The case of Windhoek, Namibia. *Development Southern Africa*, *38*(2), 230–247. https://doi.org/10.1080/0376835X.2020.1819774

Nyuke, S. (2021). *Pentecostal urbanism? Exploring the experiences of immigrants in Johannesburg*. PhD Thesis. University of the Witwatersrand, Johannesburg.

Park-Ross, R. (2018). *Planning for urban food security: leveraging the contribution of informal trade in the case of Bellville Station precinct*. Master Thesis. University of Cape Town.

Quintero-Angel, M., Mendoza-Salazar, D.M., & Martinez-Giron, J. (2022). Food fears and risk of loss of food heritage: A little-explored effect of food modernity and times of pandemic. *International Journal of Gastronomy and Food Science*, *28*, 100499. https://doi.org/10.1016/j.ijgfs.2022.100499

Roa, J. (2023). *Informal Food Markets in Quezon City and Pasay City, Philippines: A Rapid Assessment. Resilient Cities Initiative Research Report*. International Potato Center. https://doi.org/10.4160/9789290606642

Rogerson, C. (2015). Unpacking national policy towards the urban informal economy. In J. Crush, A. Chikanda, C. Skinner (Eds.), *Mean streets: Migration, xenophobia and informality in South Africa* (pp. 229–248). Southern African Migration Programme. https://doi.org/10.2307/j.ctvh8r45r.17

Rogerson, C.M. (2018). *Local economic development in the changing world: The experience of Southern Africa*. Routledge.

Rogerson, C.M., & Letsie, T. (2013). Informal sector business tourism in the global South: Evidence from Maseru, Lesotho. *Urban Forum*, *24*(4), 485–502. https://doi.org/10.1007/s12132-013-9196-y

Rogerson, C.M., Malovha, M.C., & Rogerson, J.M. (2024). New urban tourism in the Global South: The case of inner-city Johannesburg. *Geosport for Society*, *21*(2), 97–114. https://doi.org/10.30892/gss.2103-111

Selwyn, M.X. (2018). *Inclusive Urban Management and Changing Spatial Arrangements: The Case of Street Vendors in Warwick Junction, Durban, South Africa*. Doctoral dissertation. Toyo University.

Sepadi, M.M., & Nkosi, V. (2023). Personal PM2. 5 Exposure Monitoring of Informal Cooking Vendors at Indoor and Outdoor Markets in Johannesburg, South Africa. *International Journal of Environmental Research and Public Health*, *20*(3), 2465. https://doi.org/10.3390/ijerph20032465

Sinyolo, S., Jacobs, P., & Maila, M. (2023). Women informal food traders in South Africa during COVID-19: more vulnerable, yet given least assistance. *Human Science Research Council*, *20*(3), 12–15.

Skinner, C., & Watson, V. (2021). Planning and informal food traders under COVID-19: The South African case. *Town Planning Review*, *92*(3), 301–307. https://doi.org/10.3828/tpr.2020.38

Statistics South Africa. (2021). Improving lives through data ecosystems, Statistics South Africa. https://www.statssa.gov.za/?m=2021

Tawodzera, G., & Crush, J. (2019). *Inclusive Growth and the Informal Food Sector in Cape Town, South Africa*. Hungry Cities Partnership. https://hungrycities.net/report/inclusive-growth-and-the-informal-food-sector-in-cape-town-south-africa/

Tawodzera, G. (2022). Food Security in Epworth, Zimbabwe. *Africa Development*, *47*(3), 301–328.

Tawodzera, G. (2023). The role of the informal sector in Epworth's food system, Zimbabwe. In L. Riley, & J. Crush (Eds.), *Transforming urban food systems in secondary cities in Africa*, 85–102. https://doi.org/10.1007/978-3-030-93072-1_5

Thomas, G. (2016). Promoting gender equality: Michelle Bachelet and formal and informal institutional change within the Chilean presidency. In G. Waylen (Ed.), *Gender, institutions, and change in Bachelet's Chile* (pp. 95–120). Palgrave Macmillan US. https://doi.org/10.1057/9781137501981_5

Timothy, D., & Teye, V.B. (2005). Informal sector business travelers in the developing world: A borderlands perspective. *The Journal of Tourism Studies*, *16*, 82–92.

United Nations Conference on Trade & Development. (2021). *Covid-19 and tourism: Assessing the economic consequences*. United Nations.

Wegerif, M.C., & Kissoly, L. (2022). Perspective from an African City. Food Market Governance in Dar es Salaam. In A. Moragues-Faus, J.K. Clark, J. Battersby, & A. Davies (Eds.), *Routledge handbook of urban food Governance*. Routledge. https://doi.org/10.4324/9781003055907

Wegerif, M.C. (2020). "Informal" food traders and food security: experiences from the Covid-19 response in South Africa. *Food Security*, *12*(4), 797–800. https://doi.org/10.1007/s12571-020-01078-z

Zack, T., & Landau, L.B. (2022). An enclave entrepôt: The informal migration industry and Johannesburg's socio-spatial transformation. *Urban Studies*, *59*(11), 2333–2351. https://doi.org/10.1177/00420980211012632

Zondi, L.P., & Magwaza, M.N. (2023). Women Taking Agency through Feminized Migration Patterns and Remittances: Socio-Economic Experiences of Migrant Street Vendors, Pietermaritzburg, Kwazulu-Natal-South Africa. *Advances in Anthropology*, *13*(1), 29–40. https://doi.org/10.4236/aa.2023.131003

Analiza nieformalnej branży gastronomicznej w Johannesburgu

Streszczenie. Przedstawiona w artykule analiza nieformalnej branży gastronomicznej w Johannesburgu opiera się na danych empirycznych zebranych podczas wywiadów przeprowadzonych z 25 sprzedawcami artykułów spożywczych i posiłków działającymi na terenie miasta. Informacje przekazane przez respondentów ukazują złożoną sieć nieformalnej działalności gospodarczej związanej ze sprzedażą jedzenia, która odbywa się w przestrzeniach miejskich, w szczególności w punktach takich jak główne węzły komunikacyjne i inne miejsca użyteczności publicznej. Autorzy zwracają uwagę na kwestie zarządzania miastem i promowania zrównoważonego rozwoju miejskiego, które powinny być uwzględniane przez urbanistów w celu tworzenia bardziej inkluzywnych strategii, wspierających nieformalnych sprzedawców żywności poprzez uznanie istotnej roli nieformalnej branży gastronomicznej dla całej gospodarki miejskiej.

Słowa kluczowe: nieformalna sprzedaż żywności, przestrzenie miejskie, Johannesburg, Republika Południowej Afryki

Studia
Periegetica
2(46)/2024

ISSN 2658-1736, https://journals.wsb.poznan.pl/index.php/sp
s. 135–156, https://doi.org/10.58683/sp.2022

STANLEY KAGISHO[a], ERICA SAO JOAO[b]

Sustainability-Oriented Resilience and Regenerative Adaptations in the Hospitality Industry: Lessons from Gauteng

Abstract. The South African hospitality sector faces significant challenges, including economic instability, climate change, and evolving consumer preferences. To effectively address these issues, hotels must adopt innovative resilience and regenerative strategies. This study is based on insights from resilience theory, service-dominant logic (SDL), and ecological modernisation theory. To find out how these challenges are addressed in practice, the authors conducted semi-structured interviews with hotel managers in the province of Gauteng to collect data for an in-depth thematic analysis. Examples of resilience strategies mentioned by the interviewees include effective crisis management, income diversification, and building robust community partnerships. Asked about regenerative practices, the respondents listed waste reduction, enhancing biodiversity conservation, and investing in sustainable infrastructure. These practices correspond to Sustainable Development Goals (SDGs) 9 and 1, which target the development of resilient infrastructure and poverty eradication. The authors advocate for a holistic approach to hospitality management, which integrates innovation, active community engagement, and environmental stewardship, fostering meaningful and enduring advancements within the industry.

Keywords: hospitality, resilience, regenerative adaptations, sustainable development goals

Article history. Submited 2024-11-20. Accepted 2024-12-13. Published 2025-01-08.

1. Introduction

The hospitality industry in South Africa plays a critical role in the nation's economy by driving tourism, creating employment, and fostering cultural exchange. However, this sector is also vulnerable, facing considerable challenges. Rapidly evolving

[a] School of Tourism and Hospitality, College of Business and Economics, University of Johannesburg, stanleykagisho@gmail.com, https://orcid.org/0000-0002-0623-6458
[b] Corresponding author, School of Tourism and Hospitality, College of Business and Economics, University of Johannesburg, ericasj@uj.ac.za, https://orcid.org/0000-0002-6603-4030

consumer preferences, economic pressures, and environmental concerns such as water shortages, climate change, and frequent power outages necessitate an adaptive and forward-thinking approach (Erol et al., 2024). In response to these pressures, hotels are increasingly adopting innovative sustainability strategies that not only mitigate their immediate risks but also contribute to their long-term viability. Recognising the need for resilience and sustainability, more and more hotels implement practices that promote environmental stewardship, social responsibility, and operational adaptability (Moneva, Bonilla-Priego & Ortas, 2020).

The vulnerability of the South African hospitality industry to external shocks, especially the recent COVID-19 pandemic and ongoing load shedding[1], highlights the urgency of building resilience (Booyens et al., 2024). These disruptions not only impact guest satisfaction but also affect the financial stability of hotels and their ability to sustain operations (Sobaih et al., 2021). To address these challenges, hotels adopt resilience and regenerative practices that not only safeguard their business operations but also contribute to broader sustainability goals (Achmad & Yulianah, 2022). The goal of resilience practices is to strengthen a business's ability to recover from and adapt to these disturbances or disruptions, while regenerative practices aim to restore and enhance the social and ecological systems within which they operate (Bellato, Frantzeskaki & Nygaard, 2023). This dual focus allows hotels to transform challenges into opportunities, fostering innovation and collaboration across the industry.

Therefore, the following article investigates how hotels' resilience and regenerative adaptations enhance sustainability in the hospitality industry. The article also features a comprehensive overview of specific resilience and regenerative strategies within the hospitality industry, together with an empirical study into the effectiveness of these strategies, the spread of regenerative tourism and the promotion of sustainability in the hospitality sector. By analysing these strategies, the study provides actionable insights for stakeholders seeking to balance operational efficiency with environmental and social imperatives.

By fostering environmental stewardship, encouraging community involvement, and educating guests on sustainable practices, hotels can drive long-term, regenerative change. This approach aligns with global sustainability objectives, including the United Nations Sustainable Development Goals (SDGs) 9 and 12, which focus on fostering resilient infrastructure, responsible consumption, and production patterns (United Nations, 2015).

[1] The term used to describe South Africa's energy crisis, which is manifested by nation-wide scheduled blackouts of electricity supply.

2. Literature Review

This literature review focuses on the theoretical foundations and empirical studies that underpin the resilience strategies adopted by hotels. It examines how hotels can use these strategies to address environmental, social, and economic challenges while enhancing their sustainability. The hospitality industry in South Africa is a major economic contributor, attracting global tourists and providing significant employment. However, it faces challenges like economic fluctuations, resource shortages, and climate impacts, which threaten its sustainability (Rogerson & Rogerson, 2020). Given South Africa's susceptibility to drought and reliance on coal energy, resilient and sustainable practices are increasingly critical. Hotels are now focusing on community involvement and eco-friendly approaches to create lasting value for both local communities and the environment (Legrand, Chen & Laeis, 2022).

The hospitality industry's pursuit of sustainability and resilience requires a comprehensive understanding of the theoretical foundations that inform adaptive strategies. This is why the following study relies on three complementary frameworks — resilience theory, service-dominant logic (SDL), and ecological modernisation theory (EMT) — to analyse how hotels in South Africa can adapt to sustainability challenges while fostering regenerative tourism practices.

2.1. Theoretical Foundations of Resilience

The concept of resilience has attracted increasing attention in the hospitality sector, especially given the growing unpredictability of the economic and environmental landscape. Each of the three main theories covered in this review offers significant insights into sustainable hotel practices. Resilience is the ability of a system to withstand shocks, bounce back from setbacks, and adjust to change (Zhang, Xie & Huang, 2024a). In the hospitality industry, resilience allows hotels to continue operating in the face of calamities, such as pandemics, natural disasters, and economic downturns. This flexibility is particularly important for hotels in high-risk areas like South Africa, where recurring environmental issues necessitate proactive measures to guarantee sustainability and business continuity (Carty, 2021).

There are a number of ways in which hotels can incorporate resilience into their strategic framework. For instance, they can develop contingency plans and implement risk management strategies in order to be better prepared to respond to crises swiftly. By conducting regular vulnerability assessments and scenario planning, hotel management can identify potential threats and create effective responses. Such preparations not only safeguard operational stability but also enhance stakeholder confidence, ensuring that guests and employees feel secure even in uncertain times (McCarroll, LaVanchy & Kerwin, 2024).

The focus of service-dominant logic (SDL) is on how organisations and their stakeholders, such as visitors, staff, and communities interact to co-create value (Gallarza, Gil-Saura & Arteaga-Moreno, 2023). SDL offers a useful framework for understanding how stakeholder collaboration can improve hotel resilience. By actively engaging with stakeholders, hotels can foster a culture of sustainability that permeates their operations, enabling them to respond effectively to challenges. This involvement may take various forms, including joint sustainability initiatives, feedback mechanisms, and community partnerships. In addition to fortifying internal procedures, hotels also co-create resilience with their broader network of stakeholders by educating employees and involving patrons in sustainable practices. This collaborative approach enhances operational efficiency and promotes a shared responsibility towards environmental stewardship among all parties involved (Roxas, Rivera & Gutierrez, 2020). Moreover, SDL highlights the importance of experiential value, suggesting that guests are more likely to return to hotels that demonstrate a commitment to sustainability. This insight implies that marketing sustainable practices can enhance brand loyalty and create a competitive advantage. By showcasing their commitment to environmental stewardship, hotels can attract eco-conscious consumers, thus turning sustainability into a market differentiator (Bernard & Nicolau, 2022).

According to Choudhary and Sharma (2024), ecological modernisation theory (EMT) explains how technical innovation can be used to resolve environmental challenges. By utilising eco-friendly technologies, such as waste reduction strategies, renewable energy systems, and effective water management techniques, hotels can strike a balance between environmental responsibility and financial sustainability. In the light of EMT, hotels can enhance their sustainability without compromising profitability, particularly through the adoption of technological innovations that reduce resource consumption and operational costs. For instance, implementing smart building technologies can lead to substantial energy savings, thereby lowering operational expenses and reducing the hotel's carbon footprint.

The integration of SDL and EMT provides a comprehensive framework for understanding resilience tactics in the hospitality sector. While EMT emphasises the value of innovation in addressing environmental concerns (Ali et al., 2022), SDL stresses the critical role of stakeholder engagement in fostering a resilient business model (Satar et al., 2024). Resilience theory adds another layer by highlighting the need for adaptability in the face of ever-changing market conditions and environmental challenges (Alonso et al., 2022). Collectively, these theories provide convincing arguments that pursuing sustainability and resilience is not merely a business necessity; it is essential for the long-term viability of the hospitality industry.

By prioritising collaboration, innovation, and adaptability, hotels can build a more robust framework to navigate the complexities of the modern hospitality landscape, ensuring that they remain competitive while contributing positively to their communities and the environment (Kuo, Fang, & LePage, 2022). Additionally, all of these theories support the idea that sustainability should be embedded in the corporate culture of hotels and should guide decision-making processes and operational strategies. The convergence of resilience theory, SDL, and EMT creates a theoretical framework that can help to understand the sustainable practices of hotels. By taking into account insights provided by these theories, the hospitality sector can proactively address the challenges posed by an unpredictable environment, ensuring both short-term resilience and long-term sustainability. The following sections cover six key domains of resilience: infrastructure, energy, water, social, economic, and environmental, each associated with specific strategies to strengthen the industry's adaptability and sustainability.

2.2. Energy Resilience and Technological Innovation

In the South African hospitality industry, energy resilience has gained importance, particularly in areas with unstable electricity supplies. Hotels are using alternative energy sources, like solar power, to maintain continuous service and lower their carbon footprints in response to frequent power outages and load shedding (Cheng et al., 2023). In many areas solar energy is a viable option, thanks to many days of sunshine. Hotels can lessen their dependency on traditional power networks and continue to operate during blackouts by making solar power investments (Salehi et al., 2021). According to EMT, which advocates technological innovation to achieve both economic and environmental resilience, solar energy offers not only long-term cost savings but also supports environmental sustainability (Choudhary & Sharma, 2024). Given that the province of Gauteng receives over 70% of the maximum possible sunshine annually, equating to more than 8 hours per day on average, the region is well-suited for solar energy investment, particularly compared to regions like the east coast, which typically receives less than 55% (South African Weather Services, 2021).

In addition to renewable energy, many hotels are using energy-efficient technologies like LED lighting and smart energy management systems (Dhirasasna, Becken & Sahin, 2020). Optimising resource utilisation and lowering energy consumption enhances operational efficiency (Filimonau & Magklaropoulou, 2020). By adopting these technologies hotels not only reduce their environmental impact but also contribute to their long-term sustainability (Chan, 2021). However, the high upfront cost of renewable energy systems can be a deterrent for many hotels, despite their many advantages. The wider use of these technologies may be aided by government incentives like tax breaks and subsidies for investments in renewable energy. According to a study by Gamage, Pyke and De Lacy (2024), a supporting policy framework is necessary in order to encourage more hotels to invest in energy resilience measures.

2.3. Water Management Strategies

Water scarcity is a major problem for hotels, especially for those located in areas with a pre-existing water scarcity. Hotels require a lot of water for landscaping, housekeeping, and guest services, therefore water management is an essential component of their sustainability plans. To solve these issues, creative solutions are being used, such as rainwater collecting, greywater recycling, and water-efficient fixtures (Seow et al., 2024). Hotels can repurpose water from sinks, showers, and laundry for non-potable uses like toilet flushing and irrigation by recycling greywater. With this technique, water consumption is drastically decreased without sacrificing visitor comfort (Jones & Comfort, 2020). Another good tactic, especially in drought-prone areas, is rainwater harvesting. Hotels can augment their water sources during times of scarcity by collecting and storing rainwater. Resilience theory supports these water conservation efforts, as it stresses the importance of adaptability in response to environmental challenges (Traskevich & Fontanari, 2023). Water management practices not only enhance hotels' resilience to water shortages but also contribute to broader sustainability goals by reducing dependency on municipal water supplies (Sandang & Cole, 2023).

2.4. Social Resilience and Human Resource Development

Development of human resources and the level of community involvement are directly related to social resilience of hotels. A study by Sambyal, Rishi, Mavi and Marwaha (2024) found that having qualified and flexible employees is essential to ensuring that hotel operations continue in the event of an emergency. According to Service-Dominant Logic, interactions with staff, visitors, and other stakeholders co-create resilience (Shulga, Busser & Chang, 2022). This means that training employees is essential to enhancing organisational resilience. Employee skills and hotel resilience are improved by training programs that emphasise sustainable practices including waste minimisation, energy saving, and environmentally friendly operations. Contributions to sustainable projects are more likely to come from engaged staff; in addition, they enhance customer satisfaction and organisational performance. Apart from staff training, hotels that actively engage with their local communities build stronger networks of support. By fostering local partnerships and contributing to community welfare, hotels enhance their social capital. Studies indicate that hotels that are well-integrated into their communities can rely on local support during crises, further strengthening their resilience (Sofyan et al., 2022).

2.5. Financial Planning for Economic Resilience

Economic resilience is a key aspect of hotel sustainability. Effective financial planning allows hotels to maintain stability during times of economic uncertainty. In their 2022 study Acampora, Preziosi, Lucchetti and Merli found that hotels with well-structured budgets and financial strategies are better equipped to invest in long-term sustainability projects. Many hotels are turning to sustainability-linked financing options, such as green bonds or sustainability-linked loans. These financing mechanisms incentivise hotels to meet specific sustainability targets while providing access to capital at favourable rates. By linking financial goals with environmental objectives, hotels can improve their economic resilience while advancing their sustainability agendas (Spencer et al., 2023).

Internal financial strategies, such as allocating budgetary resources for sustainability initiatives, also contribute to a hotel's economic resilience. By investing in energy-efficient infrastructure, waste reduction programs, and other sustainable practices, hotels can reduce operational costs while building long-term resilience (Melián-Alzola, Fernández-Monroy & Hidalgo-Peñate, 2020). EMT underscores the importance of such investments, arguing that sustainable business practices create a competitive advantage and contribute to economic growth (Wang, 2022). Hotels that prioritize sustainability in their financial planning are better positioned to weather economic challenges and maintain profitability in the long run.

2.6. Environmental Practices and Sustainability

Environmental sustainability has become a central focus for hotels, as consumers increasingly demand eco-friendly practices and regulatory bodies impose stricter environmental standards. Khater, Ibrahim, Sayed and Faik (2024) report that hotels are implementing various environmental strategies, such as waste reduction, recycling programs, and the use of biodegradable materials, to minimise their environmental footprint. Waste reduction programs, including recycling initiatives, are integral to hotels' environmental strategies. These efforts not only reduce waste sent to landfills but also contribute to broader sustainability goals. In addition to waste reduction, hotels are also incorporating biodegradable materials, such as eco-friendly packaging and toiletries, into their operations. This reduces environmental harm and appeals to environmentally conscious guests, enhancing brand reputation and customer loyalty (Salem et al., 2023). These environmental practices are consistent with the principles of EMT, which suggests that environmental sustainability can be achieved through innovation and modernization without sacrificing economic performance. Hotels that adopt eco-friendly practices often find themselves more competitive in the market, attracting guests who prioritize sustainability (Chung, 2020).

2.7. Infrastructure and Climate Resilience

Hotels are increasingly investing in climate-resilient infrastructure to protect against the growing frequency of extreme weather events. Hotels located in regions prone to hurricanes, floods, or heatwaves are adopting innovative building designs and materials that are resistant to such conditions (Wong et al., 2023). Climate-resilient infrastructure, such as energy-efficient building materials, flood-resistant designs, and enhanced ventilation systems, enables hotels to withstand natural disasters while minimizing recovery times. By investing in infrastructure that can endure environmental stressors, hotels ensure their operational continuity and enhance their overall resilience (Shrestha & L'Espoir Decosta, 2023).

2.8. Regenerative Practices

Regeneration goes beyond traditional sustainability, focusing on restoring and improving environmental, social, and economic systems (Bellato & Cheer, 2021). While sustainability minimises harm, regenerative practices aim for net-positive outcomes, fostering thriving environments. In the hospitality industry, these strategies are implemented to revitalise ecosystems, strengthen community well-being, and drive innovative economic growth (Hajarrahmah, McGehee, & Soulard, 2024). Rooted in systems thinking, they recognise the interconnectedness of ecological, social, and economic systems (Kreb & Zwaal, 2024), emphasising resource reuse, biodiversity restoration, and local reinvestment. Regenerative tourism, for instance, promotes positive contributions to ecosystems and cultural heritage, addressing resource depletion caused by conventional tourism models (Paddison & Hall, 2024). Hotels can adopt regenerative practices, such as ecosystem restoration through reforestation, sustainable landscaping, and biodiversity support (Legrand et al., 2024). In order to succeed, regenerative practices require community engagement, with programmes involving local stakeholders in decision-making, training, and sharing economic benefits (Dangi & Petrick, 2021). Circular economy principles, including closed-loop systems for waste and water management, enhance sustainability by reducing resource extraction and encouraging reuse (Rodríguez, Florido, & Jacob, 2020). Examples include Six Senses Resorts, which implement regenerative agriculture to supply organic produce and restore soil health (Six Senses, 2021), and Japan's Hoshinoya Fuji Hotel, which involves guests in forest restoration (Becken & Coghlan, 2024). These initiatives showcase how regenerative adaptations can redefine sustainability in hospitality. However, scholarly focus remains limited, often highlighting isolated cases rather than cohesive frameworks for broader adoption. This study addresses this gap by exploring resilience and regenerative adaptations to enhance hotel sustainability and economic stability.

2.9. Emerging Technologies for Resilience and Sustainability

Emerging technologies like AI and blockchain hold great promise for enhancing resilience and sustainability in the hospitality sector. AI optimises energy usage through predictive analytics, reducing waste and costs with smart systems for thermostats and lighting (Qi, 2024). It also personalises guest experiences by promoting eco-friendly activities and meals (Milton, 2024). Blockchain ensures transparency in supply chains, tracks sustainable sourcing, and records carbon offset programmes, fostering trust and accountability (Erol et al., 2022; Gössling et al., 2023). These technologies streamline resource allocation and secure communication during crises like natural disasters (Rashideh, 2020). Despite their potential, adoption remains limited, which calls for further exploration within resilience and regenerative frameworks (Prayag et al., 2024).

3. Data and Methods

3.1. Data Collection

The empirical part of this study is based on data collected during 15 semi-structured interviews conducted in May and June 2024. In order to facilitate the identification of important themes pertaining to the research topics, every interview was recorded, transcribed and analysed.

3.2. Target Population and Sampling

The interviews were conducted with hotel managers of three- to five-star hotel in South Africa's Gauteng province, the wealthiest one in the country, containing the country's largest city, Johannesburg, considered its financial hub. The interviewees were selected by convenience purposive sampling to ensure that they possessed the necessary knowledge and experience to contribute to the study's objectives. They were managers of various departments, such as finance, marketing, and maintenance.

Table 1. Interviewee profiles

Id	Sex	Position	Age	Education	Years of experience
1	Male	General manager	52	Higher (Bachelor of Business Management)	20
2	Female	Operations manager	41	Higher (Honours in Tourism and Hospitality Management)	12
3	Male	Front office manager	36	Higher (Diploma in Tourism Management)	9
4	Female	Food & beverage manager	45	×	15
5	Male	Sales and marketing manager	38	×	10
6	Female	Human resources manager	48	Higher (Bachelor of Human Resources)	11
7	Male	Security manager	50	×	18
8	Female	Executive housekeeper	42	Higher (Diploma in Hospitality management)	13
9	Male	Maintenance manager	37	Higher (Bachelor of Engineering)	11
10	Male	General manager	43	×	16
11	Female	Operations manager	×	Higher (Master of Tourism and Hospitality Management)	7
12	Female	Rooms division manager	39	Higher (Master of Business Administration)	12
13	Male	Executive chef	46	Higher (Culinary Arts Diploma)	19
14	Female	Housekeeping manager	34	Secondary (Matric Equivalent to Secondary Education)	8
15	Male	IT manager	40	Higher (Bachelor of Information Technology)	14

Source: Authors' compilation

3.3. Data Analysis

Qualitative data from the interviews were subjected to thematic analysis. After coding key pieces of information, broader themes such as 'water-saving technologies,' 'staff training,' and 'economic resilience' were identified. After reviewing and refining, the themes were clearly defined and linked back to the research questions and the relevant literature.

3.4. Ethical Considerations

Ethical approval for the study was obtained from the University of Johannesburg's Ethics Committee, within the School of Tourism and Hospitality. Informed consent was obtained from all Interviewees, ensuring they understood the nature of the study and their rights, including Interviewee anonymity and the right to withdraw from the study at any stage.

4. Results and Discussion

The findings of this study reveal that hotels in South Africa are adopting various resilience and sustainability strategies to address challenges like energy shortages, water scarcity, and economic instability. These strategies are interpreted in the light of resilience theory, service-dominant logic (SDL), and ecological modernisation theory, highlighting their broader implications for the hospitality industry.

4.1. Energy Resilience

In order to boost their energy resilience hotels are investing in renewable energy, particularly solar, to counter frequent power outages, as evidenced by the following comments:

- *Our solar energy investment ensures that we can continue operations during load shedding.* (Interviewee 1)
- *Solar power has reduced our dependency on the grid, especially during peak demand.* (Interviewee 2)
- *With solar, we not only maintain service quality during outages but also save on energy costs.* (Interviewee 5).

These practices are consistent with resilience theory, which emphasises adaptability in resource management during crises (Zhang, Xie & Huang, 2024b), and EMT, which promotes technological innovation to address environmental issues (Choudhary & Sharma, 2024). Furthermore, by integrating solar energy with regenerative practices, such as energy sharing within local communities, hotels can foster mutual resilience and strengthen community bonds. Exploring hybrid energy solutions, such as combining solar with wind or battery systems, could further enhance energy security (Abdelhady, 2023).

4.2. Water Resilience

Water-saving measures have become essential in addressing water scarcity, as indicated by the following comments:

- *We've installed water-efficient systems and regularly monitor consumption.* (Interviewee 3)
- *Our greywater recycling systems have significantly reduced our water usage.* (Interviewee 4)
- *We rely heavily on rainwater harvesting during dry spells to ensure our water needs are met.* (Interviewee 15)

These strategies are consistent with resilience theory, which emphasises adaptability amid environmental challenges (Seow et al., 2024), and with EMT, which supports technological innovations that reduce environmental impact while maintaining efficiency (Cheng et al., 2023). Hotels are also adopting regenerative water practices, such as contributing to local watershed restoration initiatives, which not only enhance water availability but also benefit surrounding ecosystems. Implementing additional measures, like expanded rainwater harvesting systems, would further enhance water resilience, especially during drought periods (Taghipour et al., 2024).

4.3. Social Resilience

Social resilience strategies, including staff training and community engagement, was found to be essential for maintaining operational flexibility, as can be seen in the following comments:

- *Ongoing staff development ensures employees are equipped to handle crises.* (Interviewee 5)
- *Engaging with local communities strengthens relationships, helping us navigate crises collaboratively.* (Interviewee 12)
- *Community involvement is essential because locals support us in times of need.* (Interviewee 6)

This is consistent with SDL, as value co-creation between the hotel and employees fosters resilience (Sambyal et al., 2024), while according to resilience theory, social adaptability is crucial in overcoming disruptions (Zhang, Xie & Huang, 2024a). Incorporating regenerative practices, such as empowering local communities through skills development and co-creating tourism experiences, enhances social resilience while fostering inclusive economic opportunities. By investing in staff development and community ties, hotels create a resilient workforce capable of adapting to unexpected situations.

4.4. Economic Resilience

As part of financial planning hotels were found to allocate resources to sustainability projects to secure long-term economic stability. Here are a couple of comments that illustrate this aspect:

- *We dedicate part of our budget specifically for sustainability projects to maintain economic stability.* (Interviewee 7)
- *Our sustainability initiatives go hand in hand with careful cost management to ensure we remain profitable.* (Interviewee 11)

They are consistent with resilience theory, which emphasises proactive financial planning to withstand economic shocks (Gamage et al., 2024). Additionally, according to EMT, economic investments are essential for achieving both sustainability and resilience (Spencer et al., 2023). Adopting regenerative economic practices, such as reinvesting a portion of profits into local communities or environmental conservation efforts, can create a positive cycle of mutual benefit between the hotel and its surroundings. Diversifying revenue streams through eco-tourism initiatives would further enhance economic resilience by catering to a growing market of sustainability-minded guests.

4.5. Environmental Resilience

The interviews revealed that hotels were increasingly adopting practices like waste reduction and the use of biodegradable products to enhance environmental resilience.

- *We focus on reducing waste through recycling initiatives and using biodegradable products wherever possible.* (Interviewee 8)
- *Achieving our zero-waste-to-landfill goal has driven us to innovate in waste management.* (Interviewee 3)
- *We collaborate with suppliers to minimise packaging waste.* (Interviewee 6)

These practices align with EMT, which emphasises innovation to reduce environmental harm (Khater et al., 2024), and resilience theory, highlighting environmental strategies that mitigate risks (Salem et al., 2023). Regenerative practices, such as converting organic waste into compost for local farms or integrating circular economy principles, further enhance environmental resilience by turning waste into valuable resources. Waste reduction initiatives not only contribute to environmental preservation but also provide financial savings by reducing disposal costs.

4.6. Infrastructure Resilience

In an effort to improve their infrastructure resilience, hotels are investing in energy-efficient buildings and water-saving systems to mitigate the impacts of extreme weather events, as indicated by the following comments:

- *Our infrastructure upgrades ensure continued operations even during adverse weather conditions.* (Interviewee 9)
- *Building resilience into our physical infrastructure protects us against future climate uncertainties.* (Interviewee 2)
- *Investing in strong building materials and energy-efficient designs was necessary to handle unexpected weather challenges.*(Interviewee 5)

These practices are also consistent with resilience theory, which stresses the importance of physical robustness in responding to environmental challenges (Wong et al., 2023). According to EMT, resilience can also be promoted by integrating sustainable infrastructure practices into business models (Shrestha & L'Espoir Decosta, 2023). Additionally, implementing regenerative design principles, such as incorporating green roofs or constructing using locally sourced materials, creates dual benefits of reducing environmental impact while enhancing infrastructure sustainability.

In summary, hotels in Gauteng are adopting various strategies in order to enhance their energy, water, social, economic, environmental, and infrastructure resilience. By taking proactive measures in these areas, they not only manage immediate challenges but also lay the foundation for long-term sustainability and growth, aligning with global standards and responding to both environmental and societal expectations.

As can be seen in Figure 1, hotels are adopting a range of resilience strategies to enhance various dimensions of sustainability. Environmental resilience is promoted through waste reduction and sustainable procurement, as highlighted by participants who emphasized efforts in recycling and sourcing eco-friendly products. Energy resilience is strengthened by improving efficiency and integrating renewable energy, with interviewees mentioning investments in solar energy

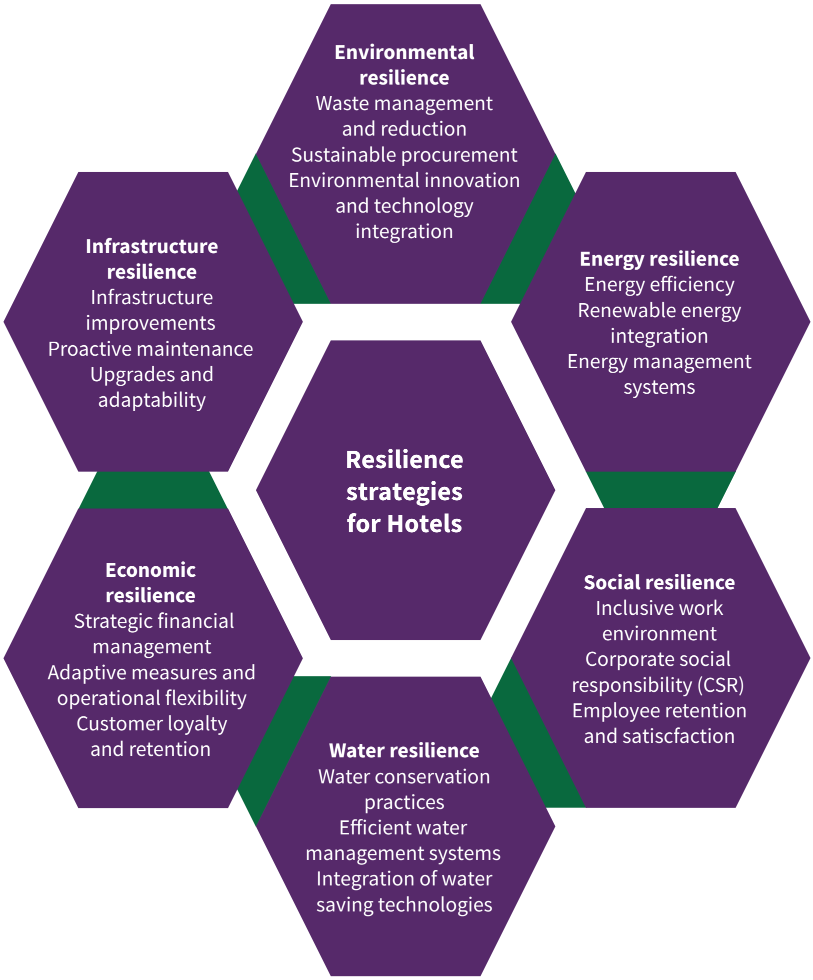


Figure 1: Key resilience strategies undertaken by Gauteng hotels
Source: Authors' compilation

systems to manage load-shedding challenges. Infrastructure resilience involves proactive maintenance and adaptability, ensuring facilities are well-prepared for future challenges. Social resilience is achieved by fostering inclusive work environments, prioritising corporate social responsibility, and enhancing employee satisfaction, as noted by participants who highlighted initiatives to support staff retention and development. Economic resilience is driven by strategic financial management and operational flexibility, with interviewees mentioning adaptive measures like cost-saving initiatives during periods of financial uncertainty. Water resilience focuses on conservation practices and the use of efficient water management systems, such as the installation of water-saving technologies mentioned by participants. Together, these strategies illustrate a comprehensive approach to building resilience in hotels, positioning them to operate sustainably and adapt to an evolving hospitality landscape.

5. Conclusion

5.1. Practical Implications

This study explores the importance of resilience and regenerative strategies in enhancing sustainability within the South African hospitality industry, addressing the sector's critical need for adaptability amid economic, environmental, and social challenges. The qualitative data from the interviews provide key insights into how hotels try to improve operational resilience, environmental stewardship, and community relations, highlighting the sector's role in advancing sustainable tourism.

Therefore, hotels' resilience requires effective crisis management, energy resilience, and innovative adaptation strategies. As already noted, hotels in South Africa face unique operational pressures from frequent power outages and water scarcity, making energy resilience a priority. Renewable energy initiatives, such as solar power and energy-efficient technologies, are proving instrumental in reducing reliance on traditional energy sources and mitigating disruptions. In addition to fostering environmental responsibility, these investments promote financial stability over the long term by reducing energy costs and minimising environmental impact.

This study emphasises the importance of diversifying income sources and building strong community relationships, which, according to SDL, are essential to both resilience and regeneration. By partnering with local businesses, hotels can boost local economic resilience while fostering a sense of community engagement. The collaborative creation of value, positioning stakeholders, employees, and guests are key contributors to hotels' sustainability goals. Another effective approach consists in engaging guests and educating them about sustainability practices because informed guests are more likely to adopt environmentally friendly behaviours, contributing to the hotel's regenerative impact.

Regenerative practices within the hospitality sector emphasise not only environmental considerations but also social and economic well-being. The interviews demonstrate that waste reduction, resource efficiency, and support for biodiversity are fundamental to fostering a regenerative approach to hospitality management. By investing in sustainable infrastructure and waste reduction strategies, hotels do their part in contributing towards Sustainable Development Goals (SDGs) 9 and 12, which prioritise resilient infrastructure and responsible consumption. The adoption of these practices represents a shift from traditional sustainability efforts toward regeneration, where hotels not only reduce harm but actively work to restore and enrich the environments they operate in.

Based on the literature review and the empirical findings, the authors advocate for an integrated approach to hospitality management that incorporates resilience, regeneration, and community involvement as core strategies. By adopting regenerative tourism principles, hotels can transcend traditional boundaries, becoming catalysts for environmental restoration and socio-economic development. This approach not only enhances adaptability but also fosters environmental and social well-being while securing long-term profitability. This study contributes to the growing body of literature on sustainable tourism, providing valuable insights for stakeholders in the hospitality industry seeking to navigate complex challenges while fostering a regenerative, community-centred business model. In the future, policy support, stakeholder collaboration, and continuous innovation will be essential in furthering these efforts, ensuring that the South African hospitality sector remains resilient, sustainable, and beneficial to both people and the planet.

6. Limitations

Although this study offers valuable insights, it only reports experiences of selected Gauteng hotels. While it can be argued that strategies employed by hotels in other provinces are similar, the limited amount of qualitative data used in the study may not have revealed other factors affecting resilience and sustainability, such as economic disparities, local regulatory frameworks, and varying community engagement levels. Future research should therefore include representative quantitative data from different regions or case studies for a better understanding of these dynamics. These collective projects will contribute to a more holistic view of the resilience disruptions and adaptations of South African hotels.

CRediT Authorship Contribution Statement

Stanley Kagisho, Erica Sao Joao: conceptualization, data curation, formal analysis, funding acquisition, investigation, methodology, project administration, resources, software, supervision, validation, visualization, writing — original draft, writing — review & editing.

Declaration of Competing Interest

None.

References

Abdelhady, S. (2023). Techno-economic study and the optimal hybrid renewable energy system design for a hotel building with net zero energy and net zero carbon emissions. *Energy Conversion and Management*, 289, 117195. https://doi.org/10.1016/j.enconman.2023.117195

Acampora, A., Preziosi, M., Lucchetti, M.C., & Merli, R. (2022). The role of hotel environmental communication and guests' environmental concern in determining guests' behavioral intentions. *Sustainability*, *14*(18), 11638. http://dx.doi.org/10.3390/su141811638

Achmad, W., & Yulianah, Y. (2022). Corporate social responsibility of the hospitality industry in realizing sustainable tourism development. *Enrichment: Journal of Management*, *12*(2), 1610–1616. https://doi.org/10.35335/enrichment.v12i2.447

Ali, M.B., Quaddus, M., Rabbanee, F.K., & Shanka, T. (2022). Community participation and quality of life in nature-based tourism: Exploring the antecedents and moderators. *Journal of Hospitality* & T*ourism Research*, *46*(3), 630–661. https://doi.org/10.1177/1096348020980094

Alonso, A.D., Bressan, A., Kok, S.K., Sakellarios, N., Vu, O.T.K., O'Shea, M., Koresis, A., Solis, M.A.B., & Santoni, L.J. (2022). Overcoming the unprecedented: Micro, small and medium hospitality enterprises under COVID-19. *International Journal of Hospitality Management*, 103, 103201. https://doi.org/10.1016/j.ijhm.2022.103201

Becken, S., & Coghlan, A. (2024). Knowledge alone won't "fix it": Building regenerative literacy. *Journal of Sustainable Tourism*, *32*(2), 385–401. https://doi.org/10.1080/09669582.2022.2150860

Bellato, L., & Cheer, J.M. (2021). Inclusive and regenerative urban tourism: Capacity development perspectives. *International Journal of Tourism Cities*, *7*(4), 943–961. https://doi.org/10.1108/IJTC-08-2020-0167

Bellato, L., Frantzeskaki, N., & Nygaard, C.A. (2023). Regenerative tourism: a conceptual framework leveraging theory and practice. *Tourism Geographies*, *25*(4), 1026–1046. https://doi.org/10.1080/14616688.2022.2044376

Bernard, S., & Nicolau, J.L. (2022). Environmental certification and hotel market value. *International Journal of Hospitality Management*, *101*, 103129. https://doi.org/10.1016/j.ijhm.2021.103129

Booyens, I., Hoogendoorn, G., Langerman, K., & Rivett-Carnac, K. (2024). Path creation for an electricity transition in South African tourism. *Tourism Geographies*, *26*(2), 194–213. https://doi.org/10.1080/14616688.2023.2274836

Carty, K.S. (2021). Towards a proactive, capabilities-based continuity framework for the hospitality and tourism industry. *Worldwide Hospitality and Tourism Themes*, *13*(3), 418–430. http://dx.doi.org/10.1108/WHATT-01-2021-0020

Chan, E.S. (2021). Why do hotels find reducing their carbon footprint difficult? *International Journal of Contemporary Hospitality Management*, *33*(5), 1646–1667. https://doi.org/10.1108/IJCHM-10-2020-1151

Cheng, Y., Zhu, K., Zhou, Q., El Archi, Y., Kabil, M., Remenyik, B., & Dávid, L.D. (2023). Tourism ecological efficiency and sustainable development in the Hanjiang River Basin: A super-efficiency slacks-based measure model study. *Sustainability*, *15*(7), 6159. https://doi.org/10.3390/su15076159

Choudhary, A., & Sharma, A. (2024). Exploring the Role of Environmental Ethical Consideration in Advancing Green Growth: Perspectives from India. *Asian Journal of Agricultural Extension, Economics* & *Sociology*, *42*(10), 116–129. https://doi.org/10.9734/ajaees/2024/v42i102567

Chung, K.C. (2020). Green marketing orientation: Achieving sustainable development in green hotel management. *Journal of Hospitality Marketing* & *Management*, *29*(6), 722–738. https://doi.org/10.1080/19368623.2020.1693471

Dangi, T.B., & Petrick, J.F. (2021). Enhancing the role of tourism governance to improve collaborative participation, responsiveness, representation and inclusion for sustainable community-based tourism: A case study. *International Journal of Tourism Cities*, *7*(4), 1029–1048. http://dx.doi.org/10.1108/IJTC-10-2020-0223

Dhirasasna, N., Becken, S,. & Sahin, O. (2020). A systems approach to examining the drivers and barriers of renewable energy technology adoption in the hotel sector in Queensland, Australia. *Journal of Hospitality and Tourism Management*, 42, 153–172. https://doi.org/10.1016/j.jhtm.2020.01.001

Erol, I., Neuhofer, I.O., Dogru, T., Oztel, A., Searcy, C., & Yorulmaz, A.C. (2022). Improving sustainability in the tourism industry through blockchain technology: Challenges and opportunities. *Tourism Management*, *93*, 104628. https://doi.org/10.1016/j.tourman.2022.104628

Erol, I., Oztel, A., Dogru, T., Peker, I., Neuhofer, I.O., & Benli, T. (2024). Supply chain resilience in the tourism and hospitality industry: A comprehensive examination of driving and restraining forces. *International Journal of Hospitality Management*, *122*, 103851. https://doi.org/10.1016/j.ijhm.2024.103851

Filimonau, V., & Magklaropoulou, A. (2020). Exploring the viability of a new 'pay-as-you-use' energy management model in budget hotels. *International Journal of Hospitality Management*, *89*, 102538. https://doi.org/10.1016/j.ijhm.2020.102538

Gallarza, M., Gil-Saura, I., & Arteaga-Moreno, F. (2023). Bridging service dominant logic and the concept of customer value through higher order indexes: Insights from hospitality experiences. *European Journal of Tourism Research*, *35*, 3510–3510. https://doi.org/10.54055/ejtr.v35i.3104

Gamage, A., Pyke, J., & De Lacy, T. (2024). Building resilience and sustainable HRM in the visitor economy: An uneasy relationship. *Journal of Hospitality and Tourism Management*, *58*, 497–505. https://doi.org/10.1016/j.jhtm.2023.05.006

Gössling, S., Balas, M., Mayer, M. & Sun, Y.Y. (2023). A review of tourism and climate change mitigation: The scales, scopes, stakeholders and strategies of carbon management. *Tourism Management*, *95*, 104681. https://doi.org/10.1016/j.tourman.2022.104681

Hajarrahmah, D., McGehee, N.G., & Soulard, J. (2024). The road to success: Tourism social entrepreneurs' quest for regenerative tourism. *Annals of Tourism Research*, *108*, 103818. https://doi.org/10.1016/j.annals.2024.103818

Jones, P., & Comfort, D. (2020). The COVID-19 crisis and sustainability in the hospitality industry. *International Journal of Contemporary Hospitality Management*, *32*(10), 3037–3050. https://doi.org/10.1108/IJCHM-04-2020-0357

Khater, M., Ibrahim, O., Sayed, M.N.E., & Faik, M. (2024). Legal frameworks for sustainable tourism: balancing environmental conservation and economic development. *Current Issues in Tourism*, *27*(21), 1–22. http://dx.doi.org/10.1080/13683500.2024.2404181

Kreb, J., & Zwaal, W. (2024). Assessment of regenerative hospitality. *Research in Hospitality Management*, *14*(2), 209–218. https://doi.org/10.1080/22243534.2024.2411978

Kuo, F.I., Fang, W.T., & LePage, B.A. (2022). Proactive environmental strategies in the hotel industry: Eco-innovation, green competitive advantage, and green core competence. *Journal of Sustainable Tourism*, *30*(6), 1240–1261. http://dx.doi.org/10.1080/09669582.2021.1931254

Legrand, W., Chen, J.S., & Laeis, G.C. (2022). *Sustainability in the hospitality industry: Principles of Sustainable Operations*. Routledge.

Legrand, W., Kuokkanen, H., Marucco, F., Hazenberg, S., & Fischer, F. (2024). Survival of the Fittest? A Call for Hospitality to Incorporate Ecology Into Business Practice and Education. *Cornell Hospitality Quarterly*, *65*(1), 68–87. https://doi.org/10.1177/19389655231182083

McCarroll, M.J., LaVanchy, G.T., & Kerwin, M.W. (2024). Tourism resilience to drought and climate shocks: The role of tourist water literacy in hotel management. *Annals of Tourism Research Empirical Insights*, *5*(2), 100147. https://doi.org/10.1016/j.annale.2024.100147

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

Milton, T. (2024). Artificial Intelligence Transforming Hotel Gastronomy: An In-depth Review of AI-driven Innovations in Menu Design, Food Preparation, and Customer Interaction, with a Focus on Sustainability and Future Trends in the Hospitality Industry. *International Journal for Multidimensional Research Perspectives*, *2*(3), 47–61. https://doi.org/10.61877/ijmrp.v2i3.126

Moneva, J.M., Bonilla-Priego, M.J., & Ortas, E. (2020). Corporate social responsibility and organisational performance in the tourism sector. *Journal of Sustainable Tourism*, *28*(6), 853–872. https://doi.org/10.1080/09669582.2019.1707838

Paddison, B., & Hall, J. (2024). Regenerative tourism development as a response to crisis: harnessing practise-led approaches. *Tourism Geographies*, 1–18. https://doi.org/10.1080/14616688.2024.2381071

Prayag, G., Jiang, Y., Chowdhury, M., Hossain, M.I., & Akter, N. (2024). Building dynamic capabilities and organizational resilience in tourism firms during COVID-19: A staged approach. *Journal of Travel Research*, *63*(3), 713–740. https://doi.org/10.1177/00472875231164976

Qi, Y. (2024). Incorporation of artificial intelligence toward carbon footprint management in hotels to create sustainable, green hotel: Mini review. *Tourism Management and Technology Economy*, *7*(1), 51–55. https://dx.doi.org/10.23977/tmte.2024.070107

Rashideh, W. (2020). Blockchain technology framework: Current and future perspectives for the tourism industry. *Tourism Management*, *80*, 104125. https://doi.org/10.1016/j.tourman.2020.104125

Rodríguez, C., Florido, C., & Jacob, M. (2020). Circular economy contributions to the tourism sector: A critical literature review. *Sustainability*, *12*(11), 4338. https://doi.org/10.3390/su12114338

Rogerson, C.M., & Rogerson, J.M. (2020). COVID-19 tourism impacts in South Africa: Government and industry responses. *Geo Journal of Tourism and Geosites*, *31*(3), 1083–1091. http://dx.doi.org/10.30892/gtg.31321-544

Roxas, F.M.Y., Rivera, J.P.R., & Gutierrez, E.L.M. (2020). Mapping stakeholders' roles in governing sustainable tourism destinations. *Journal of Hospitality and Tourism Management*, *459*, 387–398. https://doi.org/10.1016/j.jhtm.2020.09.005

Salehi, M., Filimonau, V., Ghaderi, Z., & Hamzehzadeh, J. (2021). Energy conservation in large-sized hotels: Insights from a developing country. *International journal of hospitality management*, *99*, 103061. https://doi.org/10.1016/j.ijhm.2021.103061

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

Sambyal, R., Rishi, B., Mavi, A.K., & Marwaha, A.S. (2024). Value network partners' perception of co-creation and its impact on their satisfaction. *Journal of Hospitality and Tourism Insights*, *7*(4), 2216–2236. https://doi.org/10.1108/JHTI-10-2022-0500

Sandang, Y., & Cole, S. (2023). Using a human rights approach to improve hotels' water use and sustainability. *Journal of Sustainable Tourism*, *31*(10), 2337–2355. https://doi.org/10.1080/09669582.2022.2108041

Satar, M.S., Rather, R.A., Cheema, S., Parrey, S.H., Ghaderi, Z., & Cain, L. (2024). Transforming destination-based customer engagement to revisit intention through co-creation: findings from SEM and fsQCA. *Tourism Review*, *79*(3), 601–621. https://doi.org/10.1108/tr-10-2022-0489

Seow, A.N., Choong, Y.O., Low, M.P., Ismail, N.H., & Choong, C.K., 2024. Building tourism SMEs' business resilience through adaptive capability, supply chain collaboration and strategic human resource. *Journal of Contingencies and Crisis Management*, *32*(2), 12564. http://dx.doi.org/10.1111/1468-5973.12564

Shrestha, R.K., & L'Espoir Decosta, P. (2023). Developing dynamic capabilities for community collaboration and tourism product innovation in response to crisis: Nepal and COVID-19. *Journal of Sustainable Tourism*, *31*(1), 168–186. https://doi.org/10.1080/09669582.2021.2023164

Shulga, L.V., Busser, J.A., & Chang, W. (2022). Relational energy and co-creation: effects on hospitality stakeholders' wellbeing. *Journal of Hospitality Marketing* & M*anagement*, *31*(8), 1026–1047. https://doi.org/10.1080/19368623.2022.2091706

Six Senses. (2021). *Sustainability initiatives at Six Senses Resorts*. www.sixsenses.com

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

Sofyan, A.S., Abror, A., Putra, T.W., Muslihati, M., Sofyan, S., Sirajuddin, S., Katman, M.N., & Darussalam, A.Z. (2022). Crisis and disaster management for halal tourism: a systematic review. *Tourism Review*, *77*(1), 129–145. https://doi.org/10.1108/TR-08-2020-0390

South African Weather Services. (2021). 4. Sunshine and Cloudiness. *Regional Weather and Climate of South Africa*, 1, 31–38.

Spencer, A.J., Lewis-Cameron, A., Roberts, S., Walker, T.B., Watson, B., & McBean, L.M. (2023). Post-independence challenges for Caribbean tourism development: a solution-driven approach through Agenda 2030. *Tourism Review*, *78*(2), 580–613. https://doi.org/10.1108/TR-01-2022-0049

Taghipour, A., Padash, A., Etemadi, V., Khazaei, M., & Ebrahimi, S. (2024). Sustainable and Circular Hotels and the Water–Food–Energy Nexus: Integration of Agrivoltaics, Hydropower, Solar Cells, Water Reservoirs, and Green Roofs. *Sustainability*, *16*(5), 1985. https://doi.org/10.3390/su16051985

Traskevich, A., & Fontanari, M. (2023). Tourism potentials in post-COVID19: The concept of destination resilience for advanced sustainable management in tourism. *Tourism Planning* & D*evelopment*, *20*(1), 12–36. https://doi.org/10.1080/21568316.2021.1894599

United Nations (UN). (2015). Transforming our World: The 2030 Agenda for Sustainable Development. https://sdgs.un.org/2030agenda

Wang, J. (2022). Building competitive advantage for hospitality companies: The roles of green innovation strategic orientation and green intellectual capital. *International Journal of Hospitality Management*, *102*, 103161. https://doi.org/10.1016/j.ijhm.2022.103161

Wong, I.A., Lin, X., Lin, Z., & Lin, Y. (2023). Gaining resilience through transformative services in cause-related events: an interaction ritual chain perspective. *International Journal of Contemporary Hospitality Management*, *35*(9), 3235–3262. http://dx.doi.org/10.1108/IJCHM-05-2022-0657

Zhang, J., Xie, C., & Huang, S. (2024a). Resilient leadership in hospitality and tourism enterprises: Conceptualization and scale development. *International Journal of Contemporary Hospitality Management*, *36*(4), 1299–1326. https://doi.org/10.1108/IJCHM-10-2022-1274

Zhang, J., Xie, C., & Huang, S.S. (2024b). The effect of resilient leadership on employee resilience during a crisis in tourism & hospitality firms: A self-determination perspective. *International Journal of Hospitality Management*, *122*, 103886. https://doi.org/10.1016/j.ijhm.2024.103886

Zrównoważona odporność i adaptacje proekologiczne branży hotelarskiej na przykładzie prowincji Gauteng w RPA

Streszczenie. Sektor hotelarski w RPA stoi przed poważnymi wyzwaniami, w tym niestabilnością gospodarczą, zmianami klimatu i zmieniającymi się preferencjami konsumentów. Aby skutecznie rozwiązać te problemy, hotele muszą wdrażać innowacyjne strategie zwiększające ich odporność na sytuacje kryzysowe i przyczyniające się do ochrony zasobów. Badanie opisane w artykule jest oparte na wnioskach z teorii odporności, logiki usługowej i teorii modernizacji ekologicznej. Chcąc dowiedzieć się, w jaki sposób obecne wyzwania są rozwiązywane w praktyce, autorzy przeprowadzili pogłębione wywiady z kierownikami hoteli w prowincji Gauteng, aby zebrać dane do analizy tematycznej. Przykłady strategii odporności wymienione przez respondentów obejmują skuteczne zarządzanie kryzysowe, dywersyfikację dochodów i budowanie solidnych partnerstw społecznościowych. Zapytani o praktyki proekologiczne, respondenci wymienili redukcję odpadów, zwiększenie ochrony różnorodności biologicznej i inwestowanie w zrównoważoną infrastrukturę. Praktyki są zbieżne z celami 9. i 1. zrównoważonego rozwoju, które mają na celu rozwój odpornej infrastruktury i eliminację ubóstwa. Autorzy opowiadają się za holistycznym podejściem do zarządzania usługami hotelarskimi, które łączą w sobie innowacyjność, aktywne zaangażowanie społeczności i ochronę środowiska, aby w ten sposób przyczyniać się do trwałego rozwoju branży.

Słowa kluczowe: branża hotelarsko-gastronomiczna, odporność, adaptacje proekologiczne, cele zrównoważonego rozwoju

Studia
Periegetica
2(46)/2024

ISSN 2658-1736, https://journals.wsb.poznan.pl/index.php/sp
s. 157–182, https://doi.org/10.58683/sp.2016

MAHLATSE VICTOR SETHWANA[a], TAKALANI RAMUKUMBA[b]

Government Support for Rural Tourism SMMEs: The Case of Greater Letaba Municipality in South Africa

Abstract. Small, medium, and micro enterprises (SMMEs) are major contributors to economic growth and development. While SMMEs play a crucial role in driving economic growth in advanced economies, they have a high failure rate in South Africa, especially during the start-up and growth phases. This study investigates the role of government support in the development and growth of SMMEs in South Africa. Its results indicate that despite government support schemes and initiatives, the failure rate of SMMEs remains high. The main challenges faced by the SMME sector include the large number of regulations, which limit the scope of operation and can pose a threat to survival. The main conclusions point to the information deficit and needs analysis that would tailor-make and accommodate the specific requirements of different enterprises.

Keywords: SMMEs, government support services, entrepreneurship, financial support, marketing support

Article history. Submited 2024-11-08. Accepted 2024-11-24. Published 2025-01-22.

1. Introduction

According to Kelly et al. (2021), further advancing the views of Lekhanya and Mason (2013), rural tourism small, medium, and micro enterprises (SMMES) contribute significantly to economic growth and development. Thanks to their ability to increase productivity and inspire innovation, they help to maintain the dynamic nature of economies (Kelly et al., 2021; Liu et al., 2020). Kelly et al. (2021), supporting the earlier views by Tang and Li (2021), noted that SMMEs are key drivers

[a] Corresponding Author, Mancosa, Department of Global Tourism and Hospitality, victor.sethwana@mancosa.co.za, https://orcid.org/0000-0002-5934-8621
[b] Walter Sisulu University, Department of Tourism and Hospitality Management, tramukumba@wsu.ac.za, https://orcid.org/0000-0003-1176-1641

of economic growth and development, they create jobs, reduce unemployment and poverty, especially youth unemployment, and they can stimulate innovations and contribute to growth domestic product (GDP). These contributions of SMMEs have been recognised globally in all economies, including that of South Africa (Litheko, 2021; Ouma-Mugabe et al., 2021; Soogun & Mhlongo, 2021).

The 1995 White Paper on Small Business and the 1996 National Small Business Development Act both emphasized the importance of SMMEs to the South African economy (Dede et al., 2022). This led to the establishment of the Ntsika Enterprise Promotion Agency and the Khula Enterprise Finance under the Department of Trade and Industry's (DTI) jurisdiction (Diale, 2008). Non-financial or business development services are handled by the Ntsika Enterprise Promotion Agency, while Khula Enterprise Finance serves as a wholesale financial organization that supports a variety of retail finance intermediaries that would deal directly with SMME entrepreneurs (ICC, 1999).

In South Africa, an SMME is defined as any company with fewer than 200 workers, less than 5 million rands in yearly revenue, and less than 2 million rands in capital assets. Business administration is directly handled by the proprietor (Cronje et al., 2000). Because most government support programs continue to have issues, state entrepreneurial support has not produced outstanding results. The Center for Small Business Development (CSBD), the Small Enterprise Development Agency, the Industrial Development Corporation (IDC), the National Empowerment Fund, the National Development Agency (NDA), the National Youth Development Agency (NYDA), the South African Micro-Finance Apex Fund (SAMAF), the Land Bank, and the Micro-Agricultural Financial Institute of South Africa are just a few of the organizations and programs that the South African government has established to assist SMMEs (Jili et al., 2017; Tang & Li, 2021; Zulu, 2021). Nonetheless, Khula and Ntsika, which offer SMMEs both financial and non-financial services, are the subject of the study that follows (Rogerson, 1999).

The purpose of the study was to determine how much government assistance programs aid in the expansion and advancement of SMMEs. In particular, the study aimed to (a) determine the types of government support services that were available and (b) ascertain the opinions of owners/managers of tourism SMMEs operating in Greater Letaba Municipality, Limpopo Province, on the financial and non-financial assistance offered by government organizations.

1.1. Research Problem

Although the South African government remains committed to supporting entrepreneurship through various agencies, little progress has been made to foster and facilitate the growth and development of SMMEs. A lot of SMMEs still need access to financial and non-financial services offered by these agencies. Moreover, support programmes need to catch up to their objectives. Despite repeated policy revisions and the restructuring of new and weak agencies, South Africa still needs to work on creating sustainable small businesses. The purpose of the study was to analyse the effectiveness of the government support programmes and services (both financial and non-financial) provided by various state agencies based on opinions expressed by owners/managers of tourism SMME.

1.2. Theoretical Framework

The study is grounded in the principles of the New Structuralist Economics Framework. Drawing on Lin's (2021) work, the structuralist paradigm recommends that countries adapt their institutional structures. The New Structural Economics offers a fresh perspective on economic development, succeeding the structuralist and neoliberal approaches that emerged after World War II. This framework employs a neoclassical lens to examine the factors influencing a country's economic structure and its progression during economic development (Lin, 2021). This framework posits that a country's economic structure is inherently linked to its factor endowments. Achieving developmental success relies on governments aiding entrepreneurs in overcoming both soft and hard infrastructure challenges, enabling industries with comparative advantages to achieve competitive advantages in domestic and international markets. The framework emphasizes the government's role in enhancing infrastructure and institutions while facilitating entrepreneurs in transforming industries with comparative advantages into globally competitive ones. This involves targeted industrial policies to drive economic growth (Dede et al., 2022). New Structural Economics aligns closely with the domains of government and economics (Li & Maskin, 2021), as both stress the importance of government in shaping economic performance. From this perspective, traditional structures are often seen as insufficient for providing financial and non-financial support to SMMEs. For example, banks typically demand significant collateral before issuing loans to SMMEs. In response, the South African government established institutions like Khula to support SMMEs. Under the structuralist paradigm, development requires introducing new technologies and production methods to close the gap between advanced and lagging economic sectors (Contreras, 2004). The aim is to achieve a balanced economy where total output is equitably distributed across all sectors.

Economic development hinges on expanding neglected sectors of the economy (Portes et al., 1989). Structuralists advocate for government support to these sectors by easing access to loans. To this end, the South African government has implemented various programs to assist SMMEs. Structuralist theorists argue for robust government intervention to promote industrialization and recommend fiscal (e.g., taxation and public spending) and monetary (e.g., money supply and interest rates) policies (Contreras, 2004). Love (2005) highlights the need for government planning to follow a balanced growth strategy, ensuring simultaneous investment across multiple sectors and industries. This approach can provide neglected sectors with greater access to financial and non-financial resources. Addressing the shortcomings of traditional structures requires structural changes that enhance SMMEs' access to essential services and opportunities.

2. Literature Review

2.1. A Brief History of Rural Tourism Development in South Africa

Rogerson and Rogerson (2021b) contend that rural tourism development in the Global South has followed a distinct trajectory compared to the Global North due to various factors. Research on the Global South frequently highlights dependency relationships that pose challenges for rural areas. Several scholars emphasize the importance of addressing rural tourism in the Global South as a unique context, necessitating a focus on specific research problems. According to Karali et al. (2021, p. 2), "rural tourism of the developed and developing countries is required to be researched differently due to their unlike development and growth contexts." Furthermore, "rural tourism has different contextual dimensions and issues in developed and developing nations, which need to be addressed with the help of case-specific studies" (Karali et al., 2021, p. 2). Since the democratic transition, the issue of promoting rural tourism has been an item of escalating significance on the agenda of South African policymakers (Rogerson & Rogerson, 2021b). Following the end of apartheid, the new government prioritized rural development to address historical inequities and improve the quality of life for low-income communities. In pursuit of this goal, the National Tourism Sector Strategy was introduced in 2011, tasking the Department of Tourism with enhancing the spatial distribution of tourism across the country (Rogerson & Rogerson, 2021b). A key focus was fostering tourism growth in rural areas by increasing rural community participation and promoting well-informed investments in rural tourism products aligned with market demands. Specific attention was directed toward rural tourism initiatives in the former Homelands, South Africa's most impoverished regions

(Zikalala, 2011). This led to the development of two significant policy documents in 2012: the Rural Tourism Strategy (Department of Tourism, 2012a) and the National Heritage and Cultural Strategy (Department of Tourism, 2012b), both aimed at enhancing rural tourism opportunities and products.

The Rural Tourism Strategy represents South Africa's most comprehensive policy framework for rural tourism. Its vision is to establish a thriving rural tourism economy, while its mission emphasizes advancing tourism growth in rural communities, particularly in under-visited provinces. Rural tourism in South Africa highlights rural life, arts, culture, and heritage to benefit local communities and foster enriching interactions between tourists and locals. However, the strategy acknowledged several challenges, including insufficient funding, limited community involvement, and unequal revenue distribution from key rural attractions like World Heritage Sites, which often failed to contribute to poverty alleviation. The strategy identified opportunities in untapped rural cultural and heritage assets, pristine natural environments, indigenous knowledge systems, agritourism, sports, volunteer tourism, and adventure tourism (Department of Tourism, 2012a, p. 36). Its overarching goal was to promote informed investments in rural tourism projects that cater to market needs (Department of Tourism, 2012a, p. 10). Effective implementation required addressing various development needs, such as providing training, raising tourism awareness, and upgrading infrastructure—highlighted as a significant shortcoming. Additionally, the strategy underscored the pivotal role of local government in providing leadership and planning to ensure that local communities and businesses derive maximum benefits from tourism (Department of Tourism, 2012a, p. 33).

2.2. Small, Medium and Micro Enterprises (SMMEs) in South Africa

According to Kelly et al. (2021), the definitions of a small business vary in different parts of the world and for the purpose of this study, the authors adopted the definition included in Chapter 1 of the National Small Enterprise [previously Business] Act of 1996, as amended by the National Small Enterprise Amendment Acts of 2003, 2004 and 2024 (NSB Act), officially defines a small business as:

> …a separate and distinct business entity, including co-operative enterprises and non-governmental organizations, managed by one owner or more which, including its branches or subsidiaries, if any, is predominantly carried on in any sector or sub-sector of the economy mentioned in column I of the Schedule 14…

Kelly et al. (2021), further noted that the definition of SMMEs in South Africa includes several variables: size, the number of employees, and the turnover. The classification used by the Department of Trade and Industry (DTI, 2014) is consistent with the Small Enterprise Act. Kelly et al. (2021), supporting the earlier suggestions by Mbomvu et al. (2021), Mothoa & Rankhumise (2021), Ouma-Mugabe et al. (2021), noted that the DTI distinguishes SMMEs as:

- survivalist enterprises, which are set up with little capital investment by unemployed persons to earn minimum income to support their families;
- micro enterprises, with up to 5 employees, who are usually family members, have an annual turnover below R300,000;
- tiny enterprises with fewer than 10 employees and an annual turnover of less than R300,000, and a basic owner management structure;
- small enterprises with fewer than 50 employees, an annual income above R300,000, and a semi-formal management structure;
- medium enterprises, with 100–200 employees, a decentralized management structure, and an annual income of more than R1,000,000.

Due to their adaptability, SMMEs are well-positioned to thrive in dynamic business environments or economies (Quansah et al., 2022; Rashid & Ratten, 2021; Weaven et al., 2021). The sector is distinguished by its innovative nature, creativity, competitiveness, and strong drive for success (Isaacs et al., 2020; Takyi & Naidoo, 2020). These characteristics enable the continuous emergence of new SMMEs (Wiid & Cant, 2021a), which contribute to job creation, increased productivity, and improved standards of living (Abisuga-Oyekunle & Muchie, 2020). Despite these positive attributes, the growth of the SMME sector varies across countries, with some experiencing significant stagnation (Meyer & Meyer, 2017; Muriithi, 2017; Ndayizigamiye & Khoase, 2018; Bandara et al., 2020; Umadia et al., 2020). Various factors influence the success or failure of SMMEs (Nyangarika & FSM, 2020). According to Kelly et al. (2021), high mortality rates in some contexts are often attributed to challenges such as limited access to financing, inadequate infrastructure, insufficient government support, ineffective marketing, poor management or leadership, and suboptimal decision-making and these factors were earlier identified by Muriithi, (2017); Madzimure (2020); Cant (2020); Ogujiuba & Boshoff (2020); Madzimure and Tau (2021). Kelly et al. (2021), further noted that research indicates that supportive business environments play a critical role in fostering the growth and expansion of SMMEs (Wiid & Cant, 2021a; Scheba & Turok, 2020; Gamidullaeva et al., 2020). Key factors such as government assistance, including financial support (Sishuba, 2020) and training programs, significantly enhance the survival and growth rates of SMMEs.

2.3. Black Economic Empowerment and Transformation of the Tourism Industry in South Africa

Since South Africa's democratic transition in 1994, Black economic empowerment (BEE) has been a central policy priority, aimed at addressing the racial inequalities entrenched by apartheid (Sixaba & Rogerson, 2023; Sixaba & Rogerson, 2019). The tourism sector has been a major focus of empowerment and transformation initiatives (van der Watt, 2022, p. 90), with the national government introducing measures to increase Black participation in the industry (Vilakazi & Bosiu, 2021, p. 191). These policies have sparked considerable debate and scholarship, highlighting their complexities and controversies (Sixaba & Rogerson, 2023). Since 1994, multiple initiatives have targeted the transformation of South Africa's racial ownership structures and increased the participation of historically disadvantaged groups across various sectors, including tourism (Abrahams, 2019).

These efforts primarily focus on the Black (African) community, which was largely excluded from the mainstream economy during apartheid (Giddy et al., 2020). To address this exclusion, the government has introduced measures to dismantle white dominance in the tourism industry and promote Black entrepreneurship (Nomnga, 2021). According to Adinolfi et al. (2018: 89), "tourism is a sector that ideally provides outstanding opportunities to support transformation." Key initiatives include the Tourism Enterprise Programme, funding for Black entrepreneurs, the establishment of tourism business incubators, and efforts to develop niches like township tourism, which present significant opportunities for Black-owned enterprises.

Despite these efforts, small tourism enterprises face numerous internal challenges. These include limited financial resources, inadequate marketing, weak human resources, low adoption of new technologies, restricted access to business skills, insufficient knowledge of the business environment, and networking constraints (Fu et al., 2019; Isik et al., 2019; Rosalina et al., 2021; Giddy et al., 2022). Research underscores the importance of institutional support to help entrepreneurs address these issues (Yachin, 2020). For instance, Ateljevic and Doorne (2004) identified external factors such as policy infrastructure, government support, regulatory environments, and financial sector relationships as critical to overcoming constraints in small tourism firms, based on their study in Central New Zealand.

2.4. South African Government' Support for SMMEs

According to Kelly et al. (2021) further supported by the views of Moise et al. (2020) and Ouma-Mugabe et al. (2021), the South African government places high expectations on the SMME sector, viewing it as a critical driver of economic growth, job creation, and equity. However, SMMEs face significant challenges, including high failure rates primarily attributed to limited access to finance, training, and experience (Ayandibu & Vezi-Magigaba, 2021; Kanayo et al., 2021). Black-owned tourism SMMEs in rural areas are particularly vulnerable, as they face additional obstacles linked to government inefficiencies, such as inadequate support, limited understanding of small business needs, bureaucratic red tape, and poor maintenance of essential infrastructure (Sixaba & Rogerson, 2023). Recognizing these challenges, the government has established various institutions to promote and support SMMEs. The Department of Small Business Development (DSBD) was launched in 2014 as part of the National Development Plan to create a favourable environment for SMME growth, with the ambitious goal of generating 90% of jobs through this sector (Kelly et al., 2021; Vivence, 2021; Zulu, 2021). The Department of Trade and Industry (DTI), through its expanded mandate, supports SMMEs via industrial and commercial mechanisms, collaborating with institutions such as the National Youth Development Agency (NYDA), the Small Enterprise Development Agency (SEDA), the National Empowerment Fund (NEF), and the Small Enterprise Finance Agency (SEFA) (Khoase & Ndayizigamiye, 2018; Khoase et al., 2020; Kelly et al., 2021).

The DTI implements policies and strategies aimed at fostering enterprise growth, empowerment, and equity through initiatives like Broad-Based Black Economic Empowerment (B-BBEE), the Isivande Women's Fund, and the SEDA Technology Programme (STP). Among these, the National Empowerment Fund (NEF) is pivotal in promoting small business development, offering both financial and non-financial support for start-ups, business expansion, and equity acquisition (Arshad et al., 2020; Kelly et al., 2021). In the tourism sector, public-private partnerships (PPPs) have been a key strategy for supporting SMMEs. The public sector plays a leading role, as the government is responsible for establishing policies and laws that regulate and support tourism SMMEs across national, provincial, and local levels (Rogerson, 2008). This framework seeks to address systemic barriers while fostering an ecosystem conducive to the sustainable growth of tourism SMMEs.

2.5. Funding Programmes for Tourism SMMEs

The South African government has implemented numerous funding programmes for tourism SMMEs to stimulate the country's tourism sector. The Department of Environmental Affairs and the Tourism Department of Trade and Industry, in partnership with the Tourism Business Council of South Africa (TBCSA), published a funding information handbook. The handbook provides information about different types of programmes that provide funding to tourism SMMES, funding criteria, and contact details of the relevant funding organizations. Such funding programmes include the National Empowerment Fund (NEF), Industrial Development Corporation (IDC), Department of Economic Development and Tourism (All provincial Government), The Department of Trade and Industry (DTI), National Department of Tourism (NDT) and National Empowerment Fund, Business Partners, Tourism Support Programme (TSP), SADC Project Preparation and Development Facility (PPDF), Rural and Community Development Fund, Mezzanine Finance, IDF Fund, Tourism Support Programme (TSP), Tourism Enterprise Partnership (TEP), Ithala Development Finance Corporation, and Metier Capital Growth Fund II.

The National Empowerment Fund and Industrial Development Corporation provide financial assistance to tourism SMMES countrywide (Hewitt & van Rensburg, 2020). The Department of Economic Development and Tourism (all provincial governments) provides financial assistance to SMMES in the tourism sector through various programmes (Zulu, 2021). These include the Tourism Support Programme (TSP), the SADC Project Preparation and Development Facility (PPDF), and the Rural and Community Development Fund. All these programmes are available to all tourism SMMES countrywide. The Department of Trade and Industry (DTI) provides financial assistance to SMMES in the tourism sector through the Mezzanine Finance and the IDF Fund (Mhlope, 2021). These funds are available to all tourism SMMES countrywide. The National Department of Tourism (NDT) provides financial assistance to SMMES in the tourism sector through the Tourism Support Programme (TSP). This programme is available to all tourism SMMES countrywide. The National Empowerment Fund and Business Partners provide financial assistance to SMMES in the tourism sector through the Tourism Enterprise Partnership (TEP), and this programme is available to all tourism SMMES countrywide (Ouma-Mugabe et al., 2021). The Ithala Development Finance Corporation provides financial assistance to SMMES in the tourism sector through the Metier Capital Growth Fund II, and this programme is available to all tourism SMMES countrywide (Mothoa & Rankhumise, 2021).

Regarding funding accessibility in Mopani District, the Limpopo Department of Economic Development, Environment and Tourism (LEDET) is the primary source of funding for tourism SMMES in Limpopo (Hewitt & van Rensburg, 2020). The department offers several funding programmes, including the Tourism Incentive Programme (TIP), the Rural Enterprise Development Programme (REDP), and the Small Enterprise Development Agency (SEDA). Small Enterprise Finance Agency (SEFA) and the TIP provide financial assistance for tourism projects, such as infrastructure development and marketing initiatives (Schirmer & Visser, 2021).

The REDP funds small businesses in rural areas, while SEFA provides loans to SMMES (Hewitt & van Rensburg, 2020).

The Small Enterprise Finance Agency (SEFA) also funds tourism SMMES in Limpopo province. SEFA offers loans and grants to small businesses. Loans are provided at low interest rates and have flexible repayment terms (Mbomvu et al., 2021). Grants are available for start-up costs and to assist with specific projects. The Industrial Development Corporation (IDC) and the National Empowerment Fund (NEF) are other sources of funding for tourism SMMES (Ouma-Mugabe et al., 2021). The IDC provides loans and venture capital to small businesses, which are available for start-up costs and expansion projects; venture capital is available for innovative projects (Ayandibu & Vezi-Magigaba, 2021). While the National Empowerment Fund (NEF) provides equity investments and loans to small tourism businesses, these investments are available for start-up and expansion projects. In contrast, loans are available for working capital and specific projects (Kraai, 2021).

The South African Tourism (SAT) and the Limpopo Tourism Agency (LTA) are public institutions that fund tourism SMMES in Limpopo. The SAT and LTA provide grants for marketing initiatives and projects promoting the province's tourism (Botha et al., 2021). The Mopani District Municipality also has several funding programmes for SMMES in the tourism sector, including the Mopani Tourism SMME Stimulus Grant and the Mopani Tourism Incubation Programmes. The municipal funding provides grants for developing tourism products and services and the development of tourism SMMES, including training and mentorship.

3. Research Design and Methods

This study employed an explanatory sequential design (Creswell & Plano Clark, 2011), consisting of two distinct phases. The first phase involved the distribution of an online questionnaire survey to tourism SMMES registered in the Limpopo Department of Economic Development, Environment and Tourism (LEDET) database. Out of the 125 SMMES contacted, 100 completed the questionnaire, achieving a response rate of 80%. Only SMMES that had been in operation for at least three years were included in the analysis, ensuring that the data collected reflected businesses with sufficient market experience. The online questionnaire consisted of 18 questions, designed to gather information on various aspects of government support for rural tourism SMMES in GLM. There were 6 Yes/No questions to determine respondents' awareness of available government funding opportunities, whether they had applied and received government funding, received feedback on/reasons for rejected funding applications and their willingness to apply for government funding in the future. Respondents were also asked to express their views about statements regarding perceived adequacy, availability, and effectiveness of government support and engagement with tourism SMMEs in areas such as dialogue, financial assistance, skills training, and development initiatives. The degree of agreement with the statements was measured on a 5-point Likert scale, with responses ranging from 1 (Strongly Disagree), through 3 (Neutral), to 5 (Strongly Agree). Multiple choice questions were used to determine the type of government support required by tourism SMMEs, reasons for funding application not successful, reasons for not applying for funding and reasons for not applying government relief fund. The second phase of the study involved follow-up interviews with 10 SMMEs that agreed to participate further. These semi-structured interviews explored tourism SMMEs' perceptions, experiences, and suggestions regarding government support, funding, accessibility, and programme effectiveness. Respondents were assured of confidentiality and informed of their right to withdraw from the study at any stage.

Table 1. Data collection instruments

PHASE ONE: SURVEY		
Questions		Response format
1.	What type of government support do you require?	Multiple choice
2.	Are you aware of government funding available to tourism SMMEs?	Yes/No
3.	Have you applied and received Tourism SMMEs government funding?	Yes/No
4.	Provide reasons why you have not applied for funding	Multiple choice
5.	Did you receive any feedback or reasons from the government regarding the rejection of your application?	Yes/No
6.	What was the reason/feedback why your application was not successful?	Multiple choice
7.	Are you considering reapplying for government funding/grants in the future?	Yes/No
8.	Did you apply and received government Covid-relief fund for tourism SMMEs?	Yes/No
9.	Provide reasons why you did not apply covid-19 relief fund	Multiple choice
10.	Did you receive feedback or reasons from the government regarding the rejection of your Covid-19 relief fund application?	Yes/No
11.	If you received feedback, what was the reason/feedback why your Covid-19 relief fund application was not successful?	Multiple choice
Statements		Response format
12.	There is a regular and structured dialogue between the government and Tourism SMMEs	Likert scale
13.	There are government support programmes available for Tourism SMMEs. such as the Tourism Enterprise Programme (TEP)	Likert scale
14.	The government provides all the support needed to ensure that tourism SMMEs attract tourists to the area.	Likert scale

PHASE ONE: SURVEY		
15.	Tourism SMMEs have access to available skills training programmes that can improve their opportunities provided by the government through skill development. business development initiatives. and incentive programmes.	Likert scale
16.	Participation in development programmes organized by the government provides access to business opportunities.	Likert scale
17.	The government support initiatives available for Tourism SMMEs effectively encourage growth.	Likert scale
18.	The government supports small businesses financially and technologically	Likert scale
PHASE TWO: INTERVIEW		
1.	Can you describe your experience in applying for and receiving government Covid-19 relief funds?	
2.	What kind of support or resources do you believe would be most beneficial for tourism SMMEs, and how could local authorities or organisations provide this support?	
3.	What specific financial support or training programmes do you think would be most helpful?	
4.	What specific improvements or changes do you believe are needed in government programmes and initiatives to better support tourism SMMEs?	
5.	Are there any successful government support programmes or initiatives that you have encountered, and what made them effective?	
6.	Can you elaborate on the challenges you faced when applying for government funding or grants?	
7.	What can be done to ensure the effective communication and collaboration between the government and tourism SMMEs?	
8.	What, in your opinion, could the government do to make support programmes more accessible and known to SMMEs?	
9.	What are the specific areas where you believe the government could improve its efforts in supporting tourism SMMEs?	
10.	Is there anything else you would like to mention about the challenges faced by tourism SMMEs in general?	

Source: Author's own compilation

3.1. Study Area

This study was conducted in Greater Letaba Municipality (see Figure 1). Greater Letaba Municipality (GLM) is one of Mopani District Municipality's local municipalities. According to the Greater Letaba Local Municipality (GLM) Integrated Development Plan (IDP), 2019/2020, there is much potential for the development of tourism, thanks to such attractions as the Rain Queen Modjadji or the biggest baobab tree in Africa located within the municipality neighbouring Ga-Kgapang Township. The region's tourism potential has contributed to the development of local tourism economy enabling local people to sell their crafts, the construction of accommodations facilities and a convention center. The nearby African Ivory Route, which passes through the town of Modjadjiskloof, could bring economic growth to Modjadjiskloof itself and the entire municipality. Other tourism assets include the Modjadji Nature Reserve famous for its cycads (Encephalartos transvenosus), which can only be found in the municipality; a vast tomato plantation run by a private farming operation called zz2; the Modjadji waterfall; the Manokwe Caves Modjadji Lodge and the Nahakwe Mountain Lodge.

Figure 1. Map showing the location of Greater Letaba Municipality
Source: www.municipalities.co.za

3.2. Socio-demographic Information about the Respondents

Table 2 below provides socio-demographic information about the respondents from tourism SMMEs that participated in the survey.

Table 2. Socio-demographic information about the respondents (n = 100)

	Number
Business role:	
Owner	50
Manager	16
Deputy manager	30
Other	4
Education:	
Grade 12	18
Bachelor's degree/National Diploma	46

	Number
Honours/B-Tech	20
Masters/M-Tech	15
Doctoral degree/D-Tech	1
Experience:	
Less than a year	1
1–4 years	15
5–10 years	25
11–20 years	44
21- above	15
Type of business:	
Hotel	5
B&B	16
Guesthouse	41
Lodge	14
Resort	1
Tour operator/travel agent	7
Other	16
Number of employees:	
Fewer than 5	48
5–20	38
21–50	12
51–100	2

Source: Author's own compilation

4. Results and Discussion

Government support for tourism SMMEs is crucial for their growth and survival. 60% of the respondents were aware of government funding opportunities, while 40% were unaware. The high level of awareness could be attributed to a number of factors identified as contributing to high mortality rates of SMMEs in the early stages of their operation, which prompted SMMEs to look for funding opportunities to avoid this fate (Muriithi, 2017; Madzimure, 2020; Cant, 2020; Ogujiuba & Boshoff, 2020; Madzimure & Tau, 2021). The results suggest that tourism SMMEs in Greater Letaba Municipality are always looking for funding opportunities for their business to ensure their success and survival.

Table 3. Independent samples test: funding awareness and access to finance

Group statistics						
Awareness of available tourism SMMEs funding from Government		N	Mean	Std. Deviation	Std. Error	Cohen's d
Difficulties with access to finance	Aware	60	3.2833	0.88833	0.11468	−0.83
	Not aware	40	3.9656	0.71105	0.11243	

Source: Author's own compilation

An independent sample T-test was performed to determine whether there was a difference in the average score of difficulties with access to finance between those who are aware and those who are not aware of tourism SMME funding available from government. A statistically significant difference was observed with a medium to large effect size ($t = -4.065$, $df = 98$, Sig = 0.000, Cohen's $d = -0.83$). The results show that respondents unaware of available tourism SMMEs funding from government reported significantly greater difficulties (Mean = 3.9656) compared to those who were aware (Mean = 3.2833). The T-test further revealed that being aware of funding opportunities significantly reduces perceived challenges in accessing finance, emphasizing the importance of increasing awareness among tourism SMMEs to improve their financial access. The T-test further revealed that being aware of funding opportunities significantly reduces perceived challenges in accessing finance, emphasizing the importance of increasing awareness among tourism SMMEs to improve their financial access.

Table 4. Required government support

What government support do you require?*	Responses	
	n	%
Business training and skill development	33	15.9
Financial support/funding(relieve)	49	23.7
Marketing/promotion	63	30.4
Provide market access	44	21.3
Other	18	8.7
Total	207	100.0

Source: Author's own compilation
*Respondents could choose more than one option

Tourism SMMEs require government support, including market access, marketing/promotion, financial support, training, and skills development. The survey results indicate that tourism SMMEs require a wide range of support from the government. It is important to note that the respondents could choose more than one option from those provided. The results indicate that the most frequently chosen form of support (30.4%) was support in marketing and promotion, followed financial support (23.7%). The third most frequently chosen form of support was business training and skills development (15.9%). The need for this kind of support for SMMEs was identified by Kanayo et al. (2021) and Kelly et al. (2021), who argued that governments should provide financial support and training programmes to help SMMEs realize their growth potential, while Botha et al. (2021) supported by Schirmer & Visser (2021) noted that South African government had established institutions mandated to promote and support SMMEs. According to the survey, 25% of tourism SMMEs in Greater Letaba Municipality had applied for and received government funding/grants, while 35% had applied but did not receive any. The remaining 40% of the respondents had yet to apply for government funding/grants.

Another finding of the survey is that 52% of respondents think that there is no structured dialogue between the government and SMMEs while 57% of them believe that the government needs to do more to assist SMMEs in their marketing efforts to attract more tourists to the area and benefit from their presence.

Table 5 below presents results regarding government relations and support provided to SMMEs.

Table 5. Government relations and support for tourism SMMEs.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	Count/%	Count/%	Count/%	Count/%	Count%
There is a regular and structured dialogue between the government and Tourism SMMEs	20	32	31	13	4
There are government support programmes available for Tourism SMMEs. such as the Tourism Enterprise Programme (TEP)	7	17	43	25	8
The government provides all the support needed to ensure that tourism SMMEs attract tourists to the area.	27	30	30	11	2
Tourism SMMEs have access to available skills training programmes that can improve their opportunities provided by the government through skill development. business development initiatives. and incentive programmes.	14	29	41	13	3
Participation in development programmes organized by the government provides access to business opportunities	12	27	43	15	3
The government support initiatives available for Tourism SMMEs effectively encourage growth.	15	25	47	11	2
The government supports small businesses financially and technologically (e.g. infrastructure development by enhancing connectivity and network).	29	26	34	9	2

Source: Author's own compilation

It is worth noting regardless of the statement between 31% and 47% of answers were neutral. The highest percentage (33%) of respondents agreed that government support programmes were available for tourism SMMEs, such as the Tourism Enterprise Programme (TEP).

Table 6. Basic information about the interviewees

	Number
Business role:	
Owner	8
Manager	2
Education:	
Bachelor's degree/National Diploma	1
Honours/B-Tech	2
Masters/M-Tech	6
Doctoral degree/D-Tech	1
Experience:	
5–10 years	4
11–20 years	5
21- above	1
Type of business:	
B&B	5
Guesthouse	4
Lodge	1
Number of employees:	
Fewer than 5	9
5–20	1

Source: Author's own compilation

The results above regarding government relations and support for SMMEs reveal a gap between government initiatives to support SMMEs and the actual support received by these SMMEs. On the one hand, these results are consistent with the findings reported by Sixaba and Rogerson (2023), who identified several problems resulting from government actions or inaction that limit the development prospects of Black-owned tourism SMMEs in rural areas. These challenges include the lack of government support, an inadequate understanding of the needs of small businesses, bureaucratic processes, and the failure of the government to supply or maintain basic infrastructure essential for the functioning of tourism small businesses. These results were supported by Fu et al. (2019), Işik et al. (2019), Rosalina et al. (2021) and Giddy et al. (2022). On the other hand, the respondents acknowledged the availability of government support for SMMEs, which was also reported by Sishuba (2020). While this is true, the results indicate the respondents were not convinced that the government was doing enough to support them financially. However, according to Botha, Smulders, Combrink, and Meiring (2021), the South African Tourism (SAT) and Limpopo Tourism Agency (LTA) provide funding to tourism SMMEs in Limpopo in the form of grants for marketing initiatives and projects that promote tourism in the province (Botha et al., 2021).

The following section focuses on the qualitative data collected during interviews with 10 respondents, who were asked about funding support from the government, which is critical to their survival and growth. The goal of this part of the study was to gain a deeper understanding of what happens when tourism SMMEs apply for government funding and their experiences regarding marketing support from the government. The responses could be classified into three major themes: persistence in applying, challenges in meeting application criteria, and the lack of marketing and promotion support.

Theme 1: Persistence in applying

Interviewee I admitted to being rejected on multiple occasions but was determined to persist in applying. This persistence is a feature shared by most entrepreneurs who seek government assistance despite encountering numerous obstacles.

Interviewee H emphasized that government officials often lack a deeper understanding of the challenges faced by small businesses in the tourism sector. This lack of comprehension leads to cumbersome application processes and unresponsiveness. The interviewee stressed the need for more specialized training within the government to ensure that officials are well-equipped to support SMMEs effectively. This theme highlights the importance of government investment in educating its personnel to serve SMMEs better.

Theme 2: Challenges in meeting application criteria

Interviewee G shared an experience of applying for a programme related to water and power infrastructure. The interviewee asked for an explanation of why their application had been rejected despite their efforts to reduce electricity consumption using solar panels and energy-efficient appliances. This response highlights the challenge of understanding and meeting the criteria set by government agencies when applying for funding.

Interviewee D highlighted the need to simplify regulatory requirements, particularly Value Added Tax (VAT) registration. The interviewee suggested that specific requirements, like VAT registration, should be scrapped for start-ups. Furthermore, the interviewee emphasized that the regulations must differentiate between different types of SMMEs, such as small, micro, and medium enterprises, rather than applying a one-size-fits-all approach. This would ensure that small businesses are excluded from specific regulations that may not be relevant to their scale of operation.

Interviewee F expressed a need for financial support in the form of grants to boost the cash flow of SMMEs. The interviewee emphasized that grants would assist in addressing immediate financial concerns, such as renovations and security infrastructure, which are crucial for the tourism industry. The lack of adequate funds for essential improvements can adversely affect the cash flow of SMMEs and hinder their ability to thrive.

Interviewee A highlighted the need for accessible financial support, especially for start-ups. The interviewee said it was difficult to obtain funding and emphasized the importance of not burdening new businesses with drastic measures that require significant personal investments. Accessibility to funds without stringent requirements and burdensome financial commitments was a common concern among the participants.

The above results suggest that while the government provides many funding opportunities, tourism SMMEs face challenges in obtaining that funding. These results are consistent with the findings reported by Ayandibu and Vezi-Magigaba (2021); Kanayo et al. (2021), who identified the lack of access to finance as a prominent factor that contributed to SMMEs' failure.

Theme 3: Lack of marketing/promotion support

Interviewee B emphasized the importance of marketing as a critical aspect of support for tourism SMMEs. While not elaborating on specific types of support, the need for effective marketing strategies suggests a demand for programmes that assist businesses in promoting their services and attracting customers.

Interviewee C raised concerns about the government's focus on marketing larger businesses, while ignoring the needs of smaller enterprises. The interviewee stressed the importance of promoting township businesses to counteract negative perceptions. This highlights the need for more effective marketing and communication strategies to support SMMEs.

Interviewee E emphasized the significance of market access for SMMEs with limited resources. The interviewee discussed the challenges associated with documentation requirements for government support programmes and suggested easing these requirements, especially for small enterprises, to increase accessibility to opportunities.

Interviewee J briefly mentioned the importance of marketing initiatives, which could be crucial in supporting tourism SMMEs by increasing visibility and attracting customers.

In summary, contrary to the findings reported by Botha, Smulders, Combrink, and Meiring (2021), the interviewees believed that the South African Tourism (SAT) and Limpopo Tourism Agency (LTA) were not delivering the kind of services that tourism SMMEs expected.

5. Conclusion

The results of the study described above highlight the main challenges faced by tourism SMMEs in Greater Letaba Municipality, particularly in relation to government support. Despite the existence of government programmes aimed at promoting the growth and sustainability of small businesses, the findings suggest that many SMMEs feel unsupported. A considerable number of respondents reported difficulties in accessing government funding, navigating complex application processes, and obtaining the necessary marketing and technological support. These results are consistent with findings in other studies, which emphasises the importance of targeted government interventions to foster the survival and growth of SMMEs in the tourism sector. The respondents expressed a sense of disconnect between the government's initiatives and their actual needs, suggesting that the existing support mechanisms may not be sufficiently tailored to the unique challenges of smaller businesses in the tourism industry. The study also revealed that SMMEs struggle with regulatory requirements, such as VAT registration and infrastructure criteria, which often hinder their ability to access support. These challenges reflect broader concerns mentioned in the literature about the complexity of government support systems and the need for more accessible and streamlined processes for small businesses. While some respondents were persistent in their attempts to apply for government support despite setbacks, others expressed a need for more specialized knowledge within government agencies to better assist tourism SMMEs. This suggests that while government funding and support programmes exist, their effectiveness is limited by structural barriers and a lack of alignment with the practical realities faced by small tourism enterprises. The findings underscore the need for a more responsive and simplified approach to government support, one that directly addresses the specific needs of tourism SMMEs. Enhanced training for government officials, simplified application processes, and more accessible financial and marketing support could significantly improve the effectiveness of government initiatives, thereby fostering the growth and sustainability of tourism SMMEs in the region.

6. Limitations and Future Research

The main limitation of the study is that the sample of SMMEs was relatively small and excluded informal SMMEs, which limits the representativeness of the findings. Additionally, the views expressed by the 10 interviewees may not fully reflect those of the broader sample. Future research can focus on enhancing government support by addressing regulatory challenges and ensuring transparency in funding criteria. Another possible direction for future research is to explore different financial support models, such as grants versus loans, and their impact on the sustainability of tourism SMMEs. Comparative studies of international best practices and longitudinal studies on entrepreneurial resilience could provide valuable insights to improve support systems and foster the growth of tourism SMMEs.

CRediT Authorship Contribution Statement

Sethwana M.V. and Ramukumba T. both contributed significantly to all aspects of this research project. They were responsible for the conceptualization of the study, data collection, formal analysis, and funding acquisition. They were actively involved in the investigation, methodology design, and project administration, as well as for managing resources, software, and supervision. Their contributions also extended to the validation and visualization of the research outcomes. Both authors took part in the writing of the original draft and the subsequent review and editing of the manuscript.

Declaration of Competing Interest

None.

References

Abisuga-Oyekunle, O.A., & Muchie, M. (2020). Handicraft small enterprises as an instrument for rural economic growth and poverty eradication. *Problems and Perspectives in Management*, *18*(4), 25–36. http://dx.doi.org/10.21511/ppm.18(4).2020.03

Abrahams, D. (2019). Transformation of the tourism sector in South Africa: A possible growth stimulant? *GeoJournal of Tourism and Geosites*, *26*(3), 821–830. http://dx.doi.org/10.30892/gtg.26312-400

Adinolfi, M.C., Jacobs, M., & Tichaawa, T.M. (2018). Unpacking Factors Limiting and Promoting Black-Owned SMMEs to Participate Actively Within the Tourism Value Chain in South Africa. *Africa Insight*, *48*(3), 88–104.

Ateljevic, J., & Doorne, S. (2004). Diseconomies of scale: A study of development constraints in small tourism firms in central New Zealand. *Tourism and Hospitality Research*, *5*(1), 5–24. https://doi.org/10.1057/palgrave.thr.6040002

Arshad, M.Z., Ahmad, M.J., Ali, M., Khan, W.A., & Arshad, M.H. (2020). The role of government business support services and absorptive capacity on SMEs performance. *International Journal of Advanced Science and Technology*, *29*(3), 1492–1499. http://sersc.org/journals/index.php/IJAST/article/view/6149

Ayandibu, A.O., & Vezi-Magigaba, M.F. (2021). Climate change and entrepreneurial financing. In A.O. Ayandibu, & M.F. Vezi-Magigaba (Eds.), *Handbook of research on climate change and the sustainable financial sector* (pp. 399–410). IGI Global. http://dx.doi.org/10.4018/978-1-7998-7967-1.ch024

Bandara, K.B.T.U.K., Jayasundara, J.M.S.B., Naradda Gamage, S.K., Ekanayake, E.M.S., Rajapackshe, P.S.K., Abeyrathne, G.A.K.N.J., & Prasanna, R.P.I.R. (2020). *Entrepreneurial marketing & performance of small & medium enterprises in developed and developing economies: A conceptual exploration*. IDEAS. https://ideas.repec.org/p/pra/mprapa/104341.html

Botha, A., Smulders, S.A., Combrink, H.A., & Meiring, J. (2021). Challenges, barriers, and policy development for South African SMMEs–does size matter? *Development Southern Africa*, *38*(2), 153–174. https://doi.org/10.1080/0376835X.2020.1732872

Cant, M. (2020). Legal factors affecting the establishment of township SMMEs in South Africa: Are they killing small businesses? *Journal of Private Enterprise*, *35*(4), 61–70. https://ideas.repec.org/a/jpe/journl/1740.html

Contreras, R. (2004). *Competing theories of economic development*. University of Iowa Center for International Finance and Development. https://www.nber.org/papers/w10766

Creswell, J.W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage. http://dx.doi.org/10.5539/elt.v12n5p40

Creswell, J.W., & Plano Clark, V.L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Sage. https://www.scirp.org/reference/referencespapers?referenceid=1596237

Cronje, G.J., Du Toit, G.S., & Motlatla, M.D.C. (2000). *Introduction to business management*. Oxford University Press.

Dede, K.T., Shumba, K., Zindiye, S., & Donga, G. (2022). An evaluation of government support services for SMMEs in Thohoyandou, South Africa. *Journal of Entrepreneurial Innovations*, *2*(1). https://doi.org/10.14426/jei.v2i1.1163

Diale, A.J. (2008). *Government support for small, micro and medium enterprises (SMMEs) as a venture for business and economic development in South Africa*. Tshwane University of Technology.

Department of Tourism. (2011). *National Tourism Sector Strategy*. Pretoria: Department of Tourism.

Department of Tourism. (2012a). *Rural Tourism Strategy*. Pretoria: Department of Tourism.

Department of Tourism. (2012b). *National Heritage and Cultural Tourism Strategy*. Pretoria: Department of Tourism.

DTI. (2014). *Economic empowerment* [online]. https://web.archive.org/web/20170509090538/http://www.dti.gov.za/editmedia.jsp?id=3034

Fu, H., Okumus, F., Wu, K., & Köseoglu, M.A. (2019). The entrepreneurship research in hospitality and tourism. *International Journal of Hospitality Management*, *78*, 1–12. https://doi.org/10.1016/j.ijhm.2018.10.005

Gamidullaeva, L.A., Vasin, S.M., & Wise, N. (2020). Increasing small-and medium-enterprise contribution to local and regional economic growth by assessing the institutional environment. *Journal of Small Business and Enterprise Development*, *27*(2), 259–280. https://doi.org/10.1108/JSBED-07-2019-0219

Giddy, J.K., Idahosa, L.O., & Rogerson, C.M. (2020). Leveraging state-owned nature-based assets for transformation and SMME development: Pilanesberg National Park, South Africa. In J.M. Rogerson, & G. Visser (Eds.), *New directions in South African tourism geographies* (pp. 299–316). Springer.

Giddy, J.K., Rogerson, C.M., & Rogerson, J.M. (2022). Rural tourism firms in the COVID-19 environment: South African challenges. *GeoJournal of Tourism and Geosites*, *41*(2), 343–353. https://doi.org/10.30892/gtg41202-836

Hewitt, L.M., & van Rensburg, L.J.J. (2020). The role of business incubators in creating sustainable small and medium enterprises. *The Southern African Journal of Entrepreneurship and Small Business Management*, *12*(1), 9. https://sajesbm.co.za/index.php/sajesbm/article/view/295/443

International Chamber of Commerce (ICC). (1999). *Supporting South Africa's small, micro and medium enterprise strategy — Khula Enterprise Finance Ltd and Ntsika Enterprise Promotion Agency: Discussion points on the way forward*. Washington, DC: World Bank.

Isaacs, E., Friedrich, C., & Basardien, F. (2020). SMME performance—Results from a longitudinal study. *Industry and Higher Education*, *24*(1), 63–69. https://doi.org/10.5367/000000010790877335

Işik, C., Küçükaltan, E.G., Çelebi, S.K., Çalkin, O., Enser, I., & Çelik, A. (2019). Tourism and entrepreneurship: A literature review. *Journal of Ekonomi*, *1*(1), 1–27.

Jili, N.N., Masuku, M.M., & Selepe, B.M. (2017). SMMEs promoting local economic development (LED) in uMlalazi Local Municipality, KwaZulu-Natal. *African Journal of Hospitality, Tourism and Leisure*, *6*(1), 1–10. https://doaj.org/article/34dbaa3e9bc24c189d5563116861eefc

Kanayo, O., Olamide, E., Ogujiuba, C., & Stiegler, N. (2021). Effect of contextual factors on entrepreneurship success in South Africa: Application of two-way analysis of variance design. *Academy of Entrepreneurship Journal*, *27*, 1–15.

Karali, A., Das, S., & Roy, H. (2021). Forty years of the rural tourism research: Reviewing the trend, pattern and future agenda. *Tourism Recreation Research*, *49*(1), 173–200. https://doi.org/10.1080/02508281.2021.1961065

Kelly, T.D., Shumba, K., Zindiye, S., & Donga, G. (2021). An evaluation of government support services for SMMEs in Thohoyandou, South Africa. *Journal of Entrepreneurial Innovations*, *2*(1), 69–83. https://doi.org/10.14426/jei.v2i1.1163

Khoase, R.G., & Ndayizigamiye, P. (2018). Analysing the role and impact of public and private supporting institutions interventions on SMMEs access to funding: A comparative study between Lesotho and South Africa. Acta Universitatis Danubius. *Œconomica*, *14*(4), 58–71.

Khoase, R.G., Derera, E., McArthur, B., & Ndayizigamiye, P. (2020). Barriers to start-up and sustainable growth of SMMEs: A comparative study between South Africa and Lesotho. *African Journal of Business and Economic Research*, *15*(2), 135–155. https://doi.org/10.31920/1750-4562/2020/v15n2a7

Kraai, N.D. (2021). *Procurement policies and sustainability on SMMEs: A case study of Gauteng Province.* Master's thesis. University of Cape Town.

Lekhanya, L.M., & Mason, R.B. (2013). The use of marketing strategies by small, medium, and micro enterprises in rural KwaZulu-Natal. *The Southern African Journal of Entrepreneurship and Small Business Management*, *6*(1), 38–53. https://doi.org/10.4102/sajesbm.v6i1.32

Litheko, A. (2021). Small tourism business growth through eco-tourism in Mahikeng, South Africa. *African Journal of Hospitality, Tourism and Leisure*, *10*(1), 256–269. https://doi.org/10.46222/ajhtl.19770720-100

Li, D.D., & Maskin, E.S. (2021). Government and economics: An emerging field of study. *Journal of Government and Economics*, *1*, 100005. https://doi.org/10.1016/j.jge.2021.100005

Lin, J.Y. (2021). New structural economics: A framework of studying government and economics. *Journal of Government and Economics*, *2*, 100014. https://doi.org/10.1016/j.jge.2021.100014

Liu, Y., Ndubisi, N.O., Liu, Y., & Barrane, F.Z. (2020). New product development and sustainable performance of Chinese SMMEs: The role of dynamic capability and intra-national environmental forces. *International Journal of Production Economics*, *230*, 107817. https://doi.org/10.1016/j.ijpe.2020.107817

Love, J. (2005). The rise and decline of economic structuralism in Latin America: New dimensions. *Latin American Research Review*, *40*(3), 100–126. https://doi.org/10.1353/lar.2005.0058

Madzimure, J. (2020). The compliance challenges of small, medium and micro enterprises in South Africa. *Eurasian Journal of Business and Management*, *8*(3), 182–190.

Madzimure, J., & Tau, L.P. (2021). Challenges facing small to medium enterprises in Metsimaholo Municipality, South Africa. *Eurasian Journal of Social Sciences*, *9*(1), 14–23.

Mbomvu, L., Hlongwane, I. T., Nxazonke, N.P., Qayi, Z., & Bruwer, J.P. (2021). Load shedding and its influence on South African small, medium and micro enterprise profitability, liquidity, efficiency and solvency. *Business Re-Solution Working paper BRS/2021/001*. http://dx.doi.org/10.2139/ssrn.3831513

Meyer, D.F., & Meyer, N. (2017). Management of small and medium enterprise (SME) development: An analysis of stumbling blocks in a developing region. *Polish Journal of Management Studies*, *16*.

Mhlope, V. (2021). *An exploratory case study on the barriers, challenges, and benefits of sustainability reporting by small and medium enterprises (SMEs) in South Africa*. Master's thesis. Faculty of Commerce, Rhodes Business School.

Moise, L.L., Khoase, R., & Ndayizigamiye, P. (2020). The influence of government support interventions on the growth of African foreign-owned SMMEs in South Africa. In M.-Á. Galindo-Martín, M.-T. Mendez-Picazo, & M.-S. Castaño-Martínez (Eds.), *Analyzing the relationship between innovation, value creation, and entrepreneurship* (pp. 104–124). IGI Global.

Mothoa, M.S., & Rankhumise, E.M. (2021). Government contribution towards the growth of small and medium-sized enterprises: Owners' perspective. *International Journal of Entrepreneurship*, *25*, 1–11.

Muriithi, S.M. (2017). *African small and medium enterprises (SMEs) contributions, challenges, and solutions*. Progressive Academic Publishing.

Ndayizigamiye, P., & Khoase, R.G. (2018). Inhibitors of the adoption of e-commerce by SMMEs in two South African cities. *International Journal of eBusiness and eGovernment Studies*, *10*(1), 51–66.

Nomnga, V.J. (2021). Empowering rural women in the hospitality industry through small, medium and micro enterprises. *International Journal of Innovation, Creativity and Change*, *15*(8), 1056–1067.

Nyangarika, A., & FSM, B. (2020). Socio-economic factors affecting deposits growth in Sacco's development case of Geita, Tanzania. I*nternational Journal of Advance Research and Innovative Ideas in Education*, *6*(2), 1273–1288.

Ogujiuba, K.K., & Boshoff, E. (2020). SMEs and sustainable entrepreneurship in South Africa: Impact analysis of contextual factors in the services sector. *EuroEconomica*, *3*(39), 7–28.

Ouma-Mugabe, J., Chan, K.Y., & Marais, H.C. (2021). A critical review of policy instruments for promoting innovation in manufacturing small and medium enterprises (SMEs) in South Africa. In C. Daniels, M. Dosso, J. Amadi-Echendu (Eds.), *Entrepreneurship, technology commercialisation, and innovation policy in Africa* (pp. 237–258). Springer. https://doi.org/10.1007/978-3-030-58240-1_11

Portes, A., Manu, I.C., & Lauren, M. (1989). *The informal economy: Studies in advanced and less developed countries*. Johns Hopkins University Press.

Quansah, E., Hartz, D.E., & Salipante, P. (2022). Adaptive practices in SMEs: Leveraging dynamic capabilities for strategic adaptation. *Journal of Small Business and Enterprise Development*, *29*(7), 1130–1148. https://doi.org/10.1108/JSBED-07-2021-0269

Rashid, S., & Ratten, V. (2021). Entrepreneurial ecosystems during COVID-19: The survival of small businesses using dynamic capabilities. *World Journal of Entrepreneurship, Management and Sustainable Development*, *17(*3), 457–476. https://doi.org/10.1108/WJEMSD-09-2020-0110

Rogerson, C.M. (1999). Small enterprise development in post-apartheid South Africa: Gearing up for growth and poverty alleviation. In K. King & S. McGrath (Eds.), *Enterprise in Africa: Between poverty and growth* (p. 8). Intermediate Technology Publications.

Rogerson, C.M. (2008). Integrating SMMEs into value chains: The role of South Africa's Tourism Enterprise Programme. *Africa Insight*, *38*(1), 1–19.

Rogerson, C.M & Rogerson, J.M. (2021a). In-Between' Rural Tourism: Rethinking Rural Tourism Spaces for Policy Development in South Africa. *African Journal of Hospitality, Tourism and Leisure*, *10*(4), 1394–1413. https://doi.org/10.46222/ajhtl.19770720-169

Rogerson, C.M. & Rogerson, J.M. (2021b). The Evolution of Rural Tourism in South Africa: An Historical Lens. *African Journal of Hospitality, Tourism and Leisure*, *10*(6), 1728–1740. https://doi.org/10.46222/ajhtl.19770720-189

Rosalina, P.D., Dupre, K., & Wang, Y. (2021). Rural tourism: A systematic literature review on definitions and challenges. *Journal of Hospitality and Tourism Management*, *47*, 134–149. https://doi.org/10.1016/j.jhtm.2021.03.001

Scheba, A., & Turok, I.N. (2020). Strengthening township economies in South Africa: The case for better regulation and policy innovation. *Urban Forum*, *31*(1), 77–94. https://doi.org/10.1007/s12132-019-09378-0

Schirmer, S.D., & Visser, R. (2021). *What role can small and micro businesses play in achieving inclusive growth?* Johannesburg: Centre for Development and Enterprise.

Sishuba, L.C. (2020). *Institutional framework for promoting and supporting small, micro, and medium enterprise in South Africa: Supply perspective*. Master's thesis. University of Cape Town.

Sixaba, Z., & Rogerson, C.M. (2019). Black economic empowerment and South African tourism: The early pioneers. *African Journal of Hospitality, Tourism and Leisure*, *8*(4), 1–10.

Sixaba, Z., & Rogerson, C.M. (2023). Transformation" and Tourism Small Firm Development in South Africa: Evidence from Eastern Cape Province. *Studia Periegetica*, *1*(41), 1–26. https://doi.org/10.58683/sp.378

Soogun, A., & Mhlongo, L. (2021). Impact of business empowerment workshops on growth of SMMEs towards radical economic transformation. *Expert Journal of Economics*, *9*, 1–8.

Takyi, L., & Naidoo, V. (2020). Innovation and business sustainability among SMEs in Africa: The role of the institutions. In *Sustainability in the entrepreneurial ecosystem: Operating mechanisms and enterprise growth* (pp. 50–74). IGI Global.

Tang, D., & Li, X. (2021). Thoughts on innovation and entrepreneurship mode reform of college students in the context of COVID-19. *The International Journal of Electrical Engineering & Education*, *60*(1), 1548–1557. https://doi.org/10.1177/0020720920984318

Umadia Sr, K., & Kasztelnik, K. (2020). The financial innovative business strategies of small to medium scale enterprises in developing countries and influence for the global economy performance. *SocioEconomic Challenges*, *4*(3), 20–32. https://doi.org/10.21272/sec.4(3).20-32.2020

van der Watt, H. (2022). *Better lives for all?: Prospects for empowerment through marine wildlife tourism in Gansbaai, South Africa*. PhD dissertation (Development Studies). Massey University.

Vilakazi, T., & Bosiu, T. (2021). Black Economic Empowerment, barriers to entry, and economic transformation in South Africa. In A. Andreoni, P. Mondilwa, S. Roberts, & F. Tregenna (Eds.),

Structural transformation in South Africa: The challenges of inclusive industrial development in a middle-income country (pp. 189–212). Oxford University Press.
Vivence, K. (2021). Understanding the state and the role of cooperatives in South Africa: a profiling approach. *ASBBS Proceedings*, *28*, 116–130.
Weaven, S., Quach, S., Thaichon, P., Frazer, L., Billot, K., & Grace, D. (2021). Surviving an economic downturn: Dynamic capabilities of SMEs. *Journal of Business Research*, *128*, 109–123. https://doi.org/10.1016/j.jbusres.2021.02.009
White Paper on National Strategy for The Development and Promotion of Small Business In South Africa. (1995). https://www.gov.za/sites/default/files/gcis_document/201409/163170.pdf
Wiid, J.A., & Cant, M.C. (2021a). The future growth potential of township SMMEs: An African perspective. *Journal of Contemporary Management*, *18*(1), 508–530. https://doi.org/10.35683/jcm21005.115
Wiid, J.A., & Cant, M.C. (2021b). Market conditions in Gauteng townships: Conducive to business growth and sustainability. *Academy of Entrepreneurship Journal*, 27, 1–16.
Yachin, J.M. (2020). *Behind the scenes of rural tourism: A study of entrepreneurship in micro-firms*. Thesis for Doctoral Degree in Tourism Studies. Faculty of Human Sciences. Mid Sweden University.
Zikalala, S. (2011). Correspondence, Deputy Director Intergovernmental Relations and Policy Analysis, Department of Tourism 'Request assistance on community-based tourism: Umbrella for rural tourism and township tourism'.
Zulu, B.C. (2021). An economic development policy implementation approach to the creation of sustainable maritime SMMEs in the KwaZulu-Natal Province. In S. Bauk, S.D. Ilčev (Eds.), *The 1st International Conference on Maritime Education and Development: ICMED* (p. 297). Springer Nature. https://doi.org/10.1007/978-3-030-64088-0_26

Wsparcie rządowe dla MMŚP z branży turystyki wiejskiej na przykładzie gminy Greater Letaba w RPA

Streszczenie. Mikro-, małe i średnie przedsiębiorstwa (MMŚP) przyczyniają się w istotny sposób do rozwoju gospodarczego. Podczas gdy firmy z tego sektora odgrywają kluczową rolę w gospodarkach krajów rozwiniętych, w Republice Południowej Afryki działalność wielu z nich kończy się niepowodzeniem, szczególnie w fazie rozruchu i wzrostu. Celem opisanego w artykule badania było uzyskanie informacji o tym, jak firmy turystyczne z sektora MMŚP w RPA oceniają dostępność i skuteczność wsparcia rządowego. Uzyskane wyniki wskazują, że pomimo programów i inicjatyw wskaźnik niepowodzeń w tym sektorze pozostaje wysoki. Do głównych wyzwań badani respondenci zaliczyli dużą liczbę przepisów, które ograniczają zakres ich działalności i mogą stanowić zagrożenie dla przetrwania. Zdaniem autorów, agencje rządowe odpowiedzialne za pomoc potrzebują więcej informacji o sytuacji potencjalnych beneficjentów, aby programy wsparcia były lepiej dopasowane i uwzględniały specyficzne potrzeby różnych przedsiębiorstw.

Słowa kluczowe: MMŚP, programy wsparcia rządowego, przedsiębiorczość, wsparcie finansowe, wsparcie marketingowe

1.1. Wymogi edytorskie

I. Objętość manuskryptu
Tekst powinien zawierać do 9000 słów z tabelami i rycinami. W przypadku rysunku rozmiar jednego załącznika nie może przekraczać 20 MB.

II. Wymagane pliki
1. Część główna manuskryptu — bez danych identyfikujących autorów (w formacie .rtf, .doc lub .docx):
• tytuł artykułu po angielsku i polsku
• zwięzłe i rzeczowe streszczenie po angielsku i polsku, do 150 słów, przygotowane zgodnie ze strukturą:
— cel
— metody
— wyniki
— wnioski
• słowa kluczowe po angielsku i polsku (do 5 słów)
• wstęp
• tekst główny podzielony na rozdziały opatrzone tytułami (przegląd literatury, metody, wyniki, dyskusja)
• wnioski (teoretyczne i praktyczne, ograniczenia badań i przyszłe prace)
• bibliografia
2. Strona tytułowa manuskryptu, dane autorów (w formacie .rtf, .doc lub .docx)
• tytuł artykułu
• imię i nazwisko autora
• stopień/tytuł naukowy
• afiliacja
• numer ORCID
• adres e-mail
• adres korespondencyjny
3. Ryciny, zdjęcia, schematy, wykresy itp.

III. Przygotowanie tekstu
1. Tabele (w formacie .rtf, .doc lub .docx)
• ponumerowane, opatrzone tytułem oraz źródłem (np. *opracowanie własne*)
• z odwołaniem w tekście (np. *zob. tab. 1*, a nie: zob. *tabela poniżej/powyżej*)
• każda rubryka wypełniona treścią
• skróty użyte w tabeli — objaśnione pod nią
2. Ryciny, zdjęcia, schematy, wykresy itp. (format .tif dla bitmap, .eps dla plików wektorowych i xls lub xlsx w przypadku wykresów)
• min. rozdzielczość bitmap to 300 dpi, długość podstawy min. 125 mm
• opatrzone numerem oraz źródłem (np. *opracowanie własne*)
• pozbawione napisów: półgrubych, wersalikami, białych na czarnym tle, czarnych wypełnień, dodatkowych ramek
• z odwołaniem w tekście (np. *zob. rys. 1*, a nie: *zob. rysunek poniżej/powyżej*)
• z objaśnieniem użytych skrótów
3. Tekst główny
• marginesy: 2,5 cm z każdej strony
• numeracja stron — ciągła, u dołu strony
• czcionka Times New Roman z polskimi znakami, 12 pkt
• odstęp między wierszami — 1,5 wiersza
• wyróżnienia — **pismem półgrubym**
• słowa obcojęzyczne — ***kursywą***
• nazwiska użyte po raz pierwszy — pełne imię i nazwisko, kolejne przywołanie — samo nazwisko
• skróty — za pierwszym razem pełny termin, a skrót w nawiasie; dalej — tylko skrót

IV. Przypisy bibliograficzne
Według stylu APA 7 (zob. reference guide APA, https://www.scribbr.com/apa-style/apa-seventh-edition-changes/)
• Umieszczone w tekście, zawierają nazwisko autora i rok publikacji: Jafari (2003) lub (Jafari, 2010)
• Cytowanie dokładne tekstów wziętych w cudzysłów: Jafari (2003, p. 24) lub (Jafari, 2003, p. 24)
• Cytowanie dwóch i trzech autorów — podajemy nazwiska wszystkich autorów, a przed ostatnim wstawiamy „and" lub „&": Smith and White (2018)… lub (Smith & White, 2018) Beggs, Ross and Goodwin (2008)… lub (Beggs, Ross & Godwin, 2008)
• Cytowanie więcej niż trzech autorów — podajemy nazwisko pierwszego autora i „et al.": Jafari et al. (2018)… lub (Jafari et al., 2018)
• Brak nazwiska autora/redaktora — podajemy kilka pierwszych słów tytułu pracy:
— jeżeli jest to tytuł książki, periodyku lub raportu — kursywą: (Guide to citation, 2020)
— jeżeli jest to tytuł artykułu, rozdział lub strona internetowa — w cudzysłowie: („APA Citation", 2020)
• Cytowanie więcej niż jednej publikacji:
— jednego autora: Jafari (2015, 2017, 2020) lub (Jafari, 2015, 2017, 2020)
— dwóch i więcej autorów — należy je wymienić w kolejności alfabetycznej: (Jafari & Black, 2010; White, Green, & Brown 2020)
— jeśli autor wydał w danym roku więcej niż jedną publikację, to po dacie należy dodać kolejne litery alfabetu, np. (Jafari, 2014a, 2014b)
• Przypisy objaśniające, polemiczne, uzupełniające tekst główny — numerowane kolejno i umieszczone u dołu strony, czcionka 10 pkt, interlinia pojedyncza.
• Cytowanie źródeł za innym autorem (jedynie w szczególnych przypadkach): Jafari (2010) as cited in Black (2016) lub (Jafari, 2010, as cited in Black 2016)

V. Bibliografia
Uporządkowana alfabetycznie według nazwisk autorów/redaktorów i tytułów prac niemających autora/redaktora, a jeśli jest więcej prac jednego autora, to należy je zestawić chronologicznie wg dat wydania.
• Artykuł w czasopiśmie
Zawiera: nazwisko autora, inicjały imienia, rok, tytuł artykułu (prosto), tytuł czasopisma (kursywą), tom (kursywą) i nr czasopisma, zakres stron, DOI:

Oppermann, M.J. (2000). Tourism Destination Loyalty. *Journal of Travel Research*, *39*(1), 78–84. https://doi.org/10.1177%2F004728750003900110

• Pozycja książkowa
Zawiera: nazwisko autora/redaktora, inicjał imienia, rok praw autorskich, tytuł książki (kursywą), numer wydania (w nawiasie), wydawnictwo, DOI lub URL:

Kotler, P., Bowen, J.T., Makens, J., & Baloglu, S. (2017). *Marketing for Hospitality and Tourism* (7th ed.). Pearson Education. https://doi.org/10.1177%2F0047287507303976

• Rozdział pracy zbiorowej
Zawiera: nazwisko autora rozdziału, inicjał imienia, rok praw autorskich, tytuł rozdziału (prosto), In, inicjał imienia, nazwi-

sko redaktora + (Ed./Eds.), tytuł pracy zbiorowej (kursywą), numer wydania i zakres stron (w nawiasie), wydawnictwo, DOI lub URL:

Scott, N.R., & Le, D.A. (2017). Tourism Experience: A Review. In N.R. Scott & J. Gao (Eds.), *Visitor Experience Design* (2nd ed., pp. 30–52). CABI. https://doi.org/10.1080/10645578.2016.1144023

- E-book

Mitchell, J.A., Thomson, M., & Coyne, R.P. (2017). *A guide to citation*. https://www.mendeley.com/reference-management/ reference-manager

- Rozdział z e-booka

Troy, B.N. (2015). APA citation rules. In S.T. Williams (Ed.), *A guide to citation rules* (2nd ed., pp. 50–95). https://www.mendeley.com/reference-management/reference-manager

- Cały portal internetowy korporacji/grupy/organizacji

Zawiera: nazwę korporacji/grupy/organizacji. (rok ostatniej aktualizacji, dzień miesiąca, jeśli podano). Tytuł portalu internetowego. URL:

WHO. (2014, 14 listopada). World Health Organization. https://www.who.int/

- Pojedyncza strona internetowa

Zawiera: nazwisko, inicjał autora. (rok, miesiąc, dzień). Tytuł artykułu (kursywą). Tytuł portalu internetowego. URL:

Mitchell, J.A., Thomson, M., & Coyne, R.P. (2017, January 25). *APA citation. How and when to reference*. https://www.howandwhentoreference.com/APAcitation

1.1. Editorial requirements

I. Size of manuscript

The text should contain up to 9000 words including tables and figures. For drawings, the size of one attachment cannot exceed 20 MB.

II. Required files

1. **Files with the main part of the manuscript** (without authors' data, .rtf, .doc or .docx format):
- title of the article in English and Polish
- concise and factual abstract in English and Polish, from 150 to 300 words, prepared according to structure:
  — purpose
  — methods
  — results
  — conclusions
- keywords in English and Polish (up to 5 words)
- introduction
- body text — organized into chapters/sections, each with a unique title (literature review, methods, results, discussion)
- conclusion (theoretical and practical, research limitations and future work)
- bibliography — complete list of referenced sources

2. **Files with the title page including authors' data** (.rtf, .doc or .docx format)
- the title of the article
- author's first and last name
- academic degree/title
- organization/institution (if applicable)
- ORCID number
- email address
- mailing address

3. **Figures, photos and graphics**

III. Preparing text

1. **Tabeles** (.rtf, .doc or .docx format)
- numbered consecutively and consistently using Arabic numerals
- include a caption and a reference to the data source (e.g. *own research*)
- tables should be referenced in the text by their number rather than expressions such as "above" or "below" (e.g. *cf. Table 1*, not: *see table above/below*)
- do not include blank cells
- any abbreviations used must be expanded below the table

2. **Figures, photos and graphics**
- editable (formats: .tif for bitmaps, .eps for vector files, and xls or .xlsx for charts)
- bitmaps — minimum resolution: 300 dpi, width: 125 mm
- all figures should be numbered consecutively using Arabic numerals
- for any artwork that has already been published elsewhere, indicate the original source (or otherwise state Source: *own research*)
- apply no lettering in white against black background, whether in bold or italics, and no black fills or excess frames
- if the figure is referenced in the text, use its number rather than expressions such as "above" or "below" (e.g. *cf. Fig. 1*, not: *see figure above/below*)
- provide explanations of any abbreviations used

3. **Body text**
- margins: 2.5 cm each
- continuous throughout the text, using Arabic numerals, placed at the bottom of page (footer)
- typeface: Times New Roman, 12 pts
- line spacing: 1.5 line
- highlights or emphasis: apply **bold** print
- foreign (non-vernacular) words and expressions: ***italicized***
- people's names: give full name (including all given names and last name) at first mention; for any further references – quote last name only
- abbreviations and acronyms: when first used, give the complete phrase (name), including its abbreviation in brackets; onwards — use abbreviation only

IV. In-text citations

APA style (see: APA reference guide, https://www.scribbr.com/apa-style/apa-seventh-edition-changes/)
- are placed within the text and include the author's surname and year of publication: Jafari (2003) or (Jafari, 2010)
- Direct quotes should also contain the page number: Jafari (2003, p. 24) or (Jafari, 2003, p. 24)
- **In the case of two and three authors**, all surnames should be listed with either „and" or „&" placed before the last one: Smith and White (2018)… or (Smith & White, 2018) Beggs, Ross and Goodwin (2008)… or (Beggs, Ross & Goodwin, 2008)
- **In the case of more than three authors** — only the first author's surname should be given, followed by „et al.": Jafari et al. (2018)… or (Jafari et al., 2018)
- **If the author/editor is unknown**, the first few words of the reference should be used:
  — **if this is the title of a book, periodical or report**, it should be italicised: (Guide to citation, 2020)
  — **if this is the title of an article, chapter or a website**, it should be placed in quotation marks: ("APA Citation", 2020)
- Citing multiple works:
  — **by the same author:** Jafari (2015, 2017, 2020) or (Jafari, 2015, 2017, 2020)
  — by two or more authors — they should be listed alphabetically by the first author: (Jafari & Black, 2010; White, Green, & Brown 2020)
  — **if the author published multiple works in one year**, each work should be cited with consecutive letters of the alphabet following the year, e.g.: (Jafari, 2014a, 2014b)
- **Other references containing any additional comments or explanations, references to legislation**, court rulings and decisions, as well as links to websites that are provided outside the main body of the text must be numbered consecutively and placed at the bottom of the page (as footnotes) using 10 pts font with single line spacing
- Citing secondary sources (only in exceptional cases): Jafari (2010) as cited in Black (2016) or (Jafari, 2010, as cited in Black 2016)

V. Reference list

A reference list should be ordered alphabetically by first author's / editor's surname or by title, in the case of works whose author/ editor is unknown, and in the case of authors with multiple works, they should be listed chronologically by year of publication.
- **Referencing a journal article**

The basic format is: Author surname, Initial(s)., (Year), Article title (not italicised), Journal title (italicised), Volume (italicised) (issue or part number), page numbers, DOI:

Oppermann, M.J. (2000). Tourism Destination Loyalty. *Journal of Travel Research*, *39*(1), 78–84. https://doi.org/10.1177%2F004728750003900110

- Referencing a book

The basic format is: Author/Editor surname, Initial(s)., (copyright year), Book title (italicised), edition number (in brackets). Publisher. DOI or URL:

Kotler, P., Bowen, J.T., Makens, J., & Baloglu, S. (2017). *Marketing for Hospitality and Tourism* (7th ed.). Pearson Education. https://doi.org/10.1177%2F0047287507303976

- Chapter in an edited book

The basic format is: Surname of the chapter's author, initial(s)., Copyright year, Chapter title (not italicised), In, Editor initial(s)., Surname + (Ed.) or Editor initial(s)., surnames (separated by "&") + (Eds.), Edited book title (italicised), edition number and page range (in brackets). Publisher. DOI or URL:

Scott, N.R., & Le, D.A. (2017). Tourism Experience: A Review. In N.R. Scott & J. Gao (Eds.), *Visitor Experience Design* (2nd ed., pp. 30–52). CABI. https://doi.org/10.1080/10645578.2016.1144023

- Referencing an e-book

Mitchell, J.A., Thomson, M., & Coyne, R.P. (2017). *A guide to citation*. https://www.mendeley.com/reference-management/ reference-manager

- Referencing a chapter in an e-book

Troy, B.N. (2015). APA citation rules. In S.T. Williams (Ed.), *A guide to citation rules* (2nd ed., pp. 50–95). https://www.mendeley.com/reference-management/reference-manager

- Referencing an entire website created by a corporation, institution or group

Use the following format: Corporation/group/organization name. (year website was last updated/published, month day if given). Title of website. URL:

WHO. (2014, 14 listopada). World Health Organization. https://www.who.int/

- Referencing a single web page

Use the following format: author surname, initial(s). (year, month, day). Page title (italicised). Site name. URL:

Mitchell, J.A., Thomson, M., & Coyne, R.P. (2017, January 25). *APA citation. How and when to reference*. https://www.howandwhentoreference.com/APAcitation

ISSN 2658-1736