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Anne Köchling • Sabrina Seeler • Peet van der Merwe • Albert Postma (Eds.)

Towards Sustainable and Resilient Tourism Futures

Insights from the International Competence Network of Tourism Research and Education (ICNT)





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Band 1

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Anne Köchling, Sabrina Seeler, Peet van der Merwe, Albert Postma

Editorial: Towards Sustainable and Resilient Tourism Futures

The competitiveness of tourism products and tourist destinations heavily rely on natural and social resources. Thus, the industry's interest in ensuring a harmonious relationship between the natural and human world while protecting the world's finite resources is indisputable. This is also reflected in the definition of sustainable tourism by United Nations Environment Programm (UNEP) and the World Tourism Organization (UNWTO):

Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities (UNEP & UNWTO, 2005).

However, with a contribution of 8 % to the global greenhouse emission between 2009 and 2013 (World Economic Forum, 2018), the tourism industry's environmental footprint contributes heavily to environmental degradation alongside intensifying social inequalities (Danish & Wang, 2018). Until early 2020, economic maximisation strategies translated into an insatiable desire to travel among the growing global middle class, which was reflected in continuous growth in international tourist arrivals worldwide (UNWTO, 2020). Nevertheless, aspects of social and environmental sustainability were largely neglected in some destinations leading to severe imbalances in the social and environmental ecosystems. Such imbalances became threats to exceeding the carrying capacity of destinations expressed in, among others, overtourism tendencies, anti-tourist attitudes among residents or tourismphopia (e.g. Eisenstein & Schmücker, 2020; Koens et al., 2020; Milano et al., 2019). This focus on maximisation strategies and thus economic sustainability portrays a disequilibrium in the tourism industry's approach towards triple bottom line sustainability. A rethinking of tourism as we know it has been addressed by both tourism practitioners and academics prior to COVID-19 already. Moreover, a shift towards more sustainable tourism practices has been deemed incontestable to ensure the industry's positive contribution to fulfilling the UN's 17 Sustainable Development Goals (SDGs) (Dweyer, 2018; Higham & Miller, 2018; UN, 2015). Voices for re-imagining and transformation beyond previously dominant neoliberal growth strategies towards more holistic sustainability and resilience became louder during the pandemic (Postma et al., 2020). The UNWTO called for more responsibility in the recovery stages and asked for a restart of the industry:

This crisis is an opportunity to rethink the tourism sector and its contribution to the people and planet; an opportunity to build back better towards a more sustainable, inclusive and resilient tourism sector that ensure the benefits of tourism are enjoyed widely and fairly (Zurab Pololikashvili, UNWTO Secretary-General in UNWTO, n.d.).

Furthermore, Higgins-Desbiolles (2020, p.611) noted that the pandemic could become a "watershed moment", and scholars asked for optimism for positive change despite the high costs of the pandemic (Ioannides & Gyimóthy, 2020; Niewiadomski, 2020). Some scholars believe that the COVID-19 pandemic offers an unprecedented opportunity for a positive transformation of the industry towards more sustainable tourism production and consumption (Ioannides & Gyimóthy, 2020). Postma et al. (2020) also proposed responsible tourism as one of four scenarios for post-COVID-19 travel and explained that this scenario is more likely if the recession is short and shallow and a We-thinking is applied. However, the scholars also noted that business might "smell their opportunities" (Postma et al., 2020, p. 15) and focus on economic growth again, which would result in business as usual. Although there was consensus that a return to prepandemic overtourism tendencies and related adverse impacts is undesired. scholars also advised being "careful what you wish for" (Hall et al., 2020, p. 591). They anticipate little macro-scale change in post-COVID-19 tourism. In contrast, given that (international) leisure travel has been heavily restricted or even prohibited and leisure travel had become uncomfortable and demanding due to fast-changing, country-specific restrictions, test requirements and quarantines (Gössling & Schweiggart, 2022), forms of revenge or compensatory travel that satisfies the backlog demand are anticipated (Kim et al., 2021). These foresights can be evidenced by the tireless demand for leisure travel and increasing urge to travel. In Germany, for instance, the wanderlust in early 2022 was greater than ever (Forschungsgemeinschaft Urlaub und Reisen e.V., 2022). Although general trends towards more sustainable travel consumption have been witnessed (Seeler, Köchling et al., 2021; Seeler, Zacher et al., 2021), the attitude-behaviour gap (Juvan & Dolnicar, 2014) remains and human-induced impacts seem secondary when travelling. Instead, tourists want to enjoy the 'best time of the year' and do not want to hold back when travelling - an issue that is generally seen in the epoch of the Anthropocene.

However, not only the insatiable demand and partly unsustainable travel behaviour challenge the sustainable development of the post-pandemic tourism industry, but also supply-side actions and strategies. With tourism at a standstill or reduced business opportunities for almost two years (early 2022), economic scars are deepening. The industry's survival is increasingly threatened, which is mirrored in a growing number of bankruptcies and new dept. This is especially felt in long-haul tourism-dependent nations (Gössling & Schweiggart, 2022). As seen in past crises, it is expected that economic recovery will be in the foreground. With tourists impatiently waiting for leisure travel to resume, previously identified social and environmental imbalances will likely be further threatened. Early evidence also demonstrates that some issues, such as overtourism that was mostly recognised in cities prior to COVID-19, might have declined during lockdowns (Koh, 2020), but have returned quickly once restrictions were lifted and have moved to other areas. With the growing interest for nature-based and outdoor activities in a short-distanced environment that allow for social distancing and short-term recreation, issues have shifted into rural areas with growing pressure on ecosystems. For example, in South Africa, accommodation facilities on guest farms and game reserves showed an increase in tourist numbers as restrictions have slowly been lifted (Statistics South Africa, 2022). Hence, a transformation of the tourism industry seems more needed than ever.

A transformation towards more sustainable and resilient tourism systems is particularly important as future shocks are likely in the VUCA world, defined by volatility, uncertainty, complexity and ambiguity. Although the tourism industry is generally understood as being resilient, meaning that the industry's recovery from past crises demonstrated to be comparably quick due to flexibility and adaptive capacity (Orchiston, 2013; Postma & Yeoman, 2021), the magnitude of the impact of the COVID-19 pandemic brought new dimensions to questions of sustainability and resilience building. These new dimensions are currently being challenged by the intensified price wars for gas and oil as well as other resources as a result and direct respond to the Ukrainian war which started in March 2022 by the Russian invasion.

The tourism industry is generally understood as a catalyst for change and driver of transformation (Seeler, Zacher et al., 2021) – transformation of spaces, communities, businesses but also transformation of individuals and society (Sheldon, 2020). However, a rethinking of tourism and the idea of 'Building Back Better' requires systemic changes that go beyond single stakeholder transformation. Instead, a re-imagining of the tourism system is needed and this system transformation requires the consciousness and willingness to change of all stakeholders involved (Hartman et al., 2020). Seeler, Zacher et al. (2021, p. 15) argue that "transformation towards greater sustainability requires radical change in social behaviour and systemic shifts in believes and values" and further argue that "not travelling does not seem to be the solution to balancing the sustainability equilibrium", rather more resilient tourism systems are needed.

However, there will not be one generally applicable solution for destinations worldwide to become more sustainable and resilient as different challenges must be tackled. Although the tourism industry's contribution to the fulfilment of the UN's 17 SDGs is particularly mentioned in SDG8 'decent work and economic growth', SDG12 'responsible consumption and production' and SDG14 'life below water', other SDGs are central in several countries across the globe. This is also portrayed in the selection of chapters provided in this book that were authored by scholars from the International Competence Network for Tourism Research and Education (ICNT). The ICNT is an association of international universities in the field of tourism which has been established in 2006. Member universities are committed to a regular exchange regarding research and teaching in a tourism and hospitality context. The ongoing intercultural exchange enriches the knowledge of all members and promotes their professionalism in teaching and research in tourism. The contributions of network members yielded in this book represent perspectives and case studies on sustainable and

resilient tourism futures from diverse cultural backgrounds, such as Canada, China, Egypt, Finland, Germany, New Zealand, Norway, South Africa, and the United Kingdom.

Part 1: Sustainability – Attitude and Behaviour of Selected Tourist Groups

The book starts with three contributions that consider *tourists' perspectives on sustainability aspects* by analysing different groups of tourists.

Bellmann and Clemens shed light on German best agers' attitudes towards sustainability aspects of package tours. In a quantitative online survey among customers of a German outbound tour operator in the special interest market of guided group tours (cultural and experiential tours) they found, among others, that the awareness of the importance of sustainability during the tour is high, but that the tour operator is considered responsible for ensuring sustainability standards. In addition, they found that there is a high willingness among the target group to pay for supplements in order to make the journey more sustainable.

Subsequently, Seeler, Böhling and Koch introduce a description of volunteer tourists and critically explore whether volunteer tourists behave more sustainably when travelling or not. Based on a large-scale, representative online survey the authors found differences between Germans, Austrians and Swiss that are generally interested in volunteering while travelling for leisure and argue that a transformation towards 'volunteer tourism 2.0' is needed to ensure that the desired positive contribution to sustainable community development can be realised.

The Antarctic represents a fragile ecosystem that needs particular protection. As He and Liu demonstrate, tourist demand for a trip to Antarctica steadily grew until the outbreak of the COVID-19 pandemic. Chinese tourists in particular are interested in visiting this unique region. However, this increased number of visitors is accompanied by sustainability problems. Against this background, the authors analysed the tourist experience as well as the perception of sustainability issues from the perspective of Chinese visitors to Antarctica. They used online postings on two Chinese social media platforms as a basis for thematic data analysis. Findings paint a detailed picture of the Antarctic travel experience from the perspective of the aforementioned tourist group. Moreover, they conclude with potential obstacles (e.g. tourists' misbehaviour) as well as catalysts (e.g. environmental education) to sustainable tourism in Antarctica.

Part 2: Management of Wildlife Protection

Sustainability can be discussed through different lenses that depict the triple-bottom-line approach. The majority of studies that examined sustainability in a tourism context took an environmental perspective and discussed, among others, tourism's contribution to environmental degradation and resource exploitation, impacts on fragile ecosystems or (marine) wildlife, tourism-induced

pollution or climate change. The second part of the book focusses on *sustainable management of wildlife sites*.

Black, Engeset and Lück introduce results of a qualitative study on visitor responsibility at basking sites of Hawaiian green sea turtles at Hoʻokipa Beach Park (Maui, Hawaiʻi). The authors conclude that improvements to site management and visitor capacity are needed to protect the endangered species while ensuring a positive and educative visitor experience. More specifically, a viewing platform and non-resident park entry fees are recommended to ensure sustainable site development. These results illustrate that regulative visitor management tools are needed to alleviate behavioural and environmental pressures while ensuring that terrestrial basking of Hawaiian green sea turtles is not at risk.

Zhang, Lück and Liu further discuss tourism-induced impacts on marine wild-life and the need for sustainable management Zhang et al. apply a systematic literature review on adaptive management of whale-watching tourism in Port Philipp Bay (Australia). The authors identify a lack of Limits of Acceptable Change criteria as one of the core shortcomings to ensure ecological sustainability at Port Philipp Bay. They further recommend strengthening social science research, enhancing and establishing monitoring methods and improving knowledge exchange between different stakeholders. Thus, the authors conclude a combination of educative and regulative measures to ensure sustainability of whale-watching in the case of Port Philipp Bay.

Part 3: Management of Sustainability Aspects by Industry Stakeholders

The role of industry stakeholders in ensuring sustainable development through appropriate visitor management practices (i.e., soft/educative and hard/regulative visitor management) is commonly discussed in the literature, and it is widely assumed that an implementation gap prevails when it comes to environmental standards. Adaptive management and circular approaches are needed to reach carbon neutrality or positivity in tourism and visitors' awareness of their environmental footprint and possible negative impacts need to be strengthened. *Management aspects of different industry stakeholders* are discussed in this third part of the edited collection.

Ritalahti and Ali discuss the role of travel intermediaries in the realisation of sustainable consumption in tourism. They argue that travel intermediaries must take more responsibility not only to satisfy tourists' dynamically changing demand and desire for more environmental, social and economic sustainability when travelling, but also to minimise the prevailing implementation gap. The authors emphasise the heavy economic impacts of COVID-19 on travel intermediaries, yet also highlight that the increasing complexity in today's world can benefit travel intermediaries' survival as tourists value expert advice and prefer flexible and safe booking options through human interaction instead of online agents. This assumption was confirmed in the online survey which was con-

ducted in spring 2021 and in which 1,096 Finns that were clients or followers of Finnish travel intermediaries were queried. Study results show a shift in tourist behaviour towards more responsibility and stimulate travel intermediaries to respond to the changing demand.

A strategic shift is also needed in the hotel industry, which is a major contributor to the tourism industry's environmental footprint. Holmberg and Konttinen discuss how circularity, more specifically the concept of 'Circular Economy (CE)', is adopted in selected hotel chains in the Nordic countries. Holmberg and Konttinen demonstrate the complexity of circularity in hotels, discuss the degree of implementation using the ReSOLVE framework (regenerate, share, optimise, loop, virtualise, exchange) and conclude that CE actions among the selected Nordic hotels remain sporadic and holistic approaches are needed to ensure sustainable tourism development.

Sustainable tourism development can only be realised if environmental, economic and social aspects are equally integrated, and holistic management plans are established. One out of ten jobs worldwide is within tourism and the industry is an important driver of job creation particularly in developing countries as entry barriers are comparably low. Hence, the industry's important role in minimising social and economic inequalities is addressed and its contribution to the fulfilment of the UN's SDGs is revealed. However, Makuyana and du Plessis question whether tourism education is as inclusive and accessible as tourism employment proposes to be. The authors identify success factors for the co-creation of accessible and inclusive tourism education.

Part 4: Towards Sustainable and Resilient Tourism Futures – Strategies to Overcome COVID-19 Induced Issues

The last four chapters of the book comprise contributions regarding strategies to mitigate COVID-19 induced problems in tourism. These introduced strategies and case studies can have a positive impact on sustainable tourism futures by supporting, among others, community resilience.

Swanepoel and van der Merwe present the results of a market segmentation of scuba divers in Ponta do Ouro, Mozambique. Based on an extensive analysis of travel motives, they identified five different clusters of scuba divers which should be addressed differently in marketing. With these results, the authors support dive operators, which were hit hard by COVID-19, to better target potential dive tourists in post-COVID-19 tourism.

In the following chapter Sarhan and Elmahdy take us on a journey to Wadi El Gemal National Park (WGNP) in Egypt. In this ecotourism hotspot, the pandemic brought demand to a standstill with dramatic consequences for the population, which is highly dependent on tourism. In this case study, the authors present the impact of the pandemic on the community and the successful strategy for coping with the crisis: the COVID-19 Crisis Management Plan which was designed and implemented by the national park's stakeholders to mitigate

the socio-economic impacts of the pandemic thus supporting community resilience.

Dong, Schänzel and Liu focus on a form of travel that has gained importance among Chinese families in the wake of the COVID-19 pandemic and the associated need for social distancing – also when travelling: Family Recreational Vehicle Tourism. With this form of travel quarantine and vacation can be perfectly combined (quaran-cation). The theoretical background, as well as the influencing factors (e.g. cultural aspects) of this concept as a form of resilient tourism for families in pandemic times, are presented and summarised in a conceptual framework that provides the basis for further research in the field.

The book ends with Matiza's contribution on the impact of the COVID-19 pandemic on domestic tourism in Sub-Saharan Africa (SSA). This region is also highly dependent on international tourism. Respectively, the crisis had an even more significant impact. While in other parts of the world it has been possible to at least partially compensate for the lack of international guests by strengthening domestic tourism, this region faces particular challenges in domestic tourism. Matiza highlights and explains the particular difficulties related to domestic tourism in the SSA region and makes recommendations on how this type of tourism could be promoted to be better prepared for future crises for the benefit of local communities.

In summary, this book covers a wide range of perspectives on sustainability in tourism from different parts of the world while highlighting the diverse and complex facets that the topic entails. It also addresses the impact of the COVID-19 pandemic on tourism in other parts of the world and stresses the increased relevance and need for a shift in focus from economic to environmental and social sustainability. Tourism research must continue to contribute to sustainable and resilient tourism futures by shedding light on the critical issues. We look forward to a continued fruitful exchange on this and other topics within the ICNT network and wish all readers an exciting read.

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Part 1: Sustainability: Attitude and Behaviour of Selected Tourist Groups

Charlotte Bellmann, Olav Clemens

Best Ager in Times of Sustainable Tourism: A Consumer Survey on Sustainability in Guided Group Travel

Abstract: In times of demographic change, almost half of the German population is above the age of 50. 'Best Agers' are fit 50+ year olds, characterised by an above-average purchasing power and frequent travel activities. The sheer numbers of travellers belonging to this age group makes them relevant for the (German) tourism industry. When working towards more sustainability in tourism, understanding this age groups' preferences and needs concerning sustainability is key. This empirical study aims to shed light on consumer awareness of sustainability in guided group travel with a focus on the associated Best Ager target group. In a quantitative survey, attitudes of 1,733 participants were researched. A majority has positive attitudes towards sustainability and deems it essential in package tours. The tour operator is considered responsible for ensuring sustainability standards. Furthermore, participants show a willingness to accept surcharges for sustainable holidays or to travel by train/coach.

Keywords: Sustainable Tourism, Best Ager, Tour Operator, Guided Group Tours, Quantitative Research

1 Introduction

The age group consisting of individuals who are 50 and above is of increasing interest to the tourism sector in Germany. In times of demographic change, when almost half of the German population is above the age of 50, the so-called 'Best Agers' – a physically fit and active age group with high purchasing power and frequent travel activities – are highly significant for the tourism industry. The Best Agers' travel behaviour, preferred destinations and other holiday interests have been well researched in the past (Grimm, 2020; Sonntag & Sierck, 2005). However, little is known about their awareness of sustainability issues. Is this target group interested in sustainable holiday products, and if so, do they have a specific preference for, or an aversion to, sustainable holiday tours? Questions like these were researched by means of a quantitative online survey among customers of a German outbound tour operator in the special interest market of guided group tours, which offers cultural and experiential tourism ('Studienreisen').

2 Research Objectives

This research focused on attitudes of tour operator customers in Germany towards sustainability in the market segment of guided group tours. The objectives were to:

- (i) analyse whether sustainability is a relevant issue,
- (ii) research attitudes towards topics such as air travel, cruises and carbon offsetting, and
- (iii) identify preferences, requirements and limitations for sustainable holiday products.

Although aspects of social and economic sustainability were also a part of this study, an emphasis was placed on environmental sustainability issues and transportation. While the focus of the study was to research consumer attitudes towards sustainability without a specific age group in mind, a review of the participants' socio-demographic data and travel behaviour led to the conclusion that a majority of those surveyed belonged to the target group of Best Agers' in Germany. In this data analysis, we aim to contribute relevant insights with regard to Best Agers' awareness of sustainability.

3 Literature Review

3.1 Sustainable Tourism Development

Sustainability in tourism has been discussed academically for the past three decades (Huang et al., 2019). Reliant on the world's natural wonders and cultural heritage, the tourism industry is heavily affected by the current lack of sustainable action in tourism development. From dying coral reefs and plastic pollution in the ocean (Hall, 2001), to social movements with anti-tourist sentiments in urban areas (Milano et al., 2019) and economic losses in destinations heavily reliant on ski-tourism due to the lack of snow (Steiger, 2011), the negative effects of unsustainable (tourism) growth have been studied in every part of the world.

New concepts and terms have emerged within the tourism industry with the conceptualisation of sustainable development on a global political level in the Brundtland report (World Commission on Environment and Development, 1987). The United Nations Environment Programme (United Nations Environment Programme and World Tourism Organisation, 2005) defines sustainable tourism as "tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities" (p. 12). Hall et al. (2015), Rein and Strasdas (2017) and Weaver (2006) have reviewed theoretical concepts and models of sustainable tourism, and have illustrated key challenges for the tourism industry, such as human rights violations, loss of biodiversity, and energy, land and water consumption.

3.2 Tour Operators and Sustainability

A growing body of research has highlighted the role tour operators could play in the sustainable development of the tourism industry (Carey et al., 1997; Font et al., 2008; Kalisch, 2002; Kirstges, 2019; Rein & Strasdas, 2017). As intermediaries between tourists, service providers and destinations, tour operators are identified as an influential component within the tourism system. First, they

can influence the dynamics of service providers through their purchasing power (Font et al., 2008; Kalisch, 2002). Furthermore, tour operators control the tourist's journey within the destination and, depending on the size of the company, have the power to shape demand through their offers (Carey et al., 1997).

Numerous studies have focussed on exploring concepts such as corporate social responsibility (CSR) in the tour operator business and identifying practical approaches for the industry (Kalisch, 2002; Kirstges, 2019; Lund-Durlacher et al., 2019; Rein & Strasdas, 2017). Some tour operators are only slowly recognising their responsibility for sustainable action. However, with increasing public debate about the effects of travel on climate change and other sustainability topics, more and more businesses of all sizes and specialisations in the German market are starting to implement sustainability strategies (Harms et al., 2019). Measures to reduce the negative impacts of holiday trips include offering train and coach trips, carbon offsetting, reducing waste and water consumption, and choosing sustainable service providers at the destination (Kirstges, 2019; Rein & Strasdas, 2017). Furthermore, a growing body of tour operators offer more conscious and regenerative experiences for their guests. The term 'regenerative tourism' refers to travel activities that positively impact host communities and the environment and feed back into the system from which the tourism industry benefits (World Travel & Tourism Council [WTTC], 2021).

3.3 Demand for Sustainable Tourism

The lack of demand and uncertainty about the acceptance of sustainable travel products is one of the reasons why tour operators hesitate to take action concerning sustainability. Therefore, analysing and understanding the demand for sustainable tourism is of academic and practical interest. In this field of research, attitudes and behavioural characteristics are distinguished, as positive attitudes do not necessarily result in sustainable behaviour. The so-called attitude-behaviour gap is particularly evident when researching aspects of sustainability in tourism (Juvan & Dolnicar, 2014).

While attitudes towards sustainability in tourism are increasingly positive, several studies have found that German travellers still rarely make sustainable choices when planning a holiday (Kreilkamp et al., 2017; Schmücker et al., 2019). Until the COVID-19-pandemic in 2020 and 2021, travel distances and the number of flights had continuously risen in the German market, while the average trip duration decreased. Despite a slight upwards trend, carbon offsetting was bought for trips by air in only 6% of short trips and 2% of longer holidays. When asked directly about sustainability choices while planning their last holiday, only 4% of German travellers stated that sustainability was a crucial factor. Another 23% considered sustainability, among other aspects, and for 72%, sustainability did not play any role at all in the travel planning process (Schmücker et al., 2019).

Nevertheless, positive attitudes towards ecological or social aspects of sustainability were detected in 56 % of German travellers, showing a continuous up-

wards trend (Schmücker et al., 2019). In another representative study, Kreilkamp et al. (2017) found that 54% of travellers would like to travel more sustainably and that 18% already considered aspects of sustainability when travelling. Travellers with more advanced educational backgrounds tended to be more sustainability-conscious than those without some sort of professional training (Kreilkamp et al., 2017), and Generation Z and baby boomers have been identified as the most sustainability-conscious age groups (Kreilkamp et al., 2017; YouGov Deutschland GmbH, 2020). Available income, preferred travel destinations and holiday types seem to be other influencing factors (Günther et al., 2014; Kreilkamp et al., 2017).

Another topic of recent academic interest is the phenomenon of 'flight shame', defined as 'a reluctance to travel by air, or discomfort at doing so, because of the damaging emission of greenhouse gases and other pollutants by aircraft' (Oxford University Press, 2021). A study found that it most often occurs in younger generations, such as Generation Z and millennials¹ (YouGov Deutschland GmbH, 2020). Overall, 73 % of German travellers reported having a guilty conscience about flying (Forschungsgemeinschaft Urlaub und Reisen e. V., 2020). Furthermore, a mobility study by TÜV (Technischer Überwachungsverein) found that 17 % of those surveyed abstained from flying once, or more than once, due to flight shame (Verband der TÜV e. V., 2020). With the development of the phenomenon of 'flight shame' a more positive counterpart movement called 'train pride' emerged in Sweden and is starting to spread to other countries. Passenger statistics in Sweden as well as in Germany verify an increased demand for train travel (RKW Kompetenzzentrum, 2020).

3.4 Best Agers

In 2021, 45% of Germans were older than 50 (Statistisches Bundesamt, 2021). In times of demographic change and medical advances, physically and mentally fit 50+ year-olds, the Best Agers, are economically considered an extremely significant age group, with an above-average purchasing power and an increased appetite for private consumption (Silbermann, 2017). In 2019, 80% of the 50–69 age group and 63% of the 70+ age group went on at least one holiday trip of five days or more, with an above-average spending of 1,084 euro per person, per trip (Grimm, 2020). The Best Agers' travel behaviour, preferred destinations and other holiday interests have been continuously researched and they are seen as one of the key target groups especially for nature-based or cultural tourism (Grimm, 2020; Hausmann & Murzik, 2011; RKW Kompetenzzentrum, 2011; Sonntag & Sierck, 2005).

4 Method

The empirical method used in this research was a quantitative (online) survey (non-probability) conducted in June/July 2020 as part of a master's thesis (Bell-

¹ Generation Z: age 18–24; Millennials: 25–39 (YouGov Deutschland GmbH, 2020).

mann, 2020). The procedure of convenience sampling was used as the participants were recruited through the online newsletter of a medium-sized German outbound tour operator, mainly operating in the German-speaking market of guided group travel (package tours) with a specialisation in cultural and experiential tourism ('Studienreisen') in the upper price segment. The sample consisted of 1,733 German-speaking participants.

The aim of the survey was to research attitudes towards relevant aspects of sustainability in group tours, such as an interest in sustainability measures, their attitudes towards the effects of air travel and cruises on the climate, and their attitudes towards carbon offsetting, as well as their interest in train and bus transportation to and from the destination. The participants were asked to rate statements using four-point Likert-type scales on a range of sustainability topics with the fifth option being a 'don't know'/'decline answer'. The statements in most item sets were randomised to avoid effects of item position/sequence. In addition, an explanation of the term 'sustainability' in the context of tourism was provided within the questionnaire, as study results have shown that travellers often have vague or incorrect understandings of this term (Kreilkamp et al., 2017).

5 Results

5.1 Descriptive Statistics

Participants in the sample had an average age of 66 years (SD = 10 years). Only 5 % were below the age of 50. Moreover, 58 % were women and 42 % were men. In total, 65 % of those surveyed were retirees, and 76 % of the participants had a university degree. Almost one third (31 %) had a monthly household net income of 4,000 euro or more, and another 19 % had 6,000 euro or more at their disposal. In 2019, only 6 % did not go on vacation. With regard to the number of holidays taken, 15 % went on one, and 28 % went on two holidays of five nights or more, with 24 % taking three holiday trips, and another 28 % of participants going on four or more trips. After reviewing these socio-demographic characteristics and travel behaviour, the authors found evidence that the majority of those surveyed belonged to the Best Agers target group.²

5.2 Attitudes towards Sustainability on Holiday Trips

To determine whether the surveyed group had a general interest in sustainable holiday offers, participants were given a variety of statements about their personal preferences and requirements when going on holiday. Two of these eight statements concerned aspects of sustainability (ecological and social, figure 1).

² The data of this study was collected and analysed as part of a master's thesis (Bellmann, 2020), where the Best Ager target group had not yet been a focus. As only 5 % of the respondents were below the age of 50 (n=1,733), a new data analysis excluding these participants was not deemed necessary for this paper. The authors consider the results presented here to be relevant insights for the associated Best Ager target group in Germany.

Part 1: Sustainability: Attitude and Behaviour of Selected Tourist Groups

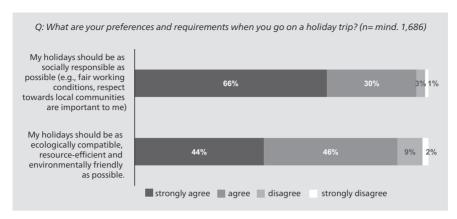


Fig. 1: Attitudes towards sustainability in holiday trips

Source: Authors' work

The vast majority of the participants concurred with both statements. Furthermore, attitudes to the relevance of sustainability standards in package holidays were investigated and showed similar results (figure 2).



Fig. 2: Importance of sustainability standards in package holidays Source: Authors' work

With agreement rates of 90% (ecological sustainability) and 96% (social sustainability), as well as of 87% (sustainability in packaged holidays), it can be stated that most of those surveyed assessed themselves as sustainability conscious (figure 3).

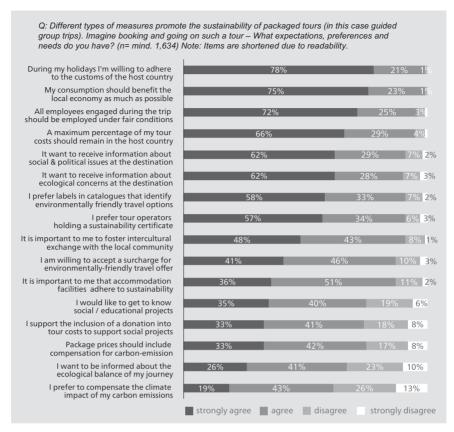


Fig. 3: Attitudes towards sustainability – aspects of guided group tours (selection of results)

Source: Authors' work

However, since discrepancies between attitudes and actual behaviour are a known phenomenon in these types of survey, the participants who had gone on at least one holiday in 2019 were subsequently asked whether sustainability had been an aspect considered during the travel planning process of their last holiday. In this case, the results quantified the attitude-behaviour gap: sustainability had been a crucial factor for only 6 % of travellers, another 52 % had considered sustainability among other things, and for 42 %, sustainability did not play any role (n = 1,624).³

In theory, the participants deemed sustainability to be an important factor. However, only a small percentage of those surveyed seriously put this attitude into practice. Nevertheless, the high numbers of participants with positive attitudes, as well as the percentage of those that had considered sustainability

³ Q: Did you consider aspects of sustainability while planning your last major holiday?.

among other things, can be seen as an indicator of interest and acceptance of sustainable holiday products.

5.3 Attitudes towards Sustainability Measures in Group Travel Offers

To further investigate the participants' interest in sustainable group travel offers, statements about the possible implementation of sustainability aspects in group trips were made. Acceptance or rejection of these statements could be indicated on a four-point Likert scale with a fifth option of declining to answer.

A total of 28 statements containing various measures covered ecological, social and economic sustainability issues, as well as topics concerning relevant stakeholders within the tourism system and different segments of a package tour. These statements were developed based on the results of a previously conducted benchmark analysis which identified the commonly used practices of six German outbound tour operators with a specialisation in sustainability (Bellmann, 2020). A selection of these statements is displayed in figure 3 as well as in two separate descriptive analyses displayed in figure 6 and figure 9.

5.4 Attitudes towards Air Travel and Cruises

Shortly before the pandemic, the effects of air and cruise travel-related carbon emissions on global warming were a much-discussed issue in the media (Schlagwein, 2019; Tabuchi, 2019). The participants' attitudes towards these topics were investigated in two separate item sets.

First, participants were given statements reflecting a range of attitudes towards air travel and its effect on the climate (figure 4). While the results also identified a group of participants with a lack of interest in the issue, most participants showed an awareness of the damaging effects of air travel on the climate. Overall, 70 % did not consider the discussion about climate change to be "overblown" (n = 1,647), and more than half of the participants stated that they had a guilty conscience about flying (52 %, n = 1,664). Moreover, 60 % agreed that one should avoid flying as much as possible (n = 1,684). For 77 % of those surveyed, the price was not the ultimate factor when deciding whether to travel by air or not (n = 1,663), and 74 % would consider payments for carbon offsetting to be an appropriate sustainability measure when travelling by air (n = 1,617). However, the vast majority (81 %; n = 1,683) generally participates in air traffic and did not agree to the statement "I don't fly in general".

Subsequently, the participants were given a second set of items, containing similar statements about cruise holidays (figure 5). While the results showed a large group of participants with an aversion to cruise travel in general, an awareness of the climate-damaging effects of these types of holidays could again be identified. Overall, 77 % did not consider the discussion about this issue to be "overblown" (n = 1,633), and 62 % agreed with the statement that cruises should not be undertaken anymore because of their climate-damaging effects (n = 1,612). In total, 83 % considered carbon offsetting to be an appropriate sustainability measure (n = 1,585). The results of this item set also identified a group of

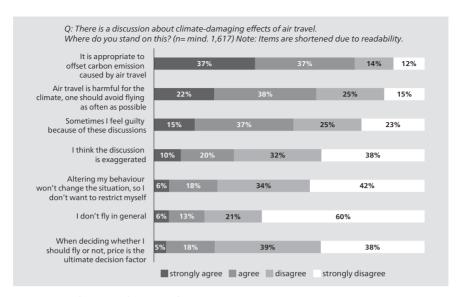


Fig. 4: Attitudes towards air travel

Source: Authors' work

participants who were indifferent to the discussion about cruise travel and climate-damaging effects: 23 % of those surveyed liked to go on cruises, despite knowing about their negative environmental impact (n = 1,612).

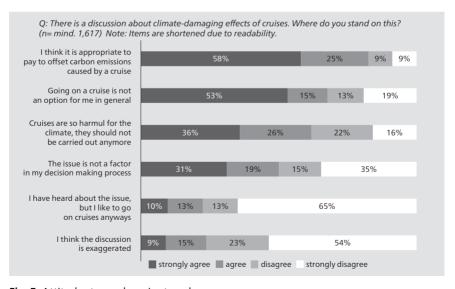


Fig. 5: Attitudes towards cruise travel

Source: Authors' work

5.5 Willingness to Travel by Train and Coach

The transportation component to and from the destination poses a dilemma for tour operators striving for increased sustainability. It is the toughest issue that needs to be resolved when offering ecologically sustainable group travel programmes. In any travel arrangement, the transportation component is the part most harmful to the environment due to the carbon emissions generated (Rein & Strasdas, 2017). Therefore, the respondents' attitudes towards solutions to the problem, for instance, focusing on nearby destinations or using lower-emission modes of transportation, were closely researched with the aid of personal statements (figure 6).

Comparing the distribution of answers, it became apparent that the statement using more unspecific phrasing⁴ was accepted at a higher rate (85 %, n=1,665) than the other statement that set out a detailed example of environmentally friendly travel.⁵ Nevertheless, 63 % of the respondents showed interest in an experiential train travel (n=1,629). To implement train transportation in package tours, it is necessary to choose destinations that can be reached within a reasonable length of time. Two further statements about tours within Germany and to nearby European destinations were given to assess the demand for short-distance travel. The respondents showed significant interest for a wider variety of travel options within Germany (68 %, n=1,494) as well as to nearby European destinations (80 %, n=1,525). These results paint a picture of a target group willing to abstain from high-emission, long-distance travel. However, when assessing these results, the fundamental changes in consumer demand during the COVID-19-pandemic must be considered, as these could have led to short-term attitude changes.

^{4 &#}x27;I prefer environmentally friendly travel to the final destination, e.g. by train.'.

^{5 &#}x27;I think that experiential train travel to the final destination accompanied by a tour guide and including stopovers is exciting.'.

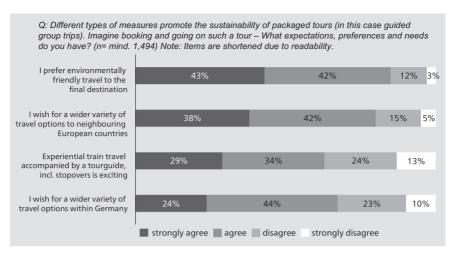


Fig. 6: Attitudes towards environmentally-friendly transportation and travel offers within Germany and Europe

Source: Authors' work

As the implementation of such measures requires the customer's willingness to endure significantly longer and perhaps more uncomfortable travel to and from the destination, the participants' attitudes towards train and coach travel were further investigated (figure 7).

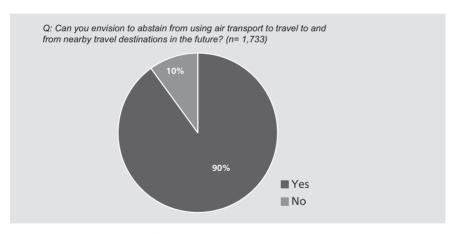


Fig. 7: Willingness to abstain from air travel

Source: Authors' work

The result was plain: 90 % of the respondents confirmed that they could imagine travelling to and from a destination without using air transport. Nevertheless, some factors that might have influenced these results need to be considered. First, the tendency to respond with socially desirable answers must be consid-

ered. Furthermore, travel duration had not yet been specified in this question. Lastly, as previously mentioned, the survey was conducted only a few months after the COVID-19-pandemic had hit Germany, when risks of infection on aircraft were of significant concern to travellers.

Respondents who indicated a willingness to abstain from air travel were subsequently asked to specify an acceptable travel duration to and from the destination, either by train or by coach on a five-part time scale (figure 8).

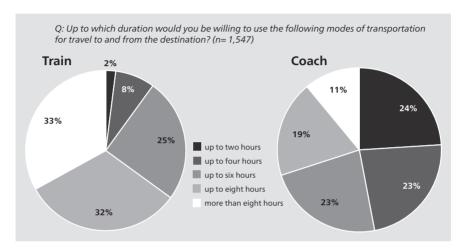


Fig. 8: Acceptable travel duration on a train or coach

Source: Authors' work

The results for both modes of transportation were significantly divergent. Acceptance of a return trip by train was distinctly higher than for travel by coach. Respondents showed a higher preparedness to accept longer travel times by train: 33 % of the respondents confirmed that they would be willing to accept a train journey of more than 8 hours, whereas that figure was only 11 % for coach travel.

5.6 Attitudes towards Carbon Offsetting

An instrument frequently used by tour operators to improve the climate balance of their travel programmes is the offer of carbon offsets for the round trip. In practice, tour operators either include all, or part, of the offsetting costs in the tour price, or inform/encourage their customers to pay offsetting fees individually (Bellmann, 2020). Attitudes towards this measure were a relevant subject of research. They were examined via two statements about the topic in general, as along with two statements with detailed options on compensation (figure 9).

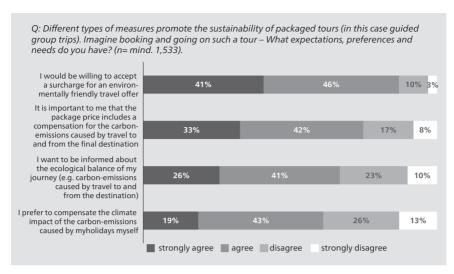


Fig. 9: Attitudes towards carbon offsetting

Source: Authors' work

When comparing the compensation options 'included in the tour cost' versus 'own compensation', the target group clearly showed a preference for the first option (acceptance rate 75 %, n = 1,617 vs 62 %, n = 1,533). Furthermore, 67 % of the participants stated their wish to be informed about the eco-balance of the trip (n = 1,625). Another 88 % of the respondents expressed their willingness to accept surcharges for climate friendly travel options (n = 1,681). This led to the conclusion that the survey group would widely accept carbon offsets included in the tour cost.

In another question, the participants were asked to indicate whether they had previously compensated for their carbon emissions. In total, 25 % of the respondents stated that they had done so, 58 % had not, and 17 % gave no information (n = 1,441).

6 Discussion

The research results show a significant level of consumer interest in sustainability options introduced by tour operators. Based on their socio-demographic data, the group surveyed was associated with the Best Agers target group. As consumers with significant purchasing power, they are an extremely relevant target group in times of demographic change. Insights on their preferences and needs concerning issues of sustainability are highly relevant for the sustainability process within the tourism industry. While previous research has identified the baby boomer generation as one of the most sustainability-conscious age groups (YouGov Deutschland GmbH, 2020), this research provided more insights into their attitudes towards sustainability.

The survey results resembled those of other sustainability surveys (Kreilkamp et al., 2017; Schmücker et al., 2019, YouGov Deutschland GmbH, 2020): research into recent travel behaviour showed that sustainability is not of significant relevance (yet). Active demand for sustainable holiday products remains an exception. Nevertheless, most of the survey participants had very positive attitudes towards sustainability, and a strong awareness of environmental issues was identified among them (see 5.2). The participants were reluctant to make sustainability choices themselves when planning their vacation, but most (87%) agreed that package holidays should fulfil sustainability standards. Therefore, we consider tour operators to be in a key position to introduce sustainability measures by including them in their travel offers.

Most respondents took a positive stance towards a range of sustainability measures in guided group tours. The participants considered the tour operator responsible for ensuring that sustainability standards are met, and were prepared to pay surcharges for a sustainable tour. Based on these results, the authors conclude that consistently sustainable travel packages are accepted and appreciated by the target group based on German citizens. There was also an interest in receiving information about sustainability topics, for instance, social and ecological issues at the destination, which could be addressed when planning and promoting travel offers, as well as during the activities of such a tour. In particular, tour operators specialising in cultural/experiential trips ('Studienreisen') could use these interests to their advantage. Furthermore, the additional benefits of sustainable travel could be highlighted in travel proposals by using suitable vocabulary, such as 'authentic' or 'regional', to address a desire to dive deeper into local culture through sustainable travel (see 5.3).

Given the overall solid growth of cruise travel before the pandemic, the Best Agers' attitudes towards cruises came as a surprise: 82% of the respondents concurred that carbon offsetting for cruise travel should be paid, and 62% of the respondents even agreed with the statement that cruises should be discontinued because of their climate-damaging effects. In general, cruises, as part of travel packages, seem to be rather unpopular within the surveyed group – 68% of the respondents stated that going on cruises was not an option for them in general (see 5.4).

The target group's approach to air travel revealed similar tendencies. Almost three-quarters of the surveyed group considered it appropriate to offset carbon emissions through financial contributions, and a total of 90 % could envision entirely avoiding air transport to nearby travel destinations in the future (figure 7). However, when assessing these results, the fundamental changes in consumer demand during the COVID-19-pandemic must be considered, since risks of infection on aircraft were of significant concern to travellers at this time.

In general, we identified a high awareness of the environmental implications of flying within the surveyed group, with 60 % even stating that air travel should be avoided as often as possible. The price factor, often considered as one of the obstacles for environmentally friendly travel, did not play a significant role for

this sample. In total, 77 % of the participants stated that the price was not the deciding factor for or against air travel (figure 4).

To increase the (environmental) sustainability of package tours, we consider the inclusion of carbon offsetting as a mandatory component of travel packages to be a key sustainability measure. Almost three-quarters of the respondents considered such fees to be an appropriate step to increase environmental sustainability. We have also seen that customers are widely willing to pay surcharges for environmentally friendly travel offers, for instance, carbon offsetting, and prefer tour operators to include these in travel packages instead of being individually responsible for them (see 5.6). Starting in 2021, the leading German tour operator Studiosus Reisen has already established this policy, thereby setting a benchmark for the industry (Studiosus Reisen München GmbH, 2020).

We were also able to identify a significant interest in a wider variety of travel offers to destinations within Germany and neighbouring European destinations (figure 6). We therefore suggest that tour operators pivot away from travel packages requiring long distance flights as often as possible, and focus on travel offers to closer destinations that can be reached within reasonable train or coach travel times (see 5.5). Given the large proportion of retirees in the sample, our data suggest that physically fit and active seniors are potentially more flexible and willing to accept long travel times (see 5.4). In particular, changes in consumer demand and travel trends resulting from the COVID-19-pandemic are an opportunity to increase short-distance travel by promoting high-quality travel offers that meet (environmental) sustainability standards, and which are optimised for the needs and preferences of the target group.

7 Conclusion

To summarise our findings, we refer to our initial research objectives. These were to

- (i) analyse whether sustainability is a relevant issue,
- (ii) research attitudes towards topics such as air travel, cruises and carbon offsetting, and
- (iii) identify preferences, requirements and limitations for sustainable holiday products.

First, we can state that a substantial majority of the participants deemed sustainability issues important and self-assessed themselves as rather sustainability-conscious. Second, our analysis of attitudes towards air travel revealed that most participants were aware of the negative environmental implications of air (and cruise) travel on the climate. Flight shame is a topic of considerable relevance for the target group, yet only a few generally avoid air travel.

Nevertheless, a willingness to abstain from air travel and use other means of transportation, especially trains, was identified. Furthermore, carbon offsetting is considered as a useful tool to improve the sustainability of holiday trips. Third, researching the preferences, requirements and limitations for sustainable

holiday products, we find that most participants consider the tour operator to be responsible for ensuring that negative impacts (on the environment and people) of holiday trips are reduced to a minimum. Nevertheless, they had strongly positive attitudes towards sustainability in guided tours and showed an acceptance of diverse sustainability measures and a willingness to pay reasonable surcharges for sustainable group tours.

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In Search for Volunteer Tourists Who Truly Leave a Positive Impact: A Description of German, Austrian and Swiss Volunteer Tourists

Abstract: Volunteers are indispensable in tourism workforce and considered central in the realisation of the UN's 17 Sustainable Development Goals. While volunteer tourism has been associated with sustainable tourism, the growth of the segment has left scars: It has increasingly been commodified and the volunteer tourists' altruistic motives are questioned. A truly sustainable contribution requires a positive transformation towards volunteer tourism 2.0. This means that sustainable consumption and production practices align. Questions arose who 'volunteer tourists 2.0' are and whether they eventually engage in more sustainable travel. A large-scale representative online survey was conducted in Germany, Austria and Switzerland to address these knowledge gaps. Results show similarities, such as a tendency towards higher interest among the younger population, but also differences, such as diverting linear relationships regarding interest potential. Results also lend evidence to more sustainability awareness among volunteer tourists and raise hope for a sustainability transformation towards 'volunteer tourism 2.0'.

Keywords: Volunteer Tourism, Volunteer Tourists 2.0, Sustainable Tourism, Social Sustainability, Sustainable Development Goals

1 Introduction

Volunteer tourists have become an important funding source for community projects in developing countries as well as important global workforce mainly for educational and environmental projects in smaller communities (Chua et al., 2021). In this vein, Lockstone-Binney and Ong (2021) note that volunteers are indispensable in tourism workforce and the scholars further postulate that tourism volunteering is crucial in reaching the UN's Sustainable Development Goals (SDGs), particularly SDG 4 'Quality Education' and SDG8 'Decent Work and Economic Growth'. Lee and Zhang (2020) further claim that volunteer tourism can be a decisive development tool towards sustainable development of host communities. Overall, there is scholarly consensus that volunteer tourism is a sustainable travel alternative that brings little harm to societies and largely benefits communities (Han et al., 2020; McGhee, 2014). Thus, volunteerism is believed to be critical in sustainability transformation post-COVID-19 and is believed to be a decisive driver in 'building better together' (UNV, 2021). However, with international movement and mobility being largely restricted in 2020 and 2021, volunteer tourists have been missing and the unavoidable financial as well as human resource cuts have caused further ripple effects as communities are returning to more traditional ways of income generation, such as logging or

poaching, which jeopardises sustainable community development (Tomazos & Murdy, 2020).

Volunteer tourism is also not free from heavy critique with reference to a *truly* sustainable impact. Most critique addressed aspects such as alleviating poverty through undermining local communities and workforce, corruption, as well as volunteers being self-centered and more interested in boosting CVs and showing-off on Instagram than actually being altruistically driven and wanting to get involved (Wearing et al., 2019). Thus, the COVID-19 pandemic and resulting crisis is also seen as a chance for a positive transformation of volunteer tourism towards triple bottom line sustainability. Tomazos and Murphy (2020) summarise that the crisis "may have a Darwinian effect, and only the better organisations will survive". Such positive change towards 'volunteer tourism 2.0' will be extremely important given that volunteer support will be needed more than ever in rebuilding tourism post-COVID-19. Volunteer tourism is not only vital for the communities where volunteer work and projects take place, but also for the volunteer tourists themselves as it is seen as a catalyst that contributes to self-development, raises consciousness and facilitates global citizenship. Although the COVID-19 pandemic is still ongoing and the magnitude of the impacts remain uncertain at the time of writing, studies indicate a change in travel motives and behaviour among some segments of the population (Seeler, Köchling et al., 2021). In addition, some scholars as well as the UNWTO raise hope for more responsible and sustainable travel behaviour in post-COVID-19 tourism (Galvani et al., 2021; Higgins-Desbiolles, 2021). Thus, the question arises who the volunteer tourist of the future will be and whether attitudes of those generally interested in volunteer tourism are more engaged in sustainable and responsible travel forms compared to the overall population. These questions will be addressed in this chapter and results from a quantitative large-scale study conducted in Germany, Austria and Switzerland presented.

2 Literature Review

2.1 Volunteering and Volunteer Tourism

Value changes and trends in the demand, particularly the search for altruistic and eudaemonic moments, transformative and emotional experiences as well as self-development and self-realisation when travelling have contributed to an increase in volunteer tourism, making voluntourism one of the major growth areas in tourism (Han et al., 2020; Wearing et al. 2019). Wearing et al. (2016) argue that the growth of this segment can be explained by the 'time poor-money rich phenomenon', meaning that people have less discretionary time at their disposal for volunteering work in their everyday life which increases the desire to actively engage in volunteering during holidays. Chua et al. (2021) define volunteer tourism as "a segment of tourism where volunteers engage in voluntary work in search of a unique experience that contributes manpower and intellectual supports to a community and altruism projects" (p. 193). Similarly, McGhee and Santos (2005) define volunteer tourism as "utilizing discretionary

time and income to travel out of the sphere of regular activity to assist others in need." (p. 760). Thus, voluntariness and unpaid work are central in the definition of volunteer tourism. As volunteer tourism combines leisure and work, it goes beyond enjoyment and relaxation and comprises learning effects and sense-making through the time volunteered for different projects (Han et al., 2020). Through a more general lens, the UNV notes that volunteering can be defined based on five components:

- Structure (formal vs. informal)
- Site (online vs. offline)
- Intensity (episodic vs. regular)
- Aspiration (self-building vs. community-building)
- Category (mutual aid, participation, campaigning, service, leisure)

In addition, tourism volunteering can be realised through volunteering in the own place of residence, which is known as host volunteering, or as guest volunteers when travelling to a destination and supporting local communities (Lockstone-Binney & Ong, 2021). Volunteer tourism is also understood as a prime example for socially and environmentally responsible travel behaviour which also brings emotional enrichment and psychological benefits to volunteer tourists (Han et al., 2020). Similarly Wearing (2002) argues that volunteer tourism can be seen as "interactive experience that causes value change, changed consciousness in individuals, which will subsequently influence their lifestyle" (p. 293). There is consensus among tourism scholars that volunteer tourism enhances cross-cultural understanding, builds up tolerance, enhances quality of life and eventually possesses cathartic effects and transformative potential (Coghlan & Weiler, 2018; Han et al., 2020).

Volunteer tourism is not only understood as being beneficial for the individuals' well-being when engaging in volunteering trips, but also for the host communities as volunteers have become important workforce and knowledge brokers in communities while doing less harm to the society (Lee & Zhang, 2020). Thus, they are indispensable for a community's economic, social and environmental well-being. Among others, local residents' sense of pride can be increased through volunteer tourism and it can foster cultural exchange, positively contribute to quality of life and help to overcome stereotypical assumption (Lee & Zhang, 2020). However, this has also created strong dependencies and overreliance on (international) volunteers in some parts of the world which has caused severe challenges, particularly as volunteer tourism does often not yield in long-term economic benefits. These challenges were strongly felt during the COVID-19 pandemic when international travel was halted and humanitarian aid was missing (Tomazos & Murphy, 2020). Generally, studies focussed on benefits and advantages of volunteer tourism and only recently started to frame negative outcomes and threats to triple bottom line sustainability (Lee & Zhang, 2020; Lockstone-Binney & Ong, 2021).

2.2 Volunteer Tourism and Sustainability

A transformation of tourism towards more sustainable consumption and production is greater than ever and volunteer tourism is deemed to be an important driver in realising such sustainability shift in tourism (Lee & Zhang, 2020; Seeler, Lück et al., 2021). First discussed in the Brundtland report (World Commission on Environment and Development, 1987), sustainable development means realising a balance between economic, environmental and socio-cultural aspects of tourism development. The World Commission on Environment and Development (1987) further summarises that sustainable development is "a process to meet the needs of the present without compromising the ability of future generations to meet their own needs." The United Nations Environment Programme (UNEP) and the World Tourism Organization (UNWTO, 2005) highlight the unique conditions of the tourism industry in ensuring sustainable development as it comprises relationships between various stakeholders which yield in sensitive situations. Thus, tourism can be both, beneficial and damaging to sustainable development as could be witnessed in the past. Respectively, a positive transformation towards more sustainable tourism futures along the triple bottom line requires the consciousness and willingness of all stakeholders involved and only if all forms of tourism are more sustainable, a sustainability shift can be fully realised (Seeler, Zacher et al., 2021). In this vein, UNEP and UNWTO (2005) claim that "sustainable tourism is not a discrete or special form of tourism. Rather, all forms of tourism should strive to be more sustainable." (p.2).

However, some alternative travel forms are assumed to be central in finding pathways towards sustainability trough community-centred, meaningful and participatory experiences that facilitate awareness-rising (Han et al., 2020). Here, a sustainable tourist can be understood as a tourist that shows respect to "local culture, conserves natural environment, and reduces interference of local environment" (Lee et al., 2013, p.457). Volunteers dedicate their time and resources to help improve cultural, ecological and social conditions in host communities. Thus, volunteer tourism is acknowledged as one possibility to fulfil these criteria as volunteering supports awareness-building, building bridges and fostering sustainability. It is also often discussed with reference to other travel forms that are also deemed to be sustainable, such as eco-tourism, community-based tourism, off-the-beaten-track tourism or backpacking (Seeler, Lück et al., 2021).

Scholars also propose that through spending time and devoting resources to specific volunteering projects, social and environmental awareness is encouraged which can contribute to positive long-term changes in sustainable consumption among volunteers (Lee & Zhang, 2020). Given that the monthly estimates of global volunteers amount to 863 million people (UNV, 2021), the relevance of volunteer workforce is not only evidenced, but also the potential to foster awareness among volunteers and beyond. Similarly, volunteer groups are

believed to be a core stakeholder group in achieving the UN's 17 SDGs by 2030 (UNV, 2021).

However, volunteer tourism projects are often in less developed countries and short-term in nature, lasting less than four weeks. The dominance of short-term visits not only challenges the economic sustainability, it also adds to environmental and social concerns (Lee & Zhang, 2020). For instance, the environmental footprint of volunteer tourists is questioned, as the emission associated with travelling to the locations where volunteer projects take place is often relatively high. The short-term nature also creates issues to host communities as the continuously changing volunteers challenge trust-building, bonding and deep exchange (Lee & Zhang, 2020; Wearing et al., 2019).

Social sustainability of host communities is also challenged as volunteer tourism is condemned to be a driver of commodification and touristification, particularly as it has become a form of mass tourism (Wearing et al., 2016). Critics argue that volunteer tourism businesses are often purely economically driven and no longer understand it as a cradle-to-cradle approach, but a profit-driven business concept where community participation is secondary. Wearing et al. (2019) critically remark that volunteer tourism has become a "multi-milliondollar industry" (p. 312) and severe issues arise if it is left to the market for commodification and eventually becoming a highly commercialised and inauthentic product. While the industry is aiming to satisfy the altruistic and philanthropic endeavours of volunteer tourists, the needs of the host communities are largely overlooked. Scholars also question whether volunteer tourism is purely altruistic and community-oriented or whether it is more driven by egoistic selfrealisation and narcistic holiday goals to beautify one's CV and enhance employability (Tomazos & Murphy, 2020; Wearing et al., 2016, 2019). Curiosity and learning about others, which are assumed to be core motives of volunteers, are also heavily discussed as it limits the host community to a replaceable anchor point and reinforces stereotypical thinking. Tomazos and Cooper (2012) argue that the ideological and philanthropical idea of volunteering in the early days has been overwritten by a commercialised and standardised tourism product that aligns with neo-liberal free market ideologies.

Similarly, Guttentag (2009) summarises that volunteer tourism is often strongly linked to "a neglect of local's desires, a hindering of work progress and completion of unsatisfactory work, a disruption of local economies, a reinforcement of conceptualisations of the 'other' and rationalisation of poverty, and an instigation of cultural changes" (p. 537). Accordingly, volunteers are more self-oriented than community-oriented and while their attitudes might generally be more sustainability-oriented, their behaviour remains egoistic and narcistic. This can be explained by the remaining attitude-behaviour gap among tourists (Breiby et al., 2020; Juvan & Dolnicar, 2014; 2016). In this vein, Seeler, Köchling et al. (2021) found that passive sustainability engagement, is more dominant than active sustainability engagement, meaning that tourists expect sustainable offers, yet do not necessarily behave sustainably and responsibly when travelling.

Although scholarly interest in understanding motivation for volunteer tourism and distinguishing volunteer tourists from other tourists has continuously increased and a certain type of traveller has been identified as being more sustainable and engaging in volunteer tourism, there is no general accepted definition of a volunteer tourist and approaches are mainly based on qualitative and exploratory studies (Han et al., 2020; Pan 2014). It is also not clear whether volunteer tourists more actively engage in sustainable travel and behave accordingly. These gaps are addressed in this chapter.

3 Method

The results presented in this chapter were derived from a large-scale online survey in Germany, Austria and Switzerland. A quota sampling strategy was applied to realise representative samples that allow for generalisation to the respective target populations aged 14 to 74 years living in private households. The quota was based on gender and age (interlocked) as well as place of residence. In case of the German sample, projection can be made for roughly 62 million people. The Austrian sample corresponds to roughly 7 million people and the Swiss sample to 6 million people. Data collection took place between October and December 2020 and a total of 1,000 Swiss and 1,000 Austrians was queried. The German sample was considerably larger and comprised a total of 19,000 people in the respective age bracket. The online survey was distributed through a web access panel provider that was also responsible for survey programming, quota control and data set preparation. This study forms part of a long-term study series (Destination Brand study series) that was first established in 2009 and has been annually conducted by the Hamburg-based research institute inspektour (international) GmbH ever since. Hence, the data collection instrument (e.g. questionnaire) has been tested extensively and scales were verified. Central to this chapter were the questions how to define a volunteer tourist and whether there are statistical differences between German, Austrian and Swiss volunteer tourists. It was also the aim to explore whether volunteer tourists are involved in more sustainable travel forms or not.

The in-depth analysis on the general interest potential based on the following question in the survey: "The following question is about your *general* interest in touristic holiday activities, *regardless* of a specific tourist destination. How interested are you in pursuing the following touristic holiday activities as part of your holiday trip with at least one overnight stay?" The general interest corresponds to the top-two-box values, meaning the two highest levels on the five-point rating scale which ranged from '5 = very interested' to '1 = not at all interested'. Beside analysing the holiday activity 'performing volunteer/voluntary work (supporting a social or environmental project)', the measurement of the general interest potential was carried out consistently in all three source markets for 36 additional holiday activities. The activities cover a broad range of holiday activities to ensure a comprehensive comparative basis.

Descriptive statistics were applied and SPSS 24 used for data analyses. Although results from all three source markets were computed and analysed, this chapter focusses on results from the German sample as the sample size allowed for more in-depth analysis, particularly with reference to the filtered data set that was limited to respondents with interest in volunteering during holidays (n= 2,686). For reasons of readability, this sub-group is labelled as 'volunteer tourists' although it is not evidenced that respondents with interest in the holiday activity have also undertaken a volunteer trip or are planning to undertake a volunteer trip. Results from Austria and Switzerland are mainly discussed as comparison points as sample sizes were too small for in-depth analyses (Austria, n= 197; Switzerland, n= 293). However, results from the two samples helped to identify whether observations are country-specific or can be generalised to a wider population, here the German speaking market.

4 Results and Discussion

4.1 General Interest in Volunteering as Holiday Activity

Among the 37 holiday activities that were tested regarding the interest potential, 'relaxing and resting' received the greatest interest among respondents in all three countries with equally high approval rates. This result is in line with other recurring large-scale studies, such as the German Reiseanalyse, which also identify relaxation as core travel motive (Forschungsgemeinschaft Urlaub und Reisen e.V., 2022). Volunteering, in contrast, gained less interest, particularly among Germans as only 14% agreed that they are (very) interested in this activity when travelling while 66 % showed no interest in this travel form. These are the lowest approval rates among the 37 holiday activities covered in the survey. Although approval rates among Austrians were slightly higher (20%), it is also the holiday activity with the lowest interest among Austrians. The approval rate for volunteering was highest among Swiss; here 29% indicated interest in volunteering. However, this is comparatively low compared to other holiday activities (ranked 34 out of 37). It is also worth to mention that the general interest among all 37 investigated topics was on average higher among Swiss, meaning that the differences revealed need to be treated in relative terms. Although interest in this activity was lower compared to other activities, the absolute projected demand is not to be ignored. The 14% of interested Germans correspond to 8.8 million people and with another 1.8 million Swiss as well as 1.3 million Austrians, there are almost 12 million people from these three countries alone that show interest in volunteering activities while travelling. Considering that altruistic and eudemonic travel motives are on the rise (Seeler, Lück et al., 2021) and there is generally an increasing desire to help others and show solidarity (Giovanis & Ozdamar, 2020), the likelihood that interest converts into actual practice increases. These projections provide legitimacy for tourism operators to create offers that satisfy this demand.

Correlation analysis using Pearson correlation coefficient was applied to measure the strength of the linear relationship between interest in volunteering and

other travel activities. This analysis helps to understand patterns of interest and supports profiling volunteer tourists. A high correlation would mean that there is not only a high interest in volunteering as a holiday activity, but also in the respective other holiday activities, meaning that there is statistical evidence for relationships between interest for the topics. Generally, positive correlations with other activities were found, yet correlation coefficients remained low to moderate (Cohen, 1992; figure 1). However, as the Destination Brand study series has been conducted for more than a decade, insights and experiences from the study series show that correlation coefficients rarely exceed a level of +.30 and high correlation coefficients are seldomly detected. Figure 1 portrays the top ten holiday activities that showed positive, yet low to moderate correlations. The analysis depicted that further positive correlations were found for 18 additional holiday activities which indicates that volunteer tourists have a broad and manifold interest in other holiday activities. Similar results were derived for the Swiss and Austrian samples.

However, linear relationships differed between the three source markets. While the highest linear relationships were found between volunteering and attending events (r = .246) and volunteering and attending cultural and musical festivals (r =.240) in the German sample, highest positive relationships were found between volunteering and being active in sports (r = .312) as well as volunteering and hiking (r = .309) in the Austrian sample. Different results were also derived from the Swiss sample where highest linear relationships were explored between volunteering and visiting gardens and parks (r =.253) and volunteering and spending holidays in the countryside (e.g. farm holidays) (r = .240). It can be concluded that German volunteer tourists differ from those in their neighbouring countries as their shared interest varies. A further differentiation was made regarding the degree of interest among volunteer tourists and conclusions drawn for generally interested respondents, described as 'general volunteer tourists', and 'core volunteer tourists'. Core volunteer tourists indicated a strong interest in the holiday activity and replied with '5= very interested'. General volunteer tourists selected either '4= interested' or '5= very interested'. In addition to correlation coefficients, figure 1 reveals the top-two-box values and indices for the interest in the respective activities among these two groups. The indices refer to the top-two-box value in comparison to all respondents in the sample (n=19,000).

The top-two-box values are lower among 'general volunteer tourists' compared to those with core interest in volunteering activities. Such tendencies are also observed in other activities and it can be concluded that respondents that indicate a strong interest in a particular topic are also more likely to show strong interest in other holiday activities compared to those respondents that are generally more reserved in approval rates. Overall, approval rates for the holiday activities displayed in table 1 are much higher in the two sub-samples compared to the overall average which mirrors the observed relationships. However, the results also reveal that the degree of difference between the two

Tab. 1: Correlation analysis and the degree of interest in selected further examined holiday themes in the source market Germany, n= 2,686

Correlation with interest in holiday activity "Performing volunteer /	Correlation coefficient	General volunteer tourist		Core volunteer tourist	
voluntary work (supporting a social / environmental project)"		top-2- value	index	top-2- value	index
Attending events	.246	65 %	186	77 %	219
Attending culture / music festivals	.240	66 %	189	77 %	222
Experiencing lively places	.238	68 %	164	78 %	190
Using study / educational offers	.236	58 %	294	70 %	358
Attending traditional folk events	.236	59 %	188	71 %	226
Spending holidays in the countryside	.228	69 %	170	79 %	194
Visiting cultural institutions / using cultural services	.226	71 %	149	80 %	167
Meeting indigenous (native) peoples	.209	68 %	183	77 %	208
Being active and involved in sports	.206	64 %	196	74 %	227
Undertaking a sustainable holiday trip	.189	72 %	190	78 %	204

Source: Authors' work

groups varies. The comparably strong correlation between volunteering and using educational/study offers is also revealed in the top-two-box values among the two sub-samples. While the general interest in demand for this topic is at 20 %, approval rates are much higher if interest in volunteering exists. This is especially the case among 'core interested respondents'. In this case, interest in using educational/study offers was expressed by 70 % of respondents. The relatively strong relationship between volunteering and undertaking sustainable holiday trips is also reflected in the top-two-box values which are twice as high as those of all respondents. Overall, the difference in the degree of interest by those interested in volunteering compared to all respondents can be witnessed as particularly pronounced compared to other holiday activities. Although not reported here in detail, these results are similar in Austria and Switzerland.

4.2 Profiling Volunteer Tourists

A stereotype analysis was carried out to identify unique socio-demographic features of volunteer tourists. Stereotypes were built based on results that were significantly higher in the sub-samples compared to the total sample. Indices were used to depict socio-demographic features that are stronger represented among the two groups of volunteer tourists compared to all Germans in the sample. An index (abbreviated as IX) of 100 reflects the mid-point and value for all respondents and indices above the mid-point portray surpassing values. In case of those generally interested in volunteering during holiday, the top-two-box value was used as comparison point. In case of core volunteer tourists, only the highest ratings were compared. The following criteria were consulted: gender, age, formal education, number of children living in the household, house-

hold size, net household income, occupation, town size as well as place of residence. Table 2 summarises the key results of the stereotype analysis.

Tab. 2: Stereotype analysis for those interested in the holiday activity 'performing volunteer/voluntary work (supporting a social or environmental project)' in the source market Germany

	Socio-demo- graphic criteria	General volunteer tourists (those who are interested and very interested in the holiday activity "Performing volunteer / voluntary work (supporting a social or environmental project)", n = 2,688)	Core volunteer tourists (those who are very interested in the holiday activity "Performing volunteer' voluntary work (supporting a social or environmental project)", n = 20)
Qđ	Sex	- Male respondents (IX = 111)	- Male respondents (IX = 114)
8	Age	- 14-19 years (IX = 171), 20-24 years (IX = 161) and 25-34 years (IX = 162)	- 14-19 years (IX = 213), 20-24 years (IX = 173) and 25-34 years (IX = 168)
	Formal education	Respondents with tertiary education (IX = 114)	Respondents with tertiary education (IX = 112)
	Children under the age of 6 / 14 / 18	- Households with children <6 years (IX = 139), <14 years (IX = 144) and <18 years (IX = 139)	 Households with children <6 years (IX = 159), <14 years (IX = 165) and <18 years (IX = 158)
	Household size	Households with 3 persons (IX = 134) and with at least 4 persons (IX = 143)	Households with 3 persons (IX = 140) and with at least 4 persons (IX = 170)
ďh.	Net household income	 Net household income over 4,000 € (IX = 119) 	 Net household income over 4,000 € (IX = 122)
	Town size	- Respondents from cities with 20,000 to <100,000 residents (IX = 115) and with 100,000 to <500,000 residents (IX = 111)	Respondents from cities with 20,000 to <100,000 residents (IX = 127)
Ô	Place of residence	Respondents from Nielsen area 2 (North Rhine-Westphalia; IX = 116) and Nielsen area 5 (Berlin; IX = 137)	Respondents from Nielsen area 2 (North Rhine-Westphalia; IX = 129) and Nielsen area 5 (Berlin; IX = 137)
0 0	Occupation	Self-employed (IX = 139), employees with managerial function (IX = 155) and pupils / students / apprentices / work volunteers (IX = 150)	Self-employed (IX = 169), employees with managerial function (IX = 163) and pupils / students / apprentices / work volunteers (IX = 134)

Source: Authors' work

Age depicts a main distinguishing factor of volunteer tourists as they are considerably younger compared to the total population. Particularly Germans aged 14 to 19 years are interested in this holiday activity and it can be generally concluded that German volunteer tourists are likely to be younger than 35 years. This finding is in line with past studies as scholars commonly referred to younger people when discussing volunteer tourists (Chua et al., 2021; Pan, 2014) and referred to other related tourist forms that are more deemed to be undertaken by young travellers, such as backpacking or off-the-beaten-track travel (Seeler, Lück et al., 2021).

These comparably young age groups are also mirrored in the household sizes and number of children in the household which lead to the conclusion that especially the younger cohorts still live with their parents. A higher net household income was also found among German volunteer tourists compared to the overall population. However, this can also be explained by the relatively large household sizes. German volunteer tourists are also more likely to be male, highly educated and live in urbanised areas (e.g. North-Rhine Westphalia, Berlin). With reference to gender, these results align with the overall share of males in formal volunteering work (not tourism related) which is slightly larger than the share of female volunteers (UNV, 2021), yet stand in contrast to existing

studies that assumed that more females participate in volunteer tourism (Weaver et al., 2016). The UNV report (2021) also estimates that more women participate in informal volunteering work compared to their male counterparts. With reference to education, these findings align with past studies that revealed general consensus that volunteer tourists are highly educated (Chua et al., 2021; Pan, 2014).

Austrian and Swiss volunteer tourists share several features such as being younger, living in larger households with children of different ages, having a higher net income level as well as being pupils/students/apprentices/work volunteers, self-employed or employees with managerial function. However, no unanimous socio-demographic profile can be derived with respect to gender. Austrian volunteer tourists in the sample are dominantly female while Swiss are almost equally male and female.

4.3 Volunteer Tourists and Sustainability

Alongside questions around general demand and interest for a holiday activity, German respondents were asked about their attitudes towards sustainability aspects along the triple bottom line (economic, environment, social sustainability) that are of relevance for holiday decision-making as well as travel behaviour. Top-two-box values were compared between all respondents, 'general volunteer tourists' and 'core volunteer tourists'. Overall it can be derived that sustainability aspects are more important to volunteer tourists compared to all respondents as approval rates for all queried aspects were higher among volunteer tourists, particularly among 'core volunteer tourists'. Smaller deviations were found with reference to respondents' preference of eating regional culinary products, which is deemed to be an important contributor to local economy, as well as aspects of social sustainability that refer to ethical and fair employment (figure 1).

Volunteer tourists are more likely to pay attention to their environmental footprint when choosing their mode of transport and are more willing to pay higher prices if accommodation provider demonstrate efforts towards environmental protection. While scholars question true sustainability endeavours among volunteer tourists and assume that volunteers are more and more often driven by egoistic and narcistic motives although pretending to be altruistic (Tomazos & Murdy, 2020; Tomazos & Cooper, 2012), results from this study shed a different light on volunteer tourists. Although the results from this study do not allow to conclude that volunteer tourists eventually behave more sustainably when travelling and a gap between attitudes and behaviour might remain, the high approval rates demonstrate awareness. Awareness is understood as a pre-condition of attitude which eventually results in desired and actionable behaviour (Seeler, Zacher et al., 2021). This raises hope for volunteer tourists' positive transformation towards more sustainable tourism futures.

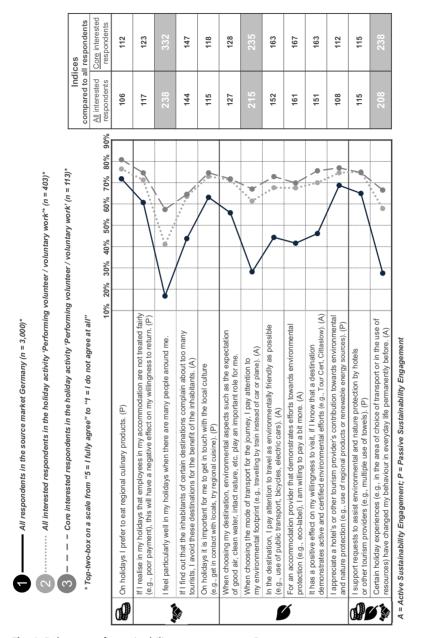


Fig. 1: Relevance of sustainability aspects among Germans Source: Authors' work

Volunteer travel has also been associated with transformative travel in past studies (Chua et al., 2021; Coghlan & Weiler, 2018). This is echoed in findings of

this study as volunteer tourists confirmed that they had changed their behaviour in their everyday life permanently after a holiday trip. Based on a theoretical review Seeler, Zacher et al. (2021) argue that experienced-based reflexivity supports awareness-building towards sustainability and can positively influence sustainable consumption behaviour. However, given that leisure travel is believed to be the best time of the year and people do not want to hold back, active engagement is often secondary. Instead, Seeler, Zacher et al. (2021) found that tourists expect from tourism providers to act sustainably, yet often restrain from actively engaging in more sustainable travel patterns. Results from this study show that differences in attitudes towards sustainability are particularly witnessed with reference to active sustainability engagement (e.g. avoiding a destination if local population is dissatisfied with tourism development). Here, volunteer tourists show much higher approval rates compared to all respondents whereas differences are rather marginal for sustainability aspects that require passive engagement (e.g. requesting/expecting particular sustainability standards and certifications by hotels and other providers). Similar results were found in Austria and Switzerland which leads to conclude that volunteer tourists are likely to travel more sustainably.

5 Conclusion

This chapter attempted to describe volunteer tourist from Germany, Austria and Switzerland, further aimed to uncover relationships between volunteer tourism and sustainable travel forms and eventually propose an outlook for 'volunteer tourism 2.0'. Results were drawn from a large sample that allowed for generalisation to the overall population aged 14 to 74 years. While similarities between Austrian, German and Swiss tourists that are generally interested in volunteer tourism were found, differences were also depicted – particularly with reference to results from the correlation analysis which showed that linear relationships vary between the three countries. This evidences that volunteering during holidays can have different meanings and reasons.

Scholars heavily discuss whether volunteer tourism can really be understood as a sustainable travel alternative. While the importance of volunteers as global workforce and broker of knowledge is incontestable (Lockstone-Binney & Ong, 2021) and the UNWTO identified volunteers as central stakeholders in the realisation of the UN's SDG, critique arose whether volunteer tourists really engage in more responsible and sustainable travel forms to fulfil altruistic and eudemonic needs or whether self-centred motives to boost the CV are more decisive (Tomazos & Murdy, 2020). Results from this study demonstrate that Germans, Austrians and Swiss that are interested in volunteer tourism are also more likely to engage in sustainable and resilient travel forms which raises hope for 'volunteer tourism 2.0' to become more sustainable in the future as well. However, critique was not only raised concerning the potential narcistic motives of volunteer tourists, but also regarding the economically-driven supply-side as volunteer tourism businesses are often driven by neoliberal maximisation strategies (Guttentag, 2009; Tomazos & Cooper, 2012). As shown by Seeler, Köchling et al.

(2021), tourists' sustainability efforts are often more passively oriented, meaning that they expect tourism operators to ensure sustainability along the customer journey. Hence, more sustainable volunteer tourism 2.0 can only be realised if all stakeholders involved are committing to sustainability goals.

As any research, this study comes with limitations. The study only allowed to portray volunteer tourists based on their general interest in the holiday activity. It cannot be concluded how many of those interested in volunteer tourism eventually engage in this alternative travel and whether the developed stereotype also applies to *real* volunteer tourists. As indicated before, it can also not be finally concluded whether the heightened sustainability engagement results in actual sustainable behaviour. Future research is needed that puts tourists that have already experiences in volunteer tourism into the focus and examine their actual motives and behaviour.

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Yueyi He, Claire Liu

Environmental Impacts and Sustainable Development of Antarctic Tourism: The Chinese Tourists' Perspectives

Abstract: This chapter presents the findings of a study on exploring the environmental impacts brought about by Antarctic tourism and issues for developing sustainable tourism in the Antarctic. This qualitative study collected data from the Chinese social media platforms Zhihu and Mafengwo. The target samples were people who had been on an Antarctica tour and posted comments online that were relevant to the research questions. The tourists' comments on Antarctic experiences were analysed using thematic analysis. The results showed the perceived situation and the impacts of Antarctic tourism on Antarctica, such as disturbing wildlife, increasing global warming, adding pressure caused by the popularity of Antarctic tourism. Combining secondary information and the stories shared by the Chinese tourists online, this study contributes to knowledge and understanding of the impacts of Antarctica tourism and the challenges in developing sustainable tourism in Antarctica.

Keywords: Antarctic Tourism, Environmental Protection, Antarctic Tourist Experiences, Sustainable Tourism

1 Introduction

Tourism in the Antarctic has a long history dating back to the end of the 19th century. According to the International Association of Antarctica Tour Operators (IAATO), in early times, the aims of exploring Antarctica were to undertake scientific studies and geographical surveys, as well as hunt seals and whales. In 1882, tourists began to land on the sub-Antarctic islands, and by 1933, most sub-Antarctic islands had already been visited by tourists (Headland, 1994). When the Antarctic Treaty was signed in Washington in 1959, Antarctica became a place devoted to peace and science. In 1966, the explorer Eric Lindblad led the first travellers' expedition to Antarctica on a cruise ship (IAATO, 2009).

With increasing interest in the Antarctic and the development of technology and infrastructure, Antarctic tourism has grown rapidly over the past two decades. Recent statistics show that the number of tourists has increased from 36,702 in 2015 to 51,707 in 2018 (IAATO, 2020a). Australia, China, and the United States are the main source markets of Antarctic tourists, accounting for 11 %, 16 %, and 30 %, respectively, in 2018. It was expected that the number of Chinese visitors would rise to over 10,000 during the 2018–2019 Antarctic season, according to the China Tourism Academy (China Global Television Network, 2019).

This study asked the questions of

- 1) How can we describe the Chinese tourists' experiences in Antarctica?
- 2) How do Chinese tourists perceive aspects of environmental protection and sustainability with regard to Antarctic tourism?

Secondary data for this qualitative study were collected from online postings on two Chinese social media platforms: Zhihu and Mafengwo. These two applications are well-known sources of information and networks for Chinese tourists to share their travel experiences online. Zhihu is one of China's largest applications for experience and knowledge sharing as well as an online question and answer (Q&A) community (Qi et al., 2020). Zhihu is a forum where users can discuss a topic of interest, and follow people who have the same interests. The integration of divergent thinking is a major feature of Zhihu, which encourages broadening the questions and open-ended answers in the Q&A process.

Mafengwo is a tourism forum established in 2006 in Beijing. It provides a platform for travel experience exchanges for people who love to travel (Leung, 2020). Registered users share their travel stories and provide travel guides for various tourism sites, as well as information on hotels, air tickets, visas, etc. Mafengwo's users come from mainland China, Hong Kong, Taiwan, Malaysia, and elsewhere. He et al. (2020) used Mafengwo to collect tourists' perceptions of Thai travel and then study the factors influencing travel decision-making of Chengdu residents. Zhihu is similar to a Q&A platform which allows users to discuss various topics; however, Mafengwo focuses on the sharing of tourism experiences. The two apps were used to complement each other in identifying user generated messages. The target samples were people who had been on an Antarctica tour and posted comments online that were relevant to the research questions. The data were analysed using thematic analysis. This chapter first reviews the background literature on Antarctica tourism, and then describes the research methodology and the process for data collection and data analysis. The findings are discussed in terms of the research questions and existing literature at the end.

2 Literature Review

2.1 Tourism in Antarctica

Antarctic tourism refers to tourism companies who are authorised by the Antarctic Treaty and are permitted to organise tourism activity in Antarctica (Rubin, 1996), and dates back to the 1960s. Since 1991, IAATO has been carefully monitoring, analysing, and reporting on Antarctic tourism. From 2018 to 2019, 56,168 people travelled to Antarctica by cruise ship, including 10,889 visitors who travelled by ship but did not set foot on the Antarctic continent (IAATO, 2020a). Antarctica accepts fewer visitors than other tourist destinations, as its unique characteristics need more rigorous regulations, monitoring, and safeguards (IAATO, 2020b).

2.1.1 The Current Situation of Antarctic Tourism

Haase (2005) summarised some weaknesses of the current management system of Antarctic tourism. His research suggested that there are needs for thorough investigation of tourism impacts as well as an appropriate monitoring system for tourism activities. The current situation can be explained using the practical example of Barrientos Island, located in the Antarctic Peninsula. The popularity of Barrientos Island lies in the rich biodiversity and many unique geological features (Cajiao et al., 2020). However, the development of tourism puts pressure on the environment at Barrientos Island through disturbing wildlife. For instance, some non-native species of flora existing on this island are widely distributed in the nearby sea; the presence of these non-native species may affect the native species as a result of tourist visitations. Furthermore, Cajiao et al. (2020) found that tourism activities, to some extent, destroy the vegetation and soil on Barrientos Island. Their research suggested that understanding the relationship between the environment and tourism development will provide a deeper and more comprehensive insight into the need for Antarctic environmental protection and promote the implementation of adaptive frameworks for this purpose.

Campos etal. (2012) classified anthropogenic impacts on Antarctica into six parts: climate change; human activity in Antarctica; sealing, whaling and fisheries; tourism; invasive species; and offshore exploration, military, and scientific activities. Although all expedition vessels visiting the Antarctic have to follow high environmental standards required by the IAATO, most vessels carry more than 400 passengers, and some may not follow the self-regulating guidelines. The frequency of visitation on King George Island also affects its environment, for example, illegal dumping of litter and sewage or fuel leaks would have severe effects on nearshore benthic communities, and noise from ships could interfere with the biologically important activities of whales, seals, and penguins (Campos et al., 2012).

2.1.2 The Antarctic Cruise Industry

Cruising is a popular form of Antarctic tourism. Wright (2008) found that the Antarctic cruise industry puts more pressure on the Antarctic environment, and that the three legal regimes in Antarctica (the Antarctic Treaty System, general international law, and the flag state law) have an important impact on the governance of cruise ships. However, the author doubted that these three legislations could implement enforceable regulations. International laws and regulations are too general to respond to the specificities of the Antarctic environment adequately. Engelbertz et al. (2015) applied political discourse analysis to analyse cruise tourism in Antarctica. Their study shows that human safety and environment protection on the Antarctic are the two main concerns, and the cruise tourism in Antarctica still lacks adequate regulations. They concluded that more volumes of maritime traffic and more people in Antarctica will bring higher risks of incidents and accidents with threats to human life and the Antarctic environment generally.

Understanding the development of Antarctic tourism could help researchers forecast Antarctic tourism trends and provide solutions to future uncertainties. Maher et al. (2011) discussed the many side-effects of Antarctic tourism's growth and explored the risk of a changing environment for Antarctic tourism. Their study used interviews to collect data and found the climate system of Antarctica was warming, but they did not consider this an issue for tourism. In addition, Kruczek et al. (2018) identified environmental problems, determined the volume of cruise traffic, and analysed the forms and scale of tourism in Antarctica to determine the direction of tourism development. The key findings of their research show that tourism pollutes the natural environment with sewage and carbon dioxide (CO₂). Moreover, the Tourism Area Life Cycle (TALC) model analysis demonstrates that the volume of Antarctic tourism is constantly increasing. Therefore, they stated that appropriate control of tourism development and the implementation of the IAATO to restrict the number of tourists in Antarctica is needed to ensure the sustainable development of tourism (Kruczek et al., 2018).

2.1.3 The Types of Antarctica Tourism Activities and Impacts

From 2003 to 2017, IAATO presented 14 different types of tourism activities on the Antarctic: ship cruises, remote underwater vehicles, science support, small boat cruising, small boat landing, extended walks, kayaking, scuba diving, skiing, snowboarding, anchoring, aircraft landing filming, and swimming (Cajiao et al., 2020). Among these 14 activities, landings through kayaking, small boats (Zodiacs), small boat rides, and extended walks were the most frequent activities in Antarctica, representing 97 % of all tourism activities (Cajiao et al., 2020).

Another particular Antarctic tourism activity is marine wildlife watching. According to Williams and Crosbie (2007), whale sightings on Antarctic sea routes have become an increasingly regular occurrence; fin whales are often sighted in the offshore areas of the Peninsula and South Georgia Island. In some of the most commonly visited destinations, repeated and frequent whale watching could cause potential disturbances to marine wildlife. To mitigate the impact of this Antarctic tourism activity, in 2001, IAATO developed the Marine Wildlife Watching Guidelines for Vessel and Small Boat Operations with periodic updates to ensure that tourists' interactions with marine wildlife do not cause harmful disturbances (Williams & Crosbie, 2007). The increase of tourism to Antarctica does not only cause local problems but also global environmental influences (Farreny et al., 2011). There is a lack of recent data on the environmental impacts of Antarctic tourism on carbon dioxide emissions. Farreny et al. (2011) used a methodology for quantifying CO2 emissions by passenger and by Antarctic cruise per day. They found that the average tourist trip to Antarctica resulted in 5.44t of CO₂ emissions per passenger, and approximately 70 % of these CO₂ emissions were coming from cruise ships.

2.2 International Laws and Regulations of Antarctic Tourism

Some literature has discussed the strengths and weaknesses of international laws and the importance of developing new laws governing Antarctic tourism. Bastmeijer (2003) examined whether the Protocol on Environmental Protection to the Antarctic Treaty and the domestic implementing legislation of the contracting parties offer normative criteria for monitoring and authorising tourist activities in Antarctica. The study has shown the deficiencies of international laws and helps researchers understand the impact of Antarctic tourism and the current situation. Bastmeijer and Roura (2004) investigated the international regulations of Antarctic tourism and discussed the main management issues. Their key finding was that more strategic policies and management systems should be cautiously considered to prevent irreversible damage in the future. They also provided suggestions such as limiting tourism activities in particular sensitive regions and forbidding tourists in previously unvisited regions. This study has emphasised the importance of concentrating on developing tourist activities in well-managed and designated areas in the longer term.

Bastmeijer et al. (2008) further explored whether additional regulations are needed to regulate or prohibit the future development of permanent land-based facilities such as hotels and visitor centres for tourists. They considered that a full prohibition of new permanent facilities could protect the environment and make Antarctic tourism sustainable by trying to keep Antarctic tourism shipbased. In addition, Molenaar's study (2005) considered that although the Antarctic Treaty System (ATS) is responsible for managing and governing Antarctica, it has been relatively passive and has various weaknesses. The study discussed further international regulations developed by the Antarctic Treaty Consultative Parties (ATCPs). The study argued that regulation of Antarctic tourism should have two distinct levels: 1) managers should strive to achieve sustainable tourism by balancing economic interests and ecological protections for the present and future; and 2) managers need to ensure that activities are consistent with and contribute to the sustainable tourism of Antarctica. For example, at this level, people need to address the various risks (e.g. human safety, and threats to the Antarctic ecosystem) associated with Antarctic tourism.

2.3 Antarctic Tourists' Behaviour

Tisdell's study (2010) reported that most tourism activities concentrate on the Antarctic Peninsula. The research surveyed Antarctic tourists to determine their socio-economic profiles and attitudes towards environmental protection and knowledge of Antarctica. The study argued that in the absence of appropriate and mandatory management, tourism activities might put Antarctica in danger. Still, tourists also can, politically and socially, play a positive role in Antarctic nature conservation as tourists want Antarctica to be maintained in its pristine state. For example, tourists are willing to help promote Antarctic environmental protection, and some are willing to devote themselves to Antarctic conservation. Pfeiffer and Peter (2004) researched the South Shetland Islands and Penguin

Island in the Antarctic Peninsula and identified sites with the highest concentration of tourism activities. They collected data on birds on these two islands and tested their heart rates to determine the impacts of tourists' behaviour. Their findings show that tourists need to learn general knowledge about avoiding harassing wildlife before landing in the Antarctic region. Hanifah et al. (2012) identified strategies to help mitigate the negative impacts of tourists' misbehaviour, such as developing sustainable tourism, and building more natural reserves. They introduced the concept of ecologically sustainable development (ESD), the concept of natural reserves devoted to peace and science (NRDPS), and the impacts of human activities in Antarctica. There are undeniable impacts of human activities in Antarctica, therefore, good practices based on ESD and NRDPS could enhance the protection and conservation efforts of Antarctica in the future.

2.4 Sustainable Tourism in Antarctica

According to World Tourism Organisation (WTO, 1993), sustainable tourism refers to the development that meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to the management of all resources in such a way that economic, social, and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity, and life support systems (WTO, 1993). Kruczek et al. (2018) observed that Antarctica is an important world testing area for sustainable tourism. However, there is no research to confirm that Antarctic tourism is sustainable or how people ensure that human arrivals do not affect the destination's sustainability. These issues require consideration from researchers.

Altvater et al. (2011) provided a set of recommendations for sustainable tourism in Antarctica to address the existing gaps in Antarctic tourism management. Recommendations included the development of a comprehensive tourism framework in the future; research and monitoring as the basis for reasonable decision-making; taking cumulative impacts into account and applying them in Environmental Impact Assessments; control of access to sites on Antarctica; control of the type of tourism activities; keeping tourism ship-based to decrease or prevent land-based facilities; creating high average environmental standards; establishment of an observer system onboard tourists' routes; and providing education and training courses for tourists before their departure to Antarctica.

Research has also shown new trends in Antarctica tourism and sustainable management strategies. For example, Goff's (2003) study showed that the New Zealand government proposed four suggestions to ensure tourists activities are conducted in a safe and eco-friendly manner: strengthening and increasing management methods; avoiding any further expansion of Antarctic tourism; prohibiting any expansion of permanent or semi-permanent land-based tourism construction in Antarctica; and keeping to the limits of government support and other non-governmental expeditions in the range of humanitarian assis-

tance and basic hospitality. New Zealand's attitudes and tourism managerial system towards Antarctica provide other countries and the IAATO with a reference point and model for policymaking (Goff, 2003). Barrington (2004) also offered some sustainable management strategies for Antarctic tourism management. As one of the Antarctic Treaty System (ATS) partners, Australia has devoted itself to improving the management of Antarctic tourism. The ATS and its partners aim to ensure that Antarctic tourism is sustainable, balancing the relationship between economic interests and environmental protection (Barrington, 2004).

The literature provides useful information on the background of Antarctic tourism and its impacts. However, it is important to find out what the tourists' experiences and perceptions are about tourism in Antarctica and how Chinese tourists are aware of the aspects of environmental protection and sustainability with regard to Antarctic tourism. The next section discusses the methodology employed in this study.

3 Methods

3.1 Research Design

This research uses secondary data with a qualitative method and interpretivist paradigm. Qualitative research is built on a relativist ontology that believes "reality is a finite subjective experience, and nothing exists outside of human thoughts" (Denzin & Lincoln, 2005, p. 1). It is also built on a subjectivist epistemology that believes "knowledge is always filtered through the lenses of language, gender, social class, race, and ethnicity" (Denzin & Lincoln, 2005, p. 1). A constructivist epistemology believes that "reality is independent of human thought, but meaning or knowledge is always a human construction" (Crotty, 1998, p. 3).

Using qualitative research, this study endeavoured to capture Chinese tourists' realities of the impacts of Antarctic tourism and explore their experiences of Antarctic tourism and interpreting the development patterns of sustainable tourism in Antarctica. Secondary research, in contrast to using primary sources, collect existing data in the form of texts, images, audio, or video recordings, which were collected by previous researchers (Beerli-Palacio & Martín-Santana, 2019). In addition, this research employed Netnography, which is an online research method for conducting ethnographic research on the internet (Kozinets, 2017). It is a qualitative and interpretive research method that applies traditional ethnographic techniques to social media (Kozinets, 2017). Contemporary netnography is a set of research practices related to data collection, analysis, and research ethics.

3.2 Sampling Strategy

This study applied a non-probability sampling method called 'purposive sampling', or 'judgmental sampling', in which the researcher only includes participants who meet certain criteria, and then checks whether or not they meet other

criteria (Ames et al., 2019). This study investigated the views of people who had been to Antarctica as tourists, and then checked to determine whether or not the information supported by them was helpful for answering the research questions. The posting time of the relevant answers on the Zhihu and Mafengwo apps was limited from 2015 to 2020 (in early 2020, many regions and countries had not yet restricted travel as a response to the COVID-19 pandemic). The posts included photographs of tourists because selfies taken in Antarctica were considered as evidence that they had in fact visited the Antarctic. The postings of the tourists in the two apps provided detailed descriptions of Antarctic tourism experiences. Posts of only one or two sentences of description were not selected, and the authors' careers, hobbies, and experiences were considered as background information for the online postings. Most authors of the posts were tourists or specialised in the Antarctic study, but some were science writers or tourism researchers.

3.3 Data Collection Procedures

This study selected tourism experiences comments on Zhihu and Mafengwo. The data collection started with information searching, using keywords in the search box of both applications to collect relevant data. In consideration of the two research questions, the researcher used six keywords:

- 1. Antarctic tourism,
- 2. Antarctic tourism experience,
- 3. Antarctic tourists.
- 4. the development of Antarctic tourism,
- 5. Regulations and laws of Antarctic tourism, and
- 6. environmental impacts of Antarctic tourism.

After these keyword searches, 20 postings on Zhihu and 20 on Mafengwo were collected. These postings were then checked to see whether or not they were relevant and informative to the research questions. Similarly, the authors' information was checked to ensure they were Antarctic visitors. Then the collected data were arranged in tables. Data were collected in Chinese then translated into English for analysis.

3.4 Data Analysis

This study used the thematic analysis method to analyse the information collected online. Thematic analysis is an interpretative approach for analysing qualitative data based on categorising it into particular themes. It aims at grasping the complexity of meanings of the phenomenon under study (Smith, 2015). The data of the study were from secondary sources, therefore thematic analysis was considered appropriate. The researcher started the analysis by becoming familiar with the data through re-reading the posts collected. Browsing through the data from Zhihu and Mafengwo has produced some new information and provided a basis for the rest of the analysis (Braun & Clarke, 2006). Secondly, the researcher created an original list of ideas relating to the research questions

(Braun & Clarke, 2006). After becoming familiar with the postings, the main data content was identified as tourists' experiences in the Antarctic and their perspectives on Antarctica and Antarctic tourism. Next, the researcher identified specific segments of these data (Thomas, 2006) based on their relevance to the two research questions.

Thirdly, from these specific segments, the researcher produced initial codes (or themes or categories; Braun & Clarke, 2006). The coding was done manually and systematically across all the data, giving equal and sufficient attention to each data item. Inductive coding was applied, which is a convenient and efficient way of analysing qualitative data by narrowing varied and extensive raw data into a brief summary format (Thomas, 2006). Through manual inductive coding, the needed data were categorised into the different theme groups. The more summative, important, and general categories were extracted from the research aims and the lower level of categories (Thomas, 2006). For example, abundant data was describing the regulations of Antarctic tourism, so this information was categorised into a category named 'strict regulations' and finally put into a more summative category named 'the environmental protection of Antarctic tourism'. Fourthly, the researcher reduced the un-coded text and redundant and overlapping categories (Thomas, 2006). Some segments of the text were removed if they were coded more than once and were not relevant to the research questions. The final results of data analysis were used to illustrate the meanings in the data and to answer the research questions.

4 Results

The following section presents the main findings identified in this qualitative study. The results are presented according to the main themes generated from the thematic analysis described in section 3. The four main themes are described and explained according to the data categories presented in table 1.

4.1 Antarctic Visitors' Experience

This major category consists of ten primary categories (table 1). In terms of tourists' perspectives on the Antarctic landscape, there were 14 segments focusing on *tourists' perspectives on Antarctic landscape*, and the authors expressed their feelings using various words such as 'shocking', 'majestic', 'pure', and 'incredible'. Most tourists considered that the Antarctic landscape gave them a different and unique experience compared to that of other destinations. Some described the Antarctic landscape with comments such as:

- "I consider that Antarctica is definitely a brand new and unique world".
- "Travelling in Antarctica impressed me the most. This is the most beautiful natural landscape I have ever seen in my life".
- "Antarctica may not be the most exciting or the most beautiful place, but it must be the most breath-taking"; and
- "No language can describe the emptiness and purity in front of me".

Tab. 1: Data Categorisation

Key Categories (primary categories)	The most important and summative categories(major categories)
 Tourists' perspectives on the Antarctic landscape Seasick Cold The physical condition of viewing wild animals The variety of Antarctic wild animals Global warming High price of Antarctic tourism The popularity of Antarctica The experience with the expedition team The uniqueness of Antarctica 	1. Antarctic visitors' experience
 4. The capacity of the cruise ship 6. The regulations around viewing wild animals 10. Environmental education 16. Strict regulations 17. Antarctic tourists' environmental awareness 	The environmental protection of Antarctic tourism
5. The polar plunge 11. Hospitality on board 15. The variety of tourists' products	3. The Antarctic tourism products
18. Negative comments by Antarctic tourists 20. Tourists' behaviour	4. The negative aspects of Antarctic tourism

Source: Authors' work

Furthermore, the results showed the seasickness and cold weather that the tourists experienced in the Antarctic. Most of the authors considered these two experiences as challenges and part of the adventure. Some authors of the posts mentioned the Drake Passage in the Antarctic waters, the only route for cruise ships to the Antarctic land. They experienced a very uncomfortable period in this place. Some posted:

- "The Drake Passage is very windy, making it easy for people to get seasick".
- "I have taken a lot of seasickness pills, but I still feel very uncomfortable".
- "The first hurdle is to cross the Drake Passage. As soon as I woke up in the morning, I started to vomit"; and
- "Sailing through the Drake Channel was a horrifying experience, and the shaking made most people want to vomit".

The coldness was also mentioned by two authors, who wrote that "I felt that the coldest day was camping in the polar regions," and "there are often strong winds in Antarctica, and the strong wind takes away too much heat from our body".

Data on the physical condition of viewing wild animals provide valuable information. Most tourists found that the rule of keeping five metres away from Antarctic wildlife was difficult to achieve and may even be impossible. There were 24 segments mentioning the physical condition of viewing wild animals.

Some posts showed the variety of Antarctic wild animals. For example, "It was the first time that everyone on the board saw so many penguins, and I felt very shocked and surprised"; "South Georgia Island is warmer compared to other areas of Antarctica; therefore, there are many kinds of animals and plants. Here is also called Antarctic wildlife's paradise".

The tourists have realised that global warming is actually happening in Antarctica.

- "The glacier has been receding".
- "Global warming has led to the rapid melting of ice".
- "We could see the glacier collapse, but I did not want to see this scene. Global warming has caused the Antarctic ice melting".
- "We may be used to hearing about the impact of climate warming on the planet in the news, but most people have never really experienced it".

Many tourists mentioned the price of an Antarctic trip, but only one stated that "travelling to the Antarctic was the highest price I have ever paid for a single destination." However, the price of Antarctic tourism did not stop the popularity of Antarctica. As some mentioned, "while polar tourism is becoming increasingly popular, more and more people are beginning to realise the impact of this industry on the environment," and "it can be said that Antarctic travel market is mature. More than 200 people travel to the South Pole every year." The tourists considered that the Antarctic had become increasingly popular, although compared to other popular destinations, its popularity was still developing.

The experience with an expedition team was also mentioned by many posts. There were 13 segments related to this primary category. These tourists considered that the staff and expedition team members in the Antarctic tour were very professional and knowledgeable. As one of the tourists posted: "the expedition team members from all over the world are equipped with stunts including ornithologists, oceanographers, geologists." Other comments on this topic were:

- "The expedition members have rich knowledge and experience, and most of them are experts in their relevant fields".
- "Such commercial expeditions in Antarctica are usually led by a very professional team".
- "Under the leadership of a professional guide, I used a snowboard and dragged my sled to the South Pole".

In addition to the unique landscape of the Antarctic, some posts made special mention of the uniqueness of Antarctica, including "The Antarctic environment is special."

4.2 The Environmental Protection of Antarctic Tourism

This major category consisted of five primary categories (table 1). Controlling the capacity of cruises to the Antarctic is a very important part of the environ-

mental protection of Antarctic tourism by the IAATO. Eight segments mentioned the number of passengers on an Antarctic cruise.

- "Most cruise ships have more than 100 passengers, and these ships are already quite large".
- "Our ship is basically the smallest, with more than 70 passengers and more than 60 crew members and expedition members".
- "The Antarctic treaty regulated that only ships with less than 500 people can land, and no more than 100 people every landing".
- "There are 190 passengers and 170 crew members".
- "There were 170 people on the ship, 55 people participated in this swimming".
- "There was a total of 175 passengers on the expedition ship"; and
- "The cruise ship carries approximately 110 passengers".

The regulations of viewing wild animals were also mentioned in most of the posts. 19 segments are related to this topic. Most regulations are about how to view wild animals. For instance,

- "The regulations and staff required that the viewing distance of penguins should not be less than five meters".
- "The density of penguins is so high, which means the principle of at least five meters away is completely impossible to achieve"; and
- "You cannot come close to penguins within five meters, but if the penguin comes to you, you do not have to hide".

Aside from the "five-metre principle," one tourist also mentioned that there was "no feeding, no rushing, no loud noise, no smoking here."

The data included 17 posts about environmental education, various lectures about Antarctica, and viewing research stations, which are important platforms for environmental education. One of the tourists considered that lectures about Antarctica and viewing research stations could promote more positive responses to climate change, attract more attention to environmental protection, and even further promote government policymaking. The tourists have mentioned their experience of viewing of research stations such as:

- "Great Wall Station has very strict requirements on the number of passengers and the landing time"; and
- "Allowed us to visit this scientific research station in the afternoon".

These comments showed that there were not only many activities around environmental education, but many tourists have participated in these activities. Strict regulations can help to achieve environmental protection against damage from Antarctic tourism. 22 data segments were describing the strict regulations at the Antarctic. Most tourists considered that Antarctic tourism needed people to follow these regulations. For instance, "People need to comply with stricter requirements here than any other destination; Due to the fragile ecology of Antarctica, all visitors to Antarctica must abide by Antarctic regulations."

Antarctic tourists' environmental awareness was crucial in evaluating the environmental protection of the Antarctic. Comments supporting this were:

- "The overall environmental protection awareness of tourists from Antarctica is much higher than tourists' awareness from other travel destinations".
- "I do not know which other tourist destinations in the world have such strict regulations".
- "The staff on the Antarctic cruise ship strictly supervise the landing"; and
- "As a tourist, I can only try my best not to destroy their ecological environment, and not disturb them".

4.3 The Antarctic Tourism Products

This major category of data consisted of three primary categories (table 1). The polar plunge was one of the most popular tourism products in the Antarctic and left most tourists feeling impressed with such an unforgettable memory. Most mentioned they participated in the polar plunge.

- "I deliberately took the national flag to dive in Antarctic water".
- "One of the must-do-experience events in Antarctica is the Polar Plunge".
- "I jumped three times in the Antarctic waters"; and
- "Antarctic diving is probably the craziest thing I have done in my life".

The tourists shared their experience of hospitality on board during their Antarctica trip, including a barbecue on deck, a cocktail party on the ice, and whisky with ice from Antarctic water. For example, "The crew helped me catch a piece of ice. I drank a cup of whisky with a small piece of the ice" and "We removed external impurities on ice cubes that we picked up from Antarctic water, and then I made an iced whisky for myself in the bar".

The variety of tourists' products in the Antarctic included driving Zodiacs (small boats), hiking, cocktail parties, viewing penguins and seals, skiing, whale watching, camping, taking propeller planes, playing with snowboards, soaking in hot springs, exploring ice lakes, snow biking, and driving snowmobiles. There were 17 segments describing the variety of tourists' products in the Antarctic e.g.

- "Tourists will see expedition members driving Zodiacs between icebergs".
- "Hiking is our expedition teams' main activity".
- "Seeing glaciers by Zodiac, hiking, viewing penguins and seals, skiing, whale watching, and camping".

4.4 The Negative Aspects of Antarctic Tourism

The results also showed the negative aspects of Antarctica tourism. This major category consisted of two primary categories: "negative comments by Antarctic tourists" and "tourists' behaviour."

- "Antarctic cruise tourism is destroying the local geographical environment".
- "Some people travel long distances on cruise ships just to sip champagne while watching the glacier melt slowly".

- "Except for penguins, seals, icebergs, the endless sea and silence, and expensive boat tickets, there is really nothing else"; and
- "Due to the large number of humans catching shrimps, a large number of penguins cannot find food. The climate is warming, and the habitat of penguins is getting reduced".

The posts also revealed the misbehaviours of tourists and tour leaders. For example, some expedition leaders like icebergs, some like animals, and some will boldly approach animals ("Our expedition team also held a small cocktail party on the ice, and I saw that the tour leader was also holding a baby elephant seal in her arms").

5 Discussion

5.1 Chinese Tourists' Experiences on Antarctica

The aim of the research was to identify Chinese tourists' experiences on Antarctica and to find out how Chinese tourists perceive aspects of environmental protection and sustainability with regard to Antarctic tourism. Findings showed the variety of tourist experiences in Antarctic tours. Most tourists who posted online considered that the Antarctic landscape gave them a different and unique experience compared to other destinations. This is in line with previous research (Amelung & Lamers, 2006) showing that the Antarctic landscape was the reason most tourists wanted to go there. Moreover, the distinctiveness of the Antarctica experience confirmed that the Antarctic environment is indeed unique. Cajiao et al. (2020) mentioned that the Antarctic has rich biodiversity and many unique geological features, and McClanahan (2020) commented that the Antarctic is a unique and fragile area. Moreover, most of the tourists considered seasickness and the coldness of the Antarctic trip as challenging and part of the adventure. This has added to the literature on tourists' various experiences and can help others understand tourists' behaviours and generate solutions to problems in the development of Antarctic tourism, such as vomitus disposal (Wright, 2008).

The Antarctic Treaty regulated that viewing wild animals should not be at less than five metres, and tourists should not stand on the animals' usual routes, approach them actively, or touch them, unless wild animals approached the tourists. However, the actual situation of viewing wild animals described by the visitors was that keeping the five-metre principle was impossible due to the high density of penguins. This result indicates that even if every tourist wanted to follow the five-metre principle strictly, tourists' landing, and inadvertent contacting wild animals could disturb wildlife or ultimately destroy their habitats. With the development of Antarctic tourism, this physical situation of viewing wild animals would bring various inevitable impacts which would become an obstacle to the implementation of sustainable tourism in the Antarctic.

In comparison to previous research on Antarctica tourism, the results of this study have revealed the issue of the expensive cost of travelling to Antarctica.

The high price may hold back the pace of development of Antarctic tourism and become an obstacle to some tourists. According to Tisdell (2010), due to the high price of Antarctic tourism, only people with a good income and social status, or those who engage in scientific work could afford to go. These tourists can, politically and socially, play a positive role in Antarctic nature conservation as most wanted Antarctica to be maintained in its pristine state. For example, tourists were willing to help promote Antarctic environmental protection, and some were willing to devote themselves to Antarctic conservation. Clearly, the high cost of Antarctic tourism restricts many tourists and controls arrivals to the Antarctic to some extent.

Moreover, the tourists identified the popularity of Antarctica as a destination. This result is consistent with the rising visitor numbers shown in the statistics of IAATO between 2009 and 2020. McClanahan (2020) suggested that due to the popularity of Antarctic tourism, some scholars and researchers were pessimistic about such rapid growth, which would have negative impacts on this unique and fragile area. However, it is also the popularity of Antarctic tourism that makes humans pay attention to environmental problems. Global warming was identified by a large number of tourists in the Antarctic as a threat to tourism to Antarctica. One of the authors posted that "global warming has caused the Antarctic ice melting. We may be used to hearing about the impact of climate warming on the planet in the news, but most people have never really experienced it." Wright (2008) examined the way the growing Antarctic cruise industry affected the Antarctic environment and legislation and illustrated the influence of climate change. Maher et al. (2011) discussed many side-effects of Antarctic tourism's growth and explored the risk of a changing environment for Antarctic tourism.

This study also revealed the roles of the expedition teams. The professional staff and expedition team members on board the cruise ships educated the tourists in Antarctica, supervising and managing their behaviour with their professional knowledge and expertise. The professionalism of the Antarctic expedition team may promote the development of sustainable tourism in the Antarctic.

Data about the polar plunge provided information about diving in the Antarctic waters. Some of the tourists considered that as one of the *must-experience* events in Antarctica. Cajiao et al. (2020) stated that in the period of 2003 to 2017, IAATO presented 14 different types of tourism activities on the Antarctic. The polar plunge is one of the most attractive experiences. The results also showed that most tourists enjoyed the hospitality on board the cruise ships. This has implications for the cruise ship operators in terms of the variety of facilities and services that can be provided. However, there are concerns around whether holding open-air barbecues on the deck brings excessive CO₂ emissions and air pollution, or if holding a small cocktail party on the ice brings in non-native species accidentally, or whether salvaging ice cubes impacts the environment and aggravates global warmings.

The findings from the posts added more tourist products known about in Antarctica tourism. This study revealed the activities of cocktail parties, camping, taking propeller planes, soaking in hot springs, exploring ice lakes, snow biking, and driving snowmobiles which did not exist in the 14 activities mentioned by IAATO.

5.2 Chinese Tourists' Perception of Environmental Protection and Sustainability of Antarctic Tourism

Barrientos Island is located in the Antarctic Peninsula and is popular due to its rich biodiversity and many unique geological features (Cajiao et al., 2020). Some tourists noticed that "now the number of penguins is declining." This finding indicates a particular threat to Antarctic animals. The development of Antarctic tourism may lead to a decrease in the number of Antarctic wild animals due to human disturbances and the threat of non-native species (Cajiao et al., 2020). Controlling the capacity of a cruise ship is an important part of the environmental protection of Antarctic tourism. According to the data, most cruise ships had more than 100 passengers. The Antarctic Treaty regulated that only ships with less than 500 people could land, with no more than 100 people in each landing. Controlling the capacity of cruises to the Antarctic is a very important part of sustainable tourism in the Antarctic as well as being an important part of the environmental protection of Antarctic tourism by the IAATO. Controlling the arrival numbers of Antarctic tourists could directly decrease pressure on the eco-environment of Antarctica.

Antarctic tourists' environmental awareness is also a crucial element for evaluating the environmental protection of the Antarctic. According to the data collected in this study, tourists followed the regulations and laws of Antarctica strictly, and most of them shared a high level of environmental awareness. However, this study also found that some tourists are not aware of the importance of environmental protection and regulations. This resonated with discussions about tourists' misbehavior mentioned in other research in terms of the negative aspects of Antarctic tourism. Studies by Pfeiffer and Peter (2004) and Williams and Crosbie (2007) discussed the potential disturbances brought by tourists' misbehaviour as a result of poor environmental awareness. Tisdell (2010) found in the absence of appropriate and mandatory management, tourism activities may put Antarctica in danger, but tourists also can, politically and socially, play a positive role in Antarctic nature conservation as most wanted Antarctica to be maintained in its pristine state. Antarctica may be a good place for environmental education. This is a positive impact on the development of Antarctic tourism.

The data also showed the negative comments by Antarctic tourists that Antarctic cruise tourism is destroying the local environment. The system of self-regulation supervised by IAATO is under enormous pressure with the development of Antarctic tourism. Haase (2005) summarised some weaknesses of the current management system of Antarctic tourism, and Cajiao et al. (2020) found that

tourism activities can destroy the vegetation and soil on Barrientos Island. Engelbertz et al. (2015) found that more volumes of maritime traffic and people in Antarctica bring higher risks of incidents and accidents as well as threats to human life and the Antarctic environment. This negative comment found on the Antarctic landscape is different from those praising the scenery written by most researchers.

6 Conclusion and Recommendations for Future Research

According to the Antarctic and Southern Ocean Coalition (ASOC), large numbers of people land at crucial wildlife habitats and historic sites in Antarctica. Such mass commercial tourism in the Antarctic requires a set of systematic checks, controls, and supervision, which will bring pressure to the environment of the Antarctic and expose defects in the IAATO's regulations (Abdullah & Shah, 2018). Against this background, there are many studies devoted to exploring this topic. Using secondary data, this study analysed the perception of the tourism experiences from Chinese visitors' perspectives. In addition, viewing wild animals, increasing numbers of Antarctic tourists, various tourists' products, the weaknesses of the current management system, and tourists' misbehaviour may be obstacles to sustainable tourism in Antarctica. However, the professionalism of the expedition team, strict regulations and environmental education as well as the high price of Antarctic tourism may benefit the promotion and development of sustainable tourism in Antarctica.

This study has contributed to research methods by using social media platforms to explore tourists' experiences in Antarctica. Moreover, the findings of this study have practical implications for tour operators in promoting and organising Antarctica tours and how international laws and regulations might be implemented to ensure the sustainable development of tourism in Antarctica. There are, however, some limitations in this study. First, the data collected were secondary and limited to the Chinese tourists who shared their experiences on two social media websites. Consequently, the experiences of tourists from other countries and areas were missing. Second, the sample size was small. The data analysis was based on 40 posts, which is not sufficient to generalise findings on those who have visited Antarctica. Future research needs to collect data from tourists from other countries to explore their experiences of Antarctica tourism. Furthermore, research also should be conducted by interviewing tour operators such as cruise ship managers and staff members, to identify their understandings of the impacts of sustainable tourism development in Antarctica. More field research on the Antarctic will need to be conducted in the future, as a momentto-moment analysis of the experience to this polar area can provide more useful information about sustainable tourism and tourism impacts on the Antarctic.

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Part 2: Management of Wildlife Protection

Colleen Black, Marit Gundersen Engeset, Michael Lück

Visitor Responsibility and Desired Site Improvements for Basking Sea Turtles

Abstract: On Maui (Hawai'i), the terrestrial basking of Hawaiian green sea turtles draws close to 500 visitors daily to Ho'okipa Beach Park. Hawai'i Wildlife Fund (HWF), a local non-profit organisation, strives to provide casual interpretation to visitors and protect the basking sea turtles. The visitor volume has created great angst regarding tourist conduct and the resulting welfare of the sea turtles. This chapter presents the results of 543 survey respondents regarding the impact of the basking event on visitors in the areas of visitor satisfaction, learning, attitudes and behaviours and the interrelationships within these. Sources of satisfaction that impact the visitor experience and how the information provided to visitors during their experience influences their environmental behaviour intentions are investigated. The research adopted four outcome indicators from Orams' marine tourism model: visitor satisfaction, learning, attitudes, and behaviours, and outlines the visitors' call for responsible visitor behaviour and sustainable management of the basking event.

Keywords: Sustainable Tourism, Wildlife Tourism, Visitor Management, Sea Turtles

1 Introduction

Tourist interactions with wildlife as a tourism activity has grown significantly over the past three decades and has transformed from a relatively rare experience into a mainstream tourism product. Tourists watching, photographing, and otherwise interacting with wildlife in their natural environment now include a wide range of species and settings, from small insects to the largest whales (Pagel et al., 2020). In 2008, Hawaiian green sea turtles (Chelonia mydas) began terrestrial basking at Hoʻokipa Beach Park, Maui. Only specific populations of green sea turtles exhibit the basking behaviour, which include the populations in Hawaiʻi, the Galapagos Islands, and the Wellesley archipelago of Australia (Van Houtan et al., 2015).

At Hoʻokipa Beach Park, the number of green sea turtles that bask range from the low twenties to over 100. Hawaiian green sea turtles will bask on other beaches within Maui and the Hawaiian archipelago; however, no other area receives the green sea turtles with such consistency and number (Hawaiʻi Wildlife Fund, personal communication, April 2016). In 2011, Maui County lifeguards noticed the large amount of beach goers in close proximity to the turtles, occasionally harassing them. As attention of the basking event increased significantly, county lifeguards could not safely monitor both people and sea turtles at Hoʻokipa Beach Park. They subsequently approached the local non-profit organisation, Hawaiʻi Wildlife Fund (HWF) to help preserve the green sea turtles and

protect them from harassment (H. Bernard, personal communication, November 26, 2016).

The basking sea turtles have now become a notoriety drawing close to 500 visitors to Hoʻokipa Beach each day (H. Bernard, personal communication, November 26, 2016). With such high numbers, it is important to investigate whether visitors exhibit responsible behaviour around the sea turtles and if the basking event is sustainable. This chapter reports on the results of a survey, investigating the impact the basking event has had on visitor satisfaction, learning, attitudes and behaviours, and the interrelationships of these four elements. Sources of satisfaction that impact on visitor experiences are also highlighted, as well as how providing information to visitors during their viewing experience influences their environmental behavioural intentions. The work at the Hoʻokipa basking site is based on Orams' (1995) marine-tourism model that adopted four outcome indicators: visitor satisfaction, learning, attitudes, and behaviours.

2 Literature Review

2.1 Ho'okipa Beach Park and Green Sea Turtle Research

One legend within Hawaiian mythology states that 'Ai'ai, the son of the fishing god Ku'ula, stopped to rest on Polihua beach, on Lāna'i. He carved an image onto a stone, laid it on the sand, and invoked his parents' spirits as he delivered an incantation. The stone became mobile, moving into the ocean, then re-emerged and relocated to the beach, where it transformed into a sea turtle (Thrum. 1907).

This work of 'Ai'ai on the island of Lāna'i was the first introduction of the turtle in the seas of Hawai'i, and also originated the habit of the turtle of going up the beach to lay its eggs, then returning to the sea (Thrum, 1907, p. 103).

Today, the green sea turtle population in Hawai'i is regarded as 'threatened' under the Endangered Species Act (ESA), first listed in 1978 and re-listed in 2016, despite over 40 years of protection (NOAA Fisheries, 2015). Between the towns of Pā'ia and Ha'ikū, lies Ho'okipa Beach Park, renowned for both its board- and kite surfing (Counts of Maui, n.d.). The Hawaiian green sea turtles emerge from the ocean not to nest, but to terrestrially bask on the sand at Ho'okipa (figure 1). It is assumed the turtles choose this beach to bask upon as it maintains a gentle slope from the ocean and is surrounded by a tall lava wall, offering protection from the elements (Hawai'i Wildlife Fund, personal communication, April 2016).

The Hawaiian green sea turtles begin their basking behaviour around mid-day and continually increase in numbers toward nightfall, where they reside on the beach overnight. The sea turtles rest and remain motionless, taking the occasional breath and tossing sand on their flippers or carapace when they become too hot. Entrance and exit gates to Hoʻokipa Beach Park are closed shortly after 7 pm, allowing the sea turtles to rest undisturbed.



Fig. 1: Basking Green Sea Turtle at Ho'okipa Beach Park Source: Courtesy of Colleen Black

It is believed that the basking behaviour aids in the sea turtles' digestion, vitamin D synthesis, egg maturation, and helps break down fungi and algae (Maxwell et al., 2014; Van Houtan et al., 2015). Basking also assists the sea turtles with their thermoregulation and allows them to avoid tiger sharks (Van Houtan et al., 2015). Other investigations into the basking behaviours of Hawaiian green sea turtles include Hawthrone (2015), who measured the behaviour of the turtles against sea surface temperatures at Hoʻokipa Beach Park and Van Houtan et al.'s (2015) work on the responses to surface temperature patterns with a turtle population on Oʻahu. National Oceanic and Atmospheric Administration (NOAA) scientist George Balazs has completed nearly 200 sea turtle studies of which a small sample includes the basking behaviours of green sea turtles in the Northwestern Hawaiian Islands (1982), their biological data (1980), migration studies (1976, 2004), and issues relating to disease (Chaloupka & Balazs, 2005, 2009; Chaloupka et al., 2009).

At this time, no investigations can be found that involve visitor management and the terrestrially basking Hawaiian green sea turtles at Hoʻokipa Beach Park. The basking event has become very popular in Maui, and there are issues of concern regarding tourists flocking to the beach to view the turtles. Contained is the irony that the basking event occurs at Hoʻokipa Beach Park, since the closest equivalent of the Hawaiian word 'Hoʻokipa' in the English language, means 'Hospitality' and its literal translation is "to enable a visitation to occur" (Fong, 1994, p. 1). This visitation, which includes a high number of tourists, raises concern about the safety of the sea turtles and some of the interactions that may take place, including the sustainability of the basking event itself. For that reason, two models that have assisted in managing the sustainability of wildlife

viewing encounters, proposed by Duffus and Dearden (1990) and Orams (1995), have been evaluated.

2.1.1 Wildlife Tourism Management Frameworks

In the 1990s, two models that assist in managing the sustainability of wildlife viewing encounters were proposed by Duffus and Dearden (1990) and Orams (1995). In the Duffus and Dearden (1990) model, wildlife watching is expressed as non-consumptive wildlife-oriented recreation (NCWOR). The authors believe visitor types can be placed on a continuum, ranging from wildlife specialists to wildlife generalists. Each visitor type has its own expectations regarding wildlife viewing events which can place increasing demands on the wildlife species, ecosystem, and the social constructs. As the popularity of a viewing attraction rises, the initial wildlife specialists are displaced, and wildlife generalists become the predominant visitor type. Consequently, the carrying capacity of the viewing site shifts to the point where it is exceeded (Duffus & Dearden, 1990). This is the current situation with the basking sea turtles at Hoʻokipa Beach Park. Since the event has gained increasing popularity, it has resulted in mass amounts of generalised visitors to the basking site, with the potential of threatening the sustainability of the basking event.

The second model, Orams' (1995) conceptual model for the management of marine tourism, categorises tourism encounters on a scale from being easily accessible to highly remote, and proposes four strategies toward site management: regulatory, physical, economic, and educational (figure 2).

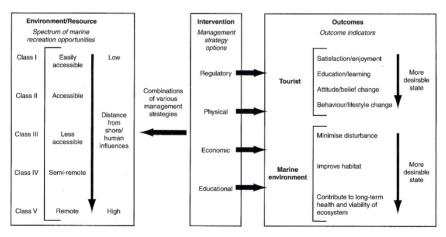


Fig. 2: Orams' (1995) conceptual model for the management of marine tourism Source: Orams, 1995

Outcome indicators help evaluate the success of the managerial strategies in the areas of visitor satisfaction/enjoyment, education/learning, attitudes/belief change and behaviour/lifestyle change (Orams, 1995). The indicators can be measured using various research tools, such as observation, questionnaires and

interviews. Besides site management, the goal of this model is to engage and move the visitor from a passive tourism experience, to one where they make long-term behaviour changes and exhibit pro-environmental behaviours toward environmental stewardship (Orams, 1996). The model utilises interpretation, defined in Tilden's (1957) seminal work as "an educational activity which aims to reveal meanings and relationships through the use of original objects, by firsthand experience, and by illustrative media, rather than simply to communicate factual information" (p. 8).

Orams developed his model from the work of Forestell and Kaufman (1990) who investigated the impacts on visitor appreciation, after receiving interpretation programmes while whale watching in Hawai'i (figure 3). The researchers used Festinger's (1957) cognitive dissonance theory to create a tri-phased interpretation programme which included pre-contact, contact, and post contact phases. Forestell and Kaufman (1990) believed that if one could create questions in the minds of visitors in the pre contact phase, it would create enough discord of not having the answers that this would cause the visitor to seek out information to satisfactorily explain what they were observing or experiencing during the contact phase. At the end of their experience, opportunities would be made available to the visitor to become more involved, by way of petitions and donations, moving them to a changed behaviour in the post contact phase.

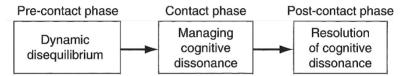


Fig. 3: Forestell and Kaufman's (1990) interpretation model Source: Forestell and Kaufman, 1990

Recognising that not all wildlife viewing encounters may be able to host pre and post contact phases but believing in the emotion generated with the interactions of nature, Orams (1995) believed the proposed outcomes of the Forestell and Kaufman's (1990) model could be achieved if visitors were given interpretation and provided opportunities and the means to act post-experience (Orams, 1996).

2.1.2 The Four Outcome Indicators of Orams' Marine Tourism Management Model

This section explores various investigations relating to Orams' (1995) four outcome indicators. The studies examined for this review involve experiences that encompassed or facilitated visitor satisfaction, learning, attitudes, and behaviours. Common attributes that presented themselves within these studies included 'authenticity', 'proximity/accessibility', 'learning', and 'the exotic'.

Regarding visitor experiences, Ramikissoon and Uysal (2014) believes that authenticity is not the goal per se but a way to enhance the quality of the experi-

ence and a sense of well-being. Visitors can experience satisfaction if the experiences they encounter within their tourism space meets with their perceived expectation. For example, Schuhmann and colleagues (2016) discovered that visitors were more willing to pay more for beachfront accommodations on beaches that were litter-free, as their idyllic image of a tropical get-away did not include views of rubbish lined beaches. For others, satisfaction can come from being at one with the environment, when the location itself is the attribute. This occurred at Mount Warning, in Australia, as most visitors preferred the low-intensity encounters while visiting it. The experience was to take in the mountain, as opposed to the physical experience of summiting it (Moyle et al., 2017). Visitors that received an authentic component in addition to experiencing their tourism space, such as a local meal or storytelling experience, displayed higher levels of visitor satisfaction, with focus on the particular attribute, than visitors who did not receive the offering (Engeset & Elvekrok, 2015).

Yet, visitor satisfaction is not always the result of a single source or attribute but often due to the interrelationships with other sources, such as proximity/accessibility, learning and the exotic. For example, visitors who chose to view the three most endangered animals in Malaysia were most satisfied with their experience and believed authenticity was due to the animal sightings, which were based on the ability of the guides to find the wildlife (Peters & Min, 2018). Visitor satisfaction also increased with closer proximity/accessibility and interactions with the giant pandas in Chengdu, China (Cong et al., 2014). In New Zealand, visitors were satisfied watching an endangered penguin in their natural habitat. However, what added to their satisfaction was the proximity they could take photos of the birds exhibiting their natural behaviours, combined with enhanced knowledge from experience (Schänzel & McIntosh, 2010).

Based on dolphin tours in New Zealand, Lück (2003) discovered that interpretation or learning while on holidays is both expected and desired by visitors, playing an important part of the visitor satisfaction with the experience. Participants on a snorkel tour in Maui stated they were more satisfied and aware of their consequences and responsibilities of actions on the marine environment after receiving interpretation than those on tours who did not (Littlejohn et al., 2016).

A host of personal, educational and conservational benefits can result from marine wildlife experiences (Zeppel & Muloin, 2008), and scientists have sought to discover whether learning during these experiences can shift the visitor toward more pro-environmental behaviours. Zeppel (2008) reported that positive changes in tourist behaviour occurred when the experience combined learning and empathy. Hoberg et al. (2020) discovered that visitors on a whale watching tour formed pro-environmental intentions after engaging and then reflecting upon the experience. The reverse is also true, where visitors are satisfied with the wildlife they viewed but concerned about the protection of the environment/natural resource around them (Newsome et al. 2017) and the numbers of tourists allowed to engage (Egresi & Prakash, 2019; Schänzel &

McIntosh, 2010). The dissatisfaction with the experience can cause the interrelationships of proximity and lack of pro-environmental behaviours of others to be of concern. Le Boeuf and Campagna (2013) believe the protection of a species must take place first before visitor satisfaction can occur and that "unrestricted free access reduces the experience for all and ultimately threatens the attraction itself and the entire program" (p. 140).

This research investigates how tourist encounters with the basking sea turtles' impact on tourist satisfaction, learning, attitudes, and behaviour, as well as the interrelationship between these four outcomes of tourist experiences. Specifically, the focus is on two main areas: First, the sources for satisfaction are investigated: Experience of authenticity (Engeset & Elvekrok, 2015), accessibility (Gundersen et al., 1996), and how exotic the experience is (Therkelsen & Halkier, 2004) are three essential sources for satisfaction with a tourist experience. The study's first aim is to identify these sources and compare their relative impact on tourists' satisfaction with viewing the basking turtles. The second aim is to understand how providing information to tourists influences their attitudes towards responsible behaviours that may affect the sustainability of the basking event and their intentions to support environmental causes. Attitude is defined as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour" (Eagly & Chaiken, 1999, p.1). The entity in question may vary in specificity as tourists can hold attitudes towards concrete places and behaviours such as sea turtle watching and more abstract, general concepts such as marine tourism in general. It is predicted that information provided during the experience will have a positive influence on attitudes. In turn, it is proposed that more positive attitudes will lead to higher intentions to support the cause as well as increased care for the sustainability of the basking event.

Attitudes, learning outcomes, and behavioural intentions can be influenced at different levels of specificity: towards responsible behaviour in general and towards responsible behaviour in specific situations or at specific places. Similarly, learning effects from tourist experiences can occur both at the general and the more specific level, leading to behavioural intentions in the form of supporting causes relating to the specific experience they have had, as well as support for more general environmentally sustainable actions. General and specific outcomes differ in their capacity for long term impact – more general attitudes and learning outcomes are likely to result in higher long-term behavioural impact, while more specific outcomes are relating to the relationship the tourist forms with the current destination. The difference for this is accounted for by measuring the outcome variables at both levels, and by testing the relationships between them. The entity in question may vary in specificity as tourists can hold attitudes towards concrete places and behaviours such as sea turtle watching, and more abstract, general concepts such as marine tourism in general. The result of this research will provide HWF and Maui County with valuable information on the visitor, their experience, and sustainable marine tourism management options to help protect the basking Hawaiian green sea turtles, at Hoʻokipa Beach Park, Maui.

3 Methods

An investigation using a case study approach was used to determine the impacts on tourists in the areas of satisfaction, learning, attitudes, and behaviour while viewing the terrestrial basking of the Hawaiian green sea turtles. The interrelationship between these four outcomes of tourist experiences is also examined. Case studies are particularly useful for understanding people, events, experiences, and organisations in their social and historical context (Veal, 2006). A random intercept survey gathered quantitative and qualitative information, adopting the outcome indicators from Orams' (1995, 1999) marine tourism model as survey categories. Questions were linked to the categories of visitor satisfaction, learning, attitudes, and behavioural intentions Socio-demographic information was also profiled.

The category of visitor satisfaction was measured by asking participants to indicate on a five-point scale (1 = strongly disagree to 5 = strongly agree) whether each of ten different areas were important in achieving a satisfactory experience. Learning was measured by asking participants to indicate on a three-point scale whether they felt that viewing the basking sea turtles had caused them to care more about sea turtle conservation and environmental choices. Relevant for learning, respondents were also asked whether they had received information about the basking sea turtles during their visit and if they had any prior knowledge of sustainable sea turtle viewing guidelines before visiting the beach. Relevant attitudes towards responsible tourist behaviour can be divided into attitudes towards responsible behaviour during a specific natural event such as viewing the basking turtles as well as more general attitudes towards the protection of sea turtles. Hence, nine items to cover both visitors' attitudes towards the basking event and attitudes towards the protection of sea turtles in general were developed. Behavioural intentions were measured by asking respondents to what extent they would be willing to pay a park visitor fee. All items are presented in the Appendix.

To get more in-depth insight into the visitors' view on responsible tourist behaviour and their overall experience with viewing the basking turtles, two-open ended questions, one asking respondents what they associated with being a responsible tourist, and one where they were invited to share how they had experienced the visit, were included. The information from these responses is analysed and discussed in light of the results from the quantitative analyses to gain more insight into factors important for promoting responsible tourist behaviour which may aid in the sustainability of the basking event.

In 2016, it was recorded that 76,094 people visited Ho'okipa Beach Park from 2:30pm to approximately 7pm (Hawthrone, J., personal communication, October 5, 2017). For a population of 75,000 people, a sample size of 382 individuals were required to achieve a 95% confidence level with a 5% margin of error.

Therefore, a rounded integer of 400 was the minimum sample size chosen for this research (Research Advisors, 2006). Subsequently, a random sample of 543 surveys was collected from July 1, 2017 to July 31, 2017, using a paper and pen survey. Surveyed participants were 18 years of age and older and were visitors to Maui and the Hawaiian Islands.

4 Results

Respondent profile: The majority of respondents (85%) were first time visitors to see the basking sea turtles at Ho'okipa. The largest age groups were born in the 1960s (22%) or the 1970s (25%), and 57% were female. The average group size was 4.32, with most of them coming from the USA (63%) followed by Canada (15%).

Satisfaction: First, the satisfaction and attitude constructs were validated using principal component analyses with varimax rotation. For the satisfaction items, three dimensions consistent with the proposed accessible, exotic, and authentic factors emerged. The items were averaged to form one measure for each of the three dimensions, and three paired sample t-tests revealed significant differences between the average scores on the three composite measures: Authenticity of the place had a higher score than how exotic the place was and the accessibility of the place. Results from the factor analysis as well as descriptive statistics and paired sample t-test scores are presented in table 1.

Tab. 1: Factor solution and descriptive statistics for satisfaction measures Principal component analysis with varimax rotation

Factor labels	Accessible	Exotic	Authentic				
Items:							
Proximity of turtles	.786	.041	.168				
Easy access to site	.785	.020	.092				
Number of turtles	.688	.276	.025				
Confidence the turtles would be basking	.561	.407	.063				
Viewing rare animal	.112	.819	.083				
Seeing animal on Endangered Species List	.078	.696	.346				
Feeling a sense of place	.134	.267	.644				
Memorable experience	.095	.153	.755				
Natural and authentic event	.055	.033	.791				
Affection towards the sea turtles	.068	.069	.681				
Cronbach's alpha	.698	.693	.689				
Composite Mean (SD)	4.16 (.685)	4.48 (.674)	4.62 (.474)				
Paired sample difference tests:							
Accessible vs Exotic	t = 9.01 (df 50)	t = 9.01 (df 507), p<.001					
Accessible vs Authentic	t = 14.20 (df 4)	t = 14.20 (df 499), p<.001					
Authentic vs Exotic	t = 4.83 (df 51)	t = 4.83 (df 516), p<.001					
			•				

Source: Authors' work

Attitudes: The questions measuring attitudes loaded on two factors. One included questions that can be interpreted as attitudes towards protecting sea turtles in general and one corresponding to attitudes towards responsible tourist behaviour at Hoʻokipa. The items were averaged to form one measure for each of the two dimensions, and a paired sample t-tests revealed significant differences between the average scores on the two composite measures: The respondents reported more positive attitudes towards protecting sea turtles in general than they did towards responsible behaviour during that specific basking event. Results from the factor analysis as well as descriptive statistics and paired sample *t*-test scores are presented in table 2.

Tab. 2: Factor solution and descriptive statistics for attitude measures

Factor labels	Sea turtles in general	Specific basking event	
Items:			
Benefit from viewing the turtles	.670	.021	
Actions I take can help the turtles	.690	.190	
Turtles are more than tourism objects	.758	.003	
It is my responsibility to participate in ethical wildlife encounters	.715	.148	
Protecting the turtles protects their significance in Hawaiian culture	.652	.103	
Basking sea turtles should be minimally disturbed	.591	.156	
Number of people around the basking turtles concerns me	.138	.862	
I would view the turtles from a platform to make less impact	.167	.731	
Number of people in water at ocean entry concerns me	.013	.773	
Cronbach's alpha	.760	.699	
Composite Mean (SD)	4.64 (.431)	4.01 (1.017)	
Paired samples t-test	t = 14.05 (df 485), p<.001		

Source: Authors' work

Learning: A total of 308 respondents (57%) received information about the basking sea turtles from HWF, and 215 (40%) reported that they had prior knowledge of responsible turtle viewing guidelines. Mean learning effects of the sea turtle viewing (on three-point scales, ranging from 1 = disagree to 3 = agree) was 2.86 (SD =.39) for the sea turtle conservation and 2.80 (SD=.46) for the environmental choices. A paired sample t-test showed that this difference was small, but significant (t=3.88, p<.001), indicating that the effect of the tourist experience had more impact on learning relating to specific aspects of the experience itself than on the more general environmental aspects.

Behavioural intentions: Mean willingness to pay a park visitor fee (on a five-point scale, ranging from 1 = strongly disagree to 5 = strongly agree) was 3.86 (SD=1.16), and mean willingness to donate to HWF was 3.34 (SD=1.19). Paired sample t-test showed that this difference was significant (t=6.31, p<.001), indi-

cating that respondents were more willing to pay a park visitor fee than to donate.

Impact of information during experience on attitudes and behavioural intentions: To test the relationships proposed (table 3), we ran eight different regression analyses. Each model tested the relationships between providing information during the event, attitude towards either protection of sea turtles in general or towards responsible behaviour during the basking viewing, and each of the two learning and the two behavioural intention outcomes.

The results presented in table 3 can be interpreted as follows: Models 1-4 show that information about the basking sea turtles did not influence any of the outcome variables (learning or behavioural intentions) directly. However, an indirect effect of information on all four outcome variables via its impact on attitudes towards generally responsible tourist behaviour and towards behaviour specifically at the turtle viewing event at Ho'okipa beach was found. That is, people receiving information exhibited more positive attitudes. This in turn had a positive effect on care about sea turtle conservation, care about their own environmental choices, willingness to pay a park fee, and willingness to donate to HWF. Attitude towards responsible behaviour during the viewing had a significant effect on respondents' care for the turtles and their environmental choices, and on willingness to pay a park fee. Taken together, these results show that both types of attitudes measured here have positive effects on both learning outcomes and behavioural intentions (figure 4). Information received during the experience only influenced the more general attitude towards sea turtle protection and not the specific attitudes towards responsible behaviour during basking viewing.

Tab. 3: Summary of mediation analyses

Model 1	Model 2
DV: Experience made me care more about sea	DV: Experience made me care more about my
turtle protection.	environmental choices
Me: Attitude towards protection of sea turtles	Me: Attitude towards protection of sea turtles
Beta coefficients	Beta coefficients
IV → DV: .012 (ns)	IV → DV: .013 ns
IV → Me: .121*	IV → Me: .124*
Me → DV: .309*	Me → DV: .404*
Test of mediation: LLCI=.0104 ULCI=.0760	Test of mediation: LLCI=.0143 ULCI=.0956
Model 3	Model 4
DV: Willingness to pay park fee	DV: Willingness to donate to HWF
Me: Attitude towards protection of sea turtles	Me: Attitude towards protection of sea turtles
Beta coefficients	Beta coefficients
IV → DV: .302*	IV → DV:104 (ns)
IV → Me: .123*	IV → Me: .140*
Me → DV: .764*	Me → DV: .455*
Test of mediation: LLCI=.0104 ULCI=.0760	Test of mediation: LLCI=.0203 ULCI=.1223

Part 2: Management of Wildlife Protection

Model 5	Model 6
DV: Experience made me care more about sea	DV: Experience made me care more about my
turtle protection.	environmental choices
Me: Attitude towards responsible behavior dur-	Me: Attitude towards responsible behavior dur-
ing basking viewing	ing basking viewing
Beta coefficients	Beta coefficients
IV → DV: .050 (ns)	IV → DV: .062 (ns)
IV → Me: .144 (ns)	IV → Me: .132 (ns)
Me → DV: .059*	Me → DV: .065*
Test of mediation: LLCI=0025 ULCI=.0227	Test of mediation: LLCI=0034 ULCI=.0241
Model 7	Model 8
DV: Willingness to pay park fee	DV: Willingness to donate to HWF
Me: Attitude towards responsible behavior dur-	Me: Attitude towards responsible behavior dur-
ing basking viewing	ing basking viewing
Beta coefficients	Beta coefficients
IV → DV :.302*	IV → DV: .094 (ns)
IV → Me: .157 (ns)	IV → Me: .193 (ns)
Me → DV: .549*	Me → DV:030 (ns)
Test of mediation: LLCI=0170 ULCI=.1918	Test of mediation: LLCI=0359 ULCI=.0185

Method used: Bootstrapping procedure using 5,000 bootstrap samples in Hayes (2019) Process macro v 3.1, Model 4. IV= Independent variable, DV=Dependent variable, Me = Mediator variable. *: p<.01, ns: not significant. For all models in table: IV= Information from HWF (Y/N). LLCI= Lower Limit Confidence Interval, ULLC: Upper Limit Confidence Interval. When the interval between LLCI and ULCI does not include 0 there is evidence for mediation effect.

Source: Authors' work

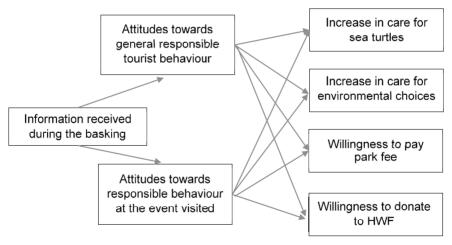


Fig. 4: Relationships between outcomes of tourist experiences at Ho'okipa Beach Source: Authors' work

Qualitative analysis: Surveyed participants were also asked what being a "responsible tourist" meant to them (figure 5). The top four items that made up 83 % of responses included: respecting the environment/wildlife and habitats (27 %), not disturbing the turtles/wildlife by giving them space (24 %), following

rules/regulations, obeying signage, adhering to cultural norms (16 %) and leaving no footprints/impacts behind (15 %).

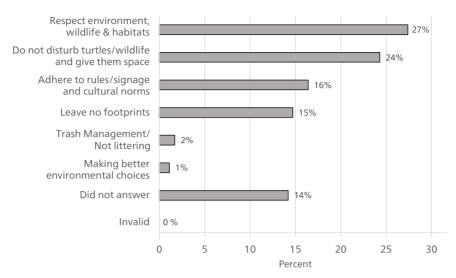


Fig. 5: What does being a responsible tourist mean to you? Source: Authors' work

The survey offered open-ended questions that welcomed visitors to share their thoughts on the sea turtle viewing experience. Of the people surveyed, 103 (19%) chose to share comments in this open field. Responses included requests to keep people away from the turtles ("keep people out of turtles!"). Resentment and disappointments were evidenced with "too many people not following the rules, frustrates me" and "so disappointed to see how the few feel they are above following guidelines! It's about 'their' experience. People 'swimming' to take pictures right next to them. Ruined the experience to a certain extent as I wanted to yell [move away]". Other visitors stated site management concerns of the viewing area: "I feel way too many people around the turtles and disturbing them. This should be 'off limits' and viewing from a distance only". "It would be nice to see more restriction on how close you can get to the turtles" and "This is a special experience that appears to need additional conservation efforts". Another stated that they "would support more structure to ensure turtle safety" and the suggestion was made to introduce "user fees" at Ho'okipa Beach Park.

A content analysis of the open-ended responses elicited five major themes, and five less dominant themes. The five major themes were:

- (1) *Concern about other visitors' disrespect:* Participants stated they were sad/disappointed that some people disregard signs/rules and disrespect the turtles both on the beach and in the water at the ocean's entry.
- (2) *Suggested additional protection:* Participants suggested restricting access to sea turtles or wanted additional conservation/protection for the turtles.

- (3) *Interest and learning:* Participants were either interested or enjoyed learning about the sea turtles and the basking event.
- (4) *Gratitude towards volunteers:* Participants who wrote down words of gratitude towards the non-profit support/protection volunteers.
- (5) *Own experience:* Participants who expressed that they felt their experience had been great, amazing, etc.

The fifth theme was related to participants' own experiences, while the previous four themes were expressions for different types of concern for the sea turtles.

5 Discussion

This research measured the outcome indicators adapted from Orams' (1995) conceptual model for the management of marine tourism (figure 2), as well as the relationship between learning, attitudes, and behavioural intentions. The results were evaluated against the literature reviewed and an analysis of the findings is provided.

Orams (1999) explains that the outcome indicators may be thought of as four steps. The experience may be measured by visitor satisfaction/enjoyment (step 1). Both education/learning (step 2) and attitudes/belief change (step 3) assist the visitor into a behaviour/lifestyle change (step 4). The visitor's transition positively impacts the marine environment through the adoption of responsible behaviours that contribute toward environmental sustainability. Examination of visitor satisfaction revealed three factors contributing to a satisfying experience: the accessibility of the site, how exotic the experience was, and the authenticity of the experience. When it comes to education (information provided), it transpired that there was no immediate influence on neither learning nor behavioural intentions. However, there was a positive effect on the attitudes towards sea turtles and the actual viewing event, which in turn had a positive effect on care about sea turtle conservation, care about their own environmental choices, willingness to pay a park fee, and willingness to donate to HWF. This is an important finding for two reasons. Firstly, it illustrates that information/education does indeed have a positive effect, even though this is not immediate. This confirms Orams' (1995) model, suggesting that the outcome indicators are a four-step process, rather than parallel (figure 6).

Secondly, it appears that these effects are more long term, such as general changes in attitudes towards conservation. The latter is exactly what Orams (1995, 1999) advocates for, i.e. deriving interpretation that creates lasting effects, rather than solely short-term feelings during or a short time after the wildlife encounter. It is also congruent with Forestell and Kaufman's (1990) interpretation model (figure 3), which suggests that there is a chance of change in participants' behaviour even for other marine activities in the future, such as snorkelling, nature cruises, or diving trips. Both Forestell and Kaufman (1990) and Orams (1997) advocate for opportunities for whale watch participants to act during or immediately after a tour. Two such actions could be a park entrance fee (despite this being *prior* to the viewing activity), and a donation to Hawai'i

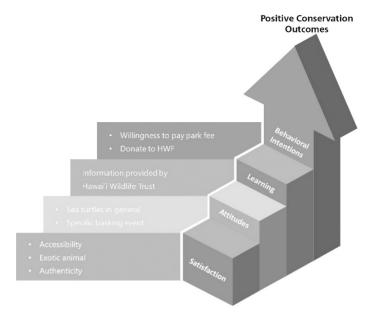


Fig. 6: Visitors viewing basking sea turtles at Ho'okipa Beach – The four steps towards positive conservation outcomes

Source: After Orams, 1999

Wildlife Fund to support visitor and site management at Hoʻokipa. It was found that participants were significantly more inclined to pay an entrance fee than donate to the HWF. This combined with the many qualitative comments of visitors to Hoʻokipa beach suggests that there needs to be better management of the site, which includes different strategies to keep visitors a minimum distance away from basking sea turtles.

6 Conclusion

This examination of visitor attitudes shows that visitor responsibility and site management were key themes. The attitudes of responsible visitors demand improvments toward both site management and visitor capacity issues at Ho'okipa Beach Park, to both protect the green sea turtles and aid in the sustainability of the viewing experience. The findings support two strategies that may be put forward to help resolve these issues, as visitors were in favour of viewing the basking sea turtles from a platform to cause less impacts on them, and of paying a modest park visitor fee. This could be used in conjunction with a monitored/manned or automated entry gate with an online reservation system. Non-resident entry fees could assist in the maintenance and sustainability of the basking site habitat and the viewing event itself.

An empty platform space near one of the pavilions already exists at Ho'okipa Beach, overlooking the entire sea turtle basking site (figures 7). This site could

be further developed into an extended and safe viewing platform, accessible through a gate.



Fig. 7: Existing undeveloped platform area overlooking turtles at Ho'okipa Beach Park Source: Courtesy of Colleen Black

The usage of non-resident park entry fees may allow for the hiring of a county official to be present at Hoʻokipa to deal with basking site offenders. On March 30, 2021, Maui County's Council Vice-Chair Keani N.W. Rawlins-Fernandez proposed "a bill for ordinance relating to reserved residential parking in public beach access parking areas" (Maui County, 2021). If this proposed legislation is accepted, all beaches on Maui will see half of the parking spots reserved for Maui residents, only. While this proposal cuts out-of-state visitors' beach accessibility in half, it may further help to have sea turtle viewing tours that enter into Hoʻokipa by way of a commercial tour, only. Since many visitors come to Hoʻokipa only to view the turtles and not for the purpose of a beach/recreational use, a non-resident entry fee could be charged to tour operators. The viewing experience of commercial tours could take place from the platform area and alleviate both behavioural and environmental pressures at the basking site creating a more sustainable basking event experience.

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Appendix

Survey Questions Relevant to this Study

How important were the following in achieving a satisfying experience when viewing the basking green sea turtles at Ho'okipa?

Very Important = 5 Important = 4 Neutral = 3 Unimportant = 2 Very Unimportant = 1

4. The proximity of the turtles.	5	4	3	2	1
5. Easy access to the beach/basking site.	5	4	3	2	1
6. The number of turtles at the basking site.	5	4	3	2	1
7. Confidence the turtles would be basking.	5	4	3	2	1
8. Viewing an animal I normally do not see.	5	4	3	2	1
9. Seeing an animal on the Endangered Species List.	5	4	3	2	1
10. Viewing an animal important to Hawaiian culture.	5	4	3	2	1
11. Feeling a sense of place viewing the basking turtles.	5	4	3	2	1
12. The basking turtles are a memorable experience.	5	4	3	2	1
13. The basking event is natural and authentic.	5	4	3	2	1
14. Affection/Empathy towards the sea turtles.	5	4	3	2	1
15. A photographic opportunity.	5	4	3	2	1

- 17. Did you receive information about the basking sea turtles from a Hawai'i Wildlife Fund representative during your experience?
- 19. Viewing the basking sea turtles has caused me to care more about:
- a) Sea turtle conservation? Agree Undecided Disagree
 b) My environmental choices? Agree Undecided Disagree
- 21. Did you have any prior knowledge of responsible sea turtle viewing guidelines, before your experience at Ho'okipa?

Yes No

Using the scale below, please indicate your responses to the following statements.

Strongly Agree = 5 Agree = 4 Undecided = 3 Disagree = 2 Strongly Disagree = 1

22. I benefit from viewing the basking green sea turtles.	5	4	3	2	1
23. I believe there are actions I can take to help the turtles.	5	4	3	2	1
24. Sea turtles/wildlife are much more than tourism objects.	5	4	3	2	1
25. It is my responsibility to participate in ethical wildlife encounters.	5	4	3	2	1
26. Sustainability of viewing the turtles basking at Ho'okipa depends on visitor and site management.	5	4	3	2	1
27. Protecting the turtles protects their significance in Hawaiian culture.	5	4	3	2	1
28. The basking green sea turtles should be minimally disturbed.	5	4	3	2	1

Visitor Responsibility and Desired Site Improvements for Basking Sea Turtles

29. The number of people around the basking sea turtles concerns me.	5	4	3	2	1
30. The number of people in the water at the ocean entry concerns me.	5	4	3	2	1
31. I would view the turtles from a platform to make less impacts on them, while still allowing me the experience.	5	4	3	2	1
32. I would support a modest park visitor fee, knowing proceeds assisted Hawai'i Wildlife Fund and Maui County with visitor and site management of the basking sea turtles at Ho'okipa.	5	4	3	2	1
33. I would NOT support a visitor park fee, but <u>WOULD</u> donate to Hawai'i Wildlife Fund to support them with visitor and site management of the basking sea turtles at Ho'okipa.	5	4	3	2	1

34. What does being a "responsible tourist" mean to you? Comments:

Xiao Zhang, Michael Lück, Claire Liu

Towards the Sustainable Management of Whale-Watching Tourism: A Case Study of Port Phillip Bay, Australia

Abstract: With the rapid growth of whale-watching tourism, the importance of its management has become evident. Higham and colleagues indicated that adaptive management is the key to a sustainable whale-watching industry and proposed an integrated and adaptive management model, combining stakeholder perspectives and operating in a dynamic two-phase environment. This study applies the model to whale-watching tourism management in Port Philip Bay (Australia) examining the extent of its fit in this case study, and what management measures could be adopted to achieve sustainable development of whale-watching tourism. This study obtained secondary data to analyse the responses of target species to tourism activities and management strategies adopted since the inception of whale-watching tourism. A key outcome is the development of sustainable management for whale-watching tourism. As the tourism industry waits to recover from the COVID-19 pandemic, such a rethink has implications for the shift towards more holistic sustainability and resilience of whale-watching tourism post-COVID-19.

Keywords: Sustainable Management, Whale-Watching Tourism, Port Phillip Bay

1 Introduction

Whale-watching is defined as "tours by boat, air or from land, formal or informal, with at least some commercial aspect, to see, swim with, and/or listen to any of the 83 [currently 90] species of whales, dolphins, and porpoises" (Hoyt, 2001, p.3). According to this widely used definition, dolphin watching/swimming falls under the umbrella of whale-watching, which is why this study adopts this common practice and uses this term throughout the chapter. Whale-watching is considered one of the most successful and resilient types of tourism globally (Hoyt, 2007). It offers significant economic returns and solid community, educational, research, and conservation benefits and is said to cause low environmental impacts (Green & Giese, 2004). Besides, whale-watching has demonstrated resilience to economic and political instability, the ability to attract visitors from remote places, and a surprising adaptability to widely varying levels of culture and infrastructure (Hoyt, 2007). However, with the rapid development of whale-watching tourism, the impacts of tourism activities on cetaceans and the sustainability of the whale-watching industry have become a major concern (Bejder & Lusseau, 2008; Parsons, 2012; Pirotta & Lusseau, 2015). Many studies have shown that short-term changes in cetaceans' behaviour, movement, vocalisation, respiration, communication and group cohesion from whale-watching activities have brought about negative impacts on

species populations (Bejder et al., 2006a, 2006b; Lusseau, 2003; Lusseau et al., 2006; Parsons, 2012). Consequently, it requires an increased focus on management governing the whale-watching industry because poor management can exacerbate the negative impacts on cetacean individuals, populations, and habitats and can render the whale-watching industry unsustainable.

1.1 Application of Adaptive Management to Whale-Watching

Many researchers presented the application of Adaptive Management (AM) to whale-watching. For instance, Higham et al. (2009) indicated that AM is the key to managing a sustainable whale-watching industry. They argued that planning, policy, and management in whale-watching tourism should be considered on multiple levels, including macro-level (global), meso-level (national) and micro-level (local-regional). Each of these levels will influence the management of human-cetacean interactions. Higham and colleagues (2009) thought that the macro-level (such as the position of the International Whaling Commission) and meso-level (such as national law and policy) factors would affect the sustainability of whale-watching tourism. However, they argued that the most crucial elements are micro-level factors (business management practices, licensing management, vessel operations, accident prevention, habitat protection, predation, disease issues). This is because micro-level operations are where industry operators and tourists come into contact with cetaceans. So, they proposed a micro-level model for the integrated, dynamic and adaptive management of tourist interactions with cetaceans (figure 1).

The model combined the perspectives of a range of key stakeholders (social science researchers, tourism operator/s, planning and management agencies and natural science researchers) and operates in a dynamic environment. The operation of the model was divided into the pre-tourism and tourism phases, in which different stakeholder factors should be considered. In the pre-tourism phase, management and planning agencies are responsible for developing relevant legislation (C1). Social scientists assess stakeholder (e.g. local communities) support (A1). Natural scientists collect baseline data, establish monitoring criteria and control sites (D1, D2, D3). Tourism operators identify the needs of tourists and local communities (B1). Management and planning agencies further develop licensing systems, Limits of Acceptable Change (LAC) criteria and operator guidelines based on relevant research and grant permits to tourism operators (C2, C3, C4, B2). In the tourism phase, natural scientists continue to collect data and provide monitoring reports to management and planning agencies (D4, D5). Social scientists research visitor satisfaction, perceptions and environmental education, and provide feedback to stakeholders (A2, A3, A4). Management and planning agencies make active management decisions based on the feedback (C5, C6). Tourism operators adjust their operations according to permit conditions and visitor satisfaction (B3). A new tour cycle is then started, and the above stakeholders continuously work on it (A4, B4, C7, D7).

Towards the Sustainable Management of Whale-Watching Tourism

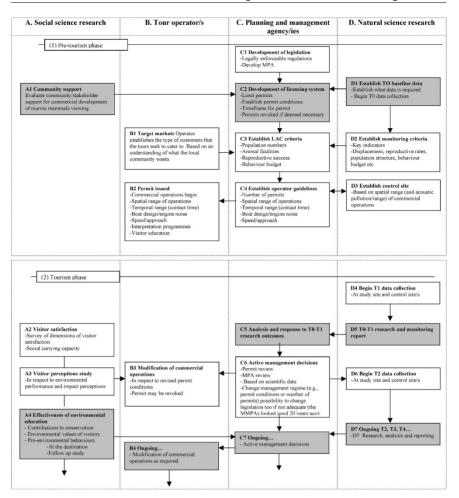


Fig. 1: Model for the integrated, dynamic and adaptive management of tourist interactions with cetaceans

Note: Shaded boxes signify where research is required to inform management decisions and modifications to the management system.

Source: Higham et al., 2009, p. 298

1.2 Case Study Area and Research Questions

Port Phillip Bay (PPB) is a semi-enclosed bay near Melbourne, Victoria, Australia (figure 2). Whale-watching tourism began here in the early 1990s, involving interactions with dolphins from vessels and in the water (Howes et al., 2012). Three kinds of dolphins can be found here, including common dolphins (Delphinus delphis), common Bottlenose dolphins (Tursiops truncatus) and Australian Bottlenose dolphins or Burrunan dolphins (Tursiops australis sp. nov.). These dolphins inhabit coastal environments adjacent to major human centres. This habitat type is considered high risk due to the impact of adjacent human

activities (e.g. many commercial vessels and private recreational boats in the bay) (Charlton-Robb et al., 2011). Therefore, better management of whale-watching tourism is needed. Studies on the effects of whale-watching tourism on dolphins in PPB have been conducted since 1998. This has also contributed to the process of adaptive management of the PPB, which has continued over the last 20 years. PPB's whale-watching tourism management is seen by the International Whaling Commission (IWC) as a model of AM applied to the whale-watching industry in reality (IWC, 2021a). Therefore, PPB was chosen as the case study site for comparison with Higham et al.'s (2009) model.

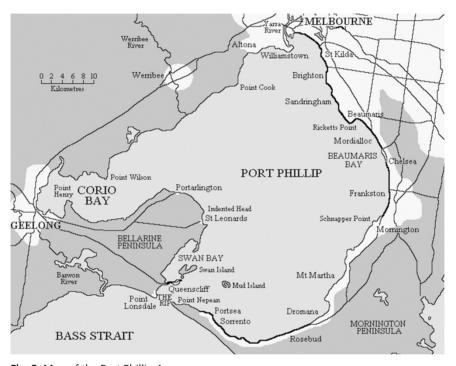


Fig. 2: Map of the Port Phillip Area

Source: Port Phillip, 2021

The management practices of PPB will be compared with Higham et al.'s (2009) model that appears to be a good fit in theory. Not only can the model's effectiveness be evaluated, but this comparison can also provide recommendations for improving the management of whale-watching tourism. The following research questions will be examined: 1) To what extent does PPB's whale-watching tourism management fit the proposed model? 2) Based on this model, what management measures could be adopted to achieve sustainable development of whale-watching tourism in PPB? The next two sections will briefly review whale-watching tourism research in PPB and present AM theory and its application to whale-watching management. And then the literature will be analysed

more detailed with regard to the research questions and the application of the model.

1.3 Overview of Whale-Watching Studies in PPB

Research into whale-watching tourism at PPB has been ongoing for over 20 years. Existing studies have focused on the following aspects: Firstly, the impact of tourism activities on dolphins has been addressed. Studies showed that Bottlenose dolphins' feeding behaviour was significantly affected when tour vessels were present. Their whistling increased to maintain group cohesion, and the long-term effects of this impact remain unclear (Scarpaci et al., 2000, 2010). The Dolphin Research Institute (DRI) classified dolphins' responses when approaching a vessel into the three categories of interaction, avoidance and neutral (Dunn et al., 2001). Filby et al. (2014) investigated the response of Burrunan dolphins to tour vessels over two time periods: 1998–2000 and 2011–2013. The investigation showed that the main response of Burrunan dolphins to the illegal approach of the tour vessels was avoidance, and that over time, dolphin responses increased significantly. Smaller groups reacted significantly more than larger groups. Filby and colleagues suggested that the consequences of this response may reduce the dolphins' core biological activities, such as foraging and resting, and thus reduce biological fitness.

The second category of research focused on assessing the effectiveness of management measures for whale-watching tourism in PPB. Scarpaci et al. (2003) investigated the compliance level with regulations by 'swim-with-dolphins' operations in PPB. Four permit conditions were investigated: type of approach, swim time, time in proximity to dolphins, and presence of calves. The results showed that the operators did not meet all four permit conditions. Compliance with temporal conditions was poorer than with other conditions. Another study examined the effectiveness of the Ticonderoga Bay Sanctuary Zone (located in PPB). The results showed that this marine sanctuary is not working as well as it should as a 'respite' and 'refuge' for dolphins from anthropogenic pressure, including commercial tourism. In all observed encounters in the sanctuary, tourism operations breached the site-specific minimum approach distance regulations (Howes et al., 2012).

The third type is tourist surveys from a social science perspective. For example, Filby et al. (2015) surveyed tourists' demographics, motivation, biocentrism, knowledge and satisfaction in PBB through 511 questionnaires between 2011 and 2013, and the results showed that tourists could be a vehicle for increasing the level of compliance by tour operators because tourists are happy to comply with regulations as they do not want to negatively affect the target species. Howes et al. (2012) suggested that one possible reason for the ineffectiveness of the marine sanctuary is that the waters close to sanctuary are more likely to encounter dolphins, which may induce operators to violate the rules and thus increase customer satisfaction. However, this is only an assumed customer benefit (Allen et al., 2007) and has not been verified by empirical studies.

1.4 Whale-Watching Adaptive Management

Whale-watching involves multiple stakeholders and multilevel governance. Despite the importance of management as an integral foundation for whale-watching, the management of whale-watching is a difficult task because many factors need to be considered, such as the lack of knowledge about target species, the regional dependence on the whale-watching industry, and the complexity of stakeholder interests (Hoyt, 2001). Various researchers suggested the application of Adaptive Management (AM) to whale-watching (Filby et al., 2014; Higham et al., 2009; Howes et al., 2012).

AM refers to the governance and treatment of large-scale ecosystems that can accommodate uncertainties arising from complex interactions (McLain & Lee, 1996). It has been widely used in environmental management because it relates past mistakes and successes to policy and management and can accommodate uncertainties arising from complex interactions (Stankey et al., 2005). The core of AM is social learning theory, which encompasses the process of knowledge acquisition and the creation of shared understanding (McLain & Lee, 1996). As stakeholders with different responsibilities form partnerships and work together to overcome conflict or disparity, the capacity for knowledge generation is increased (Berkes, 2009). A term closely related to AM is co-management, meaning sharing power and responsibility between authorities and resource users. Therefore, in some literature, the two terms are expressed together as 'adaptive co-management' (Plummer & Fennell, 2009). AM addresses the complexity of the common interests of multiple stakeholders by integrating the evolutionary process of social, economic and environmental expertise. It thus contributes to a sustainable marine conservation future (Plummer & Fennell, 2009; Waayers et al., 2012).

In the whale-watching tourism context, factors such as changes in the environment, the number of tourists, the operators' behaviour, and the number of cetaceans targeted need to be considered through AM (Higham et al., 2009). A useful concept in this process is establishing the Limits of Acceptable Change (LAC) framework. The LAC framework is used to identify the tolerance limit of an area to changes caused by various tourism activities and developments. It is concerned with how much change is acceptable and what strategies should be adopted to avoid unacceptable impacts (Duffus & Dearden, 1990). Stakeholders collectively decide on measurable limits that would require a change of regulations or management strategies. These limits are set based on biological parameters (e.g. changes in population size) or socio-economic factors (e.g. frequency of regulations and codes of conduct breach).

2 Methods

A comprehensive literature review of all studies published from 1998 to 2021 on whale-watching tourism in PPB was conducted. Literature was compiled from the online search engines and database, Google Scholar and Hospitality & Tourism Complete, using the key words "whale", "dolphin", "cetacean", "whale

watching", "dolphin swim", "regulation", "guideline", "management", "assessment", "compliance", "effectiveness", "Port Phillip Bay", "Australia". Common themes relating to both whale-watching tourism activities and management recommendations were identified and documented. In addition, a comprehensive literature review was also conducted on relevant regulations and guidelines. Regulations and guidelines information and documentation was sourced from the official webpages of the Victorian legislation and Department of Environment, Land, Water and Planning of State of Victoria. The management practices identified by literature will be compared with Higham et al.'s (2009) model.

3 Discussion: Application of the Higham et al. (2009) Model to PPB

3.1 Management Context of Whale-Watching Tourism in PPB

Higham et al. (2009) argued that planning, policy, and management in whale-watching tourism should be considered at a macro-level (global), meso-level (national) and micro-level (local-regional). At the global level, the management of whale-watching tourism is influenced by relevant international organisations, such as the IWC and the International Union for Conservation of Nature (IUCN).

At the national level, in Australia, whale-watching activities are under the multiple jurisdictions of the Australian Government, State and Territory Governments and the Great Barrier Reef Marine Park Authority. Commonwealth waters (starts three nautical miles from the shore and extends to the edge of the exclusive economic zone at 200 nautical miles) are managed by the Australian government. A legal regime under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) and 'Environment Protection and Biodiversity Conservation Regulations 2000' (EPBC Regulations) has been established to apply in all Australian waters. The Department of the Environment and Energy also made the 'Australian National Guidelines for Whale and Dolphin Watching 2017' consistent with the EPBC Act and EPBC Regulations. These guidelines describe how people may observe and interact with cetaceans to ensure that the target species are not harmed or disturbed.

At the local level, state and territory governments have their own laws and guidelines and are responsible for managing coastal waters within three nautical miles. In general, state and territory regulations follow national guidelines closely. However, additional management measures are applied for species and industry trends in the particular region. As a result, state rules may be more stringent than national guidelines (Hale, 2002). For Victoria, the state has established a legal regime to protect cetaceans. This includes the Wildlife Act 1975 and Wildlife (Marine Mammals) Regulations 2019. The Department of Environment, Land, Water and Planning (DELWP) also made a guide to boating and swimming around whales, dolphins and seals, which sets out the distances people must keep from marine mammals to minimise the impact of human activities on these species. Most whale-watching activities take place within three nautical miles of the coast. As a result, state and territory governments

regulate most whale-watching activities. PPB is within the coastal waters, which is governed by the State of Victoria, and the DELWP is the government body responsible for the whale-watching industry in PPB. In addition, stakeholders such as tourism operators, recreational and commercial vessels, fishing organisations and local individuals have interests in whale-watching tourism management. Consequently, they also should be consulted during the management and decision-making process. Next, this study will apply the Higham et al. (2009) model (figure 1) to whale-watching tourism management in PPB. By comparison between PPB's management practices and Higham et al.'s (2009) model, the two research questions (see 1.2) will be examined:

- 1) To what extent does PPB's whale-watching tourism management fit the proposed model?
- 2) Based on this model, what management measures could be adopted to achieve sustainable development of whale-watching tourism in PPB?

In line with the model, the discussion is divided into a pre-tourism phase and a tourism phase, where the tourism phase is further divided into two phases based on time.

3.2 Pre-Tourism Phase

PPB's whale-watching tourism includes sightseeing on vessels and swimming with dolphins since the early 1990s (Howes et al., 2012). Prior to this, the Victorian 'Wildlife Act 1975' and the 'Wildlife (Whales) Regulations' drafted in 1990 existed and had regulations regarding the proximity of people to cetaceans (C1, figure 1; IWC, 2021a). However, there were no legally enforced regulations governing commercial dolphin swimming/watching activities at the time. Furthermore, there is no literature showing studies that have collected baseline data within the PPB before the commencement of whale-watching tourism (D1, figure 1). Therefore, it is not surprising that PPB did not establish monitoring criteria (D2, figure 1) and LAC criteria (C3, figure 1) during the pre-tourism phase. Another consequence of the lack of baseline natural science data is the absence of a licensing system (C2, figure 1). It is also argued that the absence of a licensing system was because the commercial viability of the new form of tourism was not yet confirmed (Buurman, 2010). In this case, operators established their voluntary codes to regulate whale-watching activities. However, these voluntary codes were abandoned in 1995 because they were ineffective in protecting dolphins from harm (Allen et al., 2007).

It was not until 1998, when the "Wildlife (Whales) Regulations 1998" was passed in Victoria, that a licensing system for dolphin sightseeing/swimming was first established (C2, figure 1). In 1999, the Department of Natural Resources and Environment in Victoria issued five dolphin-swim permits and three watch permits (B2, figure 1; Scarpaci et al., 2000). Besides, the "Wildlife (Whales) Regulations 1998" also specified minimum approach distances to dolphins for different categories of vessels (including dolphin watching vessels, vessels on recreational trips), approach distances in the presence of other vessels on trips, re-

stricted approach distances for groups with calves, speed of dolphins within specified distances, location of swimmers and the need for a sanctuary (C4, figure 1). Some steps like community support (A1, figure 1) and target market studies (B1, figure 1) and establishing control sites (D3, figure 1) were missing in the pre-tourism phase.

3.3 Tourism Phase

3.3.1 Phase One

The first phase was from the early 1990s to 2009. After whale-watching tourism started, research into the effects of tourism activities on target species began to recognise the potential negative effects of high levels of vessel traffic. In 2001, the Dolphin Research Institute (DRI)'s report investigated Bottlenose dolphins population number, vessel interactions with Bottlenose dolphins, response of Bottlenose dolphins to vessels and compliance by tour operators with wildlife regulations. Based on photo identification, the DRI identified 83 individual Bottlenose dolphins between 1997 and 2001. They also estimated that 20 % of the Bottlenose dolphins were not sufficiently marked for identification and therefore concluded that the population was around 100 individuals (D4, figure 1; Dunn et al., 2001). Compliance was monitored for 711 vessels during the 1998/1999 and 1999/2000 seasons. The overall compliance rate was 51 % and 63%, respectively. The most common breach of regulations was placing the vessel in the path of dolphins (36 % in 1998/1999, 30 % in 1999/2000) (D5, figure 1; Dunn et al., 2001). The study showed an increase in avoidance responses from dolphins. The increased number of approaches by tour vessels was considered one of the reasons (D5, figure 1; Dunn et al., 2001). Scarpaci et al. (2000) monitored whistles made by Bottlenose dolphins to assess their responses to commercial dolphin-watching vessels. Thirty-two hours of dolphin sounds were recorded between 1995 and 1996. Results showed that whistle production was significantly greater in the presence of vessels, regardless of the dolphins' behavioural state before the vessels' arrival. The increase in whistle production suggests that group cohesion may be influenced by the commercial dolphin-watching vessels (D5, figure 1).

Scarpaci et al. (2003) studied the compliance of operators at PPB with the rules for swimming with Bottlenose dolphins. Between September 1998 and April 2000, the team studied a total of 128 commercial dolphin swims. Four permit conditions were investigated: type of approach, swimming time, time spent in proximity to dolphins, and presence of calves. The results showed that the operators did not comply with all four permit conditions (D5 figure 1). After one year, Scarpaci and colleagues conducted another study and the result showed no detectable change in the level of compliance for rules regarding swimming with dolphins in PPB (Scarpaci et al., 2004). In 2002, Hale supplied a report to the Victorian Department of Natural Resources and Environment which made some recommendations on achieving sustainable whale-watching tourism while minimising the impact of tourism activities on target species (D5, figure 1; Hale, 2002). The researchers concluded that the legal framework prior

to 2009 was mostly adequate and that the low level of compliance in reality was due to the fact that operators considered the risk of ignoring the regulations to be negligible, so their advice was generally to strengthen monitoring and enforcement (Dunn et al., 2001; Hale, 2002; Scarpaci et al., 2000, 2003).

In response to the above studies, a number of new management actions was taken by Victoria State. Firstly, a limit was set on the number of swimming with dolphin permits in PPB (limited to four) and a special dolphin swim permit was introduced in addition to the conditions of the existing tour operator license. Secondly, the 'Wildlife Act 1975' had been amended to strengthen the ability to identify and define offences relating to whale-watching tourism (C5, C6; figure 1; IWC, 2021a). In addition, the Ticonderoga Bay Sanctuary Zone (TBSZ) was established. This sanctuary of approximately 2,000 m² was intended to provide a *respite* and *refuge* for the dolphins in the PPB. A greater distance to the cetaceans within the sanctuary is required (C6, figure 1; Hale, 2002). Before 2004, the minimal distance between whale-watching vessels and targeted species within the sanctuary was 100m. However, based on the above natural science research, this distance was increased to 200m, and the western boundary was extended (C6, figure 1; Hale, 2002).

The most important active management action in this phase was modifying the 'Wildlife (Whales) Regulations 1998' (C6, figure 1). A 10-year renewal plan was instituted when the regulations were created. Before the expiry of the 'Wildlife (Whales) Regulations 1998', between 2007 and 2009, the Victoria State undertook an extensive review of its marine mammal legislation, examining the effectiveness of measures taken to mitigate the risks to marine mammals from human activities. The review of the regulations included extensive stakeholders' engagement and public consultations through 'Better Regulation Victoria' programme. The 'Wildlife (Marine Mammals) Regulations 2009' came into force in November 2009, following a one-year extension to the previous regulations. These new regulations aim to strike a balance between achieving sustainable development in marine mammal tourism (whale-watching tourism) and protecting the health and well-being of marine mammals and the long-term viability of their populations (Wildlife (Marine Mammals) Regulations 2009). Besides, they have also helped to strengthen monitoring and enforcement, and since 2009 the PPB has conducted targeted marine mammal compliance actions every year. On-water patrols were also in place and any observed or reported cases of non-compliance would be investigated (IWC, 2021a). It is worth mentioning that the new regulations also defined 'calf' specifically as "a young whale that is less than half the average length of an adult female whale of the same species" (Wildlife (Marine Mammals) Regulations 2009, p.2). This provided a workable standard for whale-watching tourism operators (B3, figure 1).

3.3.2 Phase Two

The second phase was from 2010 to 2019, in which PPB's whale-watching tourism continued to develop. This led to more cetaceans being exposed to high

vessel density. During this period, research conducted by independent and government-contracted researchers has highlighted some ongoing concerns about the sustainability of whale-watching tourism industry in the PPB. A study investigated the effects of vessels on Bottlenose dolphins within the PPB. The behaviour of Bottlenose dolphins at the same site was observed land-based in the presence and absence of vessels over a period of two years. The results indicated that Bottlenose dolphins were significantly less likely to feed when vessels were present. The pods with calves were larger than those without, but all pods increased in size when vessels were present (D6, figure 1; Scarpaci et al., 2010). Howes et al. (2012) evaluated the effectiveness of the Ticonderoga Bay Sanctuary Zone. Their study was conducted on 104 dolphin tour vessels where tour operations and dolphin behaviour were recorded simultaneously. The results showed that no additional precautions were taken by the tourism operations during dolphin encounters in the sanctuary. In all observed encounters, tourism operations were in breach of minimum approach distances. Consequently, this study suggested that it is recommended that a shift be made from sole reliance on passive management strategies to judicious management plans that include enhanced enforcement (D6, figure 1; Howes et al., 2012). Filby et al. (2014) investigated the response of Burrunan dolphins to dolphin-swim tour vessels in two phases, 1998 to 2000 and 2011 to 2013. The survey recorded a total of 211 encounters with dolphins. Dolphins showed more of an approach response to vessels that did not violate the regulations, while the most frequent response to vessels that approached illegally was avoidance. Small pods responded to vessels with avoidance significantly more than large pods. Resting groups showed the most avoidance response. Over time, dolphin responses (both avoidance and approach) to vessels increased significantly. The study concluded that the consequences of increased dolphin responses include the potential for reduced biological adaptations by reducing core biological activities such as foraging and resting. The authors recommended that PPB should conduct long-term studies of dolphin responses to vessels and move from passive to active management (D6, figure 1; Filby et al., 2014).

In 2015, Filby et al. conducted research investigating whether tourists can be a force to evoke compliance. Between 2011 and 2013, a total of 511 questionnaires were distributed to dolphin-swim tourists. The compliance of dolphin-swim operators was also assessed through 282 survey data collected from 1998 to 2013. The results show that the level of compliance by operators is low. In contrast, visitors were happy to comply with the regulations as they did not want to impact the target species negatively. This study suggested that these findings can be used to educate operators and help convince them that respecting the guidelines should lead to higher customer satisfaction. Filby and colleagues concluded that tourists could be used as a vehicle to increase the level of compliance by tour operators and make tourism more sustainable. Therefore, it is important to increase the educational component of whale-watching tourism for tourists (A2, A3, A4, figure 1; Filby et al., 2015). An unpublished study conducted by the DRI between 2015 and 2016 included interviews with 170

whale-watching visitors. The results showed that over 60 % either did not know or thought they could get closer to the animals than the prescribed distance. This also suggested that visitor education should be increased to promote compliance by operators (A3, A4, figure 1; IWC, 2021a).

As a result, Victoria State took a number of actions to enhance education. The Department of Environment, Land, Water and Planning have engaged with vessel owners at boat ramps, the annual boat show and through media outreach. Educational outreach is supported by on-water patrols where compliance is monitored and the regulations are enforced (C7, figure 1; IWC, 2021a). The Wildlife (Marine Mammal) Regulations 2009' expired in 2019, so another extensive review began. In response to the low level of compliance by tour operators, the new regulations introduced several new enhancements, such as mandatory 'monthly returns', which must be submitted monthly in the prescribed format or face penalty (C7, figure 1; Wildlife (Marine Mammals) Regulations, 2019). Significantly, the regulations have incorporated an AM approach that allows greater responsiveness and flexibility in identifying, adding or revising areas of importance to marine mammals that previously required 'administratively and slowly burdensome' amendments to regulation (Puszka et al., 2021). The 'Wildlife Act 1975', which was enacted 45 years ago, is now being comprehensively reviewed. Public and community values about wildlife have changed considerably. As a result, the Act has been outdated and out of step with current best-practice regulations. This review may consider the many lessons learned and research findings, including PPB, to ensure that it provides a best practice regulatory framework and reflects contemporary values and expectations (DELWP, 2021). The new tourism cycle started in 2019 (D7, C7, B4, figure 1).

4 Conclusion and Recommendations

The responses of target species to tourism activities and how those responses have changed over time were seen from the above analysis. In terms of the first research question, the management of whale-watching tourism at PPB combined the perspectives of four key stakeholders group proposed by Higham et al. (2009) and operates in a dynamic environment. As could be seen by the comparison of the secondary data with the actions suggested in the model, overall, the management actions in PPB follow the proposed model. However, there is clearly more work to be done in order to achieve sustainability of the industry. The most significant gap identified is the lack of clear LAC criteria. Higham et al. (2009) model has provided a practical guide for improving management at PPB. Based on the analysis in this chapter, the following recommendations are suggested (answers to the second research question).

1. Establishing clear LAC criteria and evaluation change period

Whale-watching tourism began before the permits were issued and monitoring criteria were established to define LAC. In fact, these factors are commonly overlooked before wildlife tourism begins (Higginbottom, 2004). This makes a

retroactive application of regulations more difficult. Changing management strategies if an industry outgrows the measures already in place is often more challenging than introducing management strategies where none have existed before. This is because it requires the planning and management agencies to prove that a significant negative impact is occurring rather than having the tour operators prove the opposite (Lundquist, 2014). Despite the establishment of a long-term mechanism for detecting dolphins (DRI, 2021), the LAC criteria are still ignored. Therefore, the PPB should establish clear LAC criteria so that before-and-after comparisons can be made to determine whether whale-watching tourism activities are becoming ecologically sustainable. Besides, in Victoria, the reviews of wildlife (marine mammals) regulations has taken place at 10-year intervals. However, the target species' ecological situation, environmental effects, tourist satisfaction and community support can change in a shorter period of time. So, an appropriate period (e.g. five years) for evaluating changes relative to LAC should be set.

2. Strengthening social science research

Research on topics such as community support, visitor satisfaction and perceptions is inadequate compared to natural science research. Many operators believe that tourists want to get close to the cetaceans and therefore choose to approach them too closely, too quickly, from the wrong angle, or with too many vessels simultaneously, to increase visitor satisfaction. However, many studies found that tourists were generally supportive of compliance or in favour of taking action to protect cetaceans (Avila-Foucat et al., 2017; Cárdenas et al., 2021; Filby et al., 2015; Hooper et al., 2021; Sitar et al., 2017; Tepsich et al., 2020). A study conducted by Lück (2003) showed that the tourists did not think they had learned much of cetaceans as well as marine environment. Lück's research was conducted almost 20 years ago at three locations in New Zealand. It is not clear what the situation in PPB is. There is a need for further research on such topics, in order to inform decision makers. Especially after COVID-19, it is reasonable to expect tourists' and the communities' perceptions to change (Haywood, 2020). Therefore, there is a need for more social science surveys. Only in this way can the opinions of the community be reflected in management decisions and the perceptions of visitors be responded to in the modifications of the commercial operations.

3. Enhancing monitoring and enforcement

A number of studies conducted at PPB have shown that even seemingly perfect whale-watching management plans that combine all the right elements and tools are ineffective in mitigating impacts on target species if they are not effectively monitored and enforced (Howes et al., 2012; Scarpaci et al., 2003). The following recommendations are suggested. Firstly, regulations need to be supported by clear enforceable consequences for non-compliance. Consequences may include warnings, fines, temporary suspension, or even revoking of permits or licences. For example, the Western Australian Government decided to

withdraw two dolphin watching permits in Shark Bay due to significant adverse impacts from tourism activities. This is considered to be the most effective management strategy (Constantine, 2014). Secondly, a practical form of monitoring needs to be implemented. The PPB now conducts an annual compliance check operation (IWC, 2021b). However, this does not appear to be sufficient. A key factor in the lack of monitoring is cost. Consequently, several cost-effective monitoring methods such as land-based observations (Howes et al., 2012; Lundquist, 2014) and the secret shopper method can be employed. 'Secret shopper' refers to the placement of observers on whale-watching vessels to monitor compliance, this is usually only practical and effective in areas where large vessels accommodating many tourists are used, and operators/guides are less likely to recognise the observer in the crowd. Besides, an unpredictable rotation of patrol presence should be effective. Tour operators are more likely to comply with the rules if they cannot predict the presence of patrol boats.

4. Improving knowledge exchange between different stakeholders

Whale-watching is a complex industry, which involves multiple stakeholders and multilevel governance (Dimmock et al., 2014). Higham et al.'s (2009) model also requires combining the perspectives of a range of key stakeholders and different stakeholder factors should be considered in all tour phases. The case study of PPB shows that of the four key stakeholders (social sciences researchers, tourism operators, planning and management agencies, natural sciences researchers) identified in Higham et al.'s (2009) model, the link between the natural sciences research and the planning, and management agencies is relatively strong and that this link is also capable of operating in a dynamic environment. However, the contact between the tourism operators and the planning and management agencies is inconsistent. Dimmock et al. (2014) found inconsistent perspectives between the above stakeholders in East Coast of Australia. The planning and management agencies (resource managers) focus on biological issues, species health, numbers and interpretations, while tourism operators seek clear and consistent information about compliance, laws and rules. The study also found that only half of the tourism operators had direct access to the research results. In addition, tourism operators receive little information (including new knowledge, regulations or policy) from resource managers by way of information exchange (Dimmock et al., 2014). Therefore, there is a need to improve the dialogue across the sector (especially between resource managers and tourism operators), which would allow the industry to understand where impacts are occurring. Similarly, enhanced dialogue can promote standards of practice and further promote the sustainable use of marine tourism resources.

The COVID-19 pandemic has halted global tourism. However, as an industry vulnerable to various risks (environmental, political and socio-economic), the tourism industry has become accustomed to crises, is fairly resilient and has shown to rebound in a relatively short period of time (Novelli et al., 2018). Over the past two years, many countries around the world have entered lockdown to control the spread of COVID-19. Anecdotal observations showed that many

wildlife species were enjoying the newly afforded peace and quiet (Morton, 2021). This may provide important insights into human-wildlife interactions (Rutz et al., 2020). Although the impact of reduced human activity on wildlife during the lockdown has yet to be assessed in empirical studies, minor changes to our lifestyles can potentially have major benefits for wildlife and ecosystem. While COVID-19 has had an unprecedented impact, it is also an opportunity for reflection and transformation (Mair, 2020). Specifically, for whale-watching, it requires the industry to pay more attention to sustainability and ensure that the public can view and interact with cetaceans in their natural environment now and for future generations.

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Part 3: Management of Sustainability Aspects by Industry Stakeholders

Jarmo Ritalahti, Alisha Ali

Finnish Tourists' Responsible Travel Intentions in Times of COVID-19: Implications for Travel Intermediaries

Abstract: Tourists are more acutely aware of their environmental, socio-cultural and economic responsibility towards a destination when on holidays and this has fuelled in the need for sustainability to be incorporated as important component of their trip. This change in customer behaviour, coupled with the COVID-19 pandemic, requires travel intermediaries to find alternative ways of creating value for their customers beyond good service and staff expertise. This research investigates the significance of responsible travel for Finnish tourists when booking with travel intermediaries during the COVID-19 pandemic. Using an online questionnaire, data was collected from 1,096 Finnish travellers to understand their perceptions towards responsible travel during the pandemic and the implications for travel intermediaries. The results revealed that responsibility was an important feature of Finnish travellers purchasing decisions. This research can support travel intermediaries in understanding how to develop and market sustainable and responsible tourism products, which contribute to the longevity of the tourism industry.

Keywords: Sustainable tourism, Responsible Tourism, Travel Intermediation, Finns' Tourist Behaviour

1 Introduction

Disintermediation resulted in travel intermediaries specialising and possessing knowledge in unique holiday experiences (Dolnicar & Laesser, 2007; Lawton & Page, 1997). Sustainable tourism is a critical area where intermediaries can become knowledge experts as this is becoming an important criterion for the purchase of travel (Ritalahti, 2021). However, the sustainable tourism product is multifaceted and encompasses many elements with information not always being easily available. For example, when booking travel, it is not only about the mode of transport and number of miles to the destination but also the transport provider and their responsibility practices which a tourist might consider. Tourists are therefore likely to turn to travel intermediaries to help them manage this level of complexity to support their decision-making. Furthermore, by focusing on sustainable travel, tour operators can play an important role in positively influencing tourist behaviours by encouraging participation in more responsible forms of tourism (Budeanu, 2007; Tepelus, 2005). Hence, these intermediaries have the potential to influence the sustainable development of tourism through the way they market, promote, sell, and form relationship with suppliers (Mossaz & Coghlan, 2017).

In Hong Kong, McKercher and Prideaux (2014) found that travel agents were hesitant in comprehending sustainable tourism. Mossaz and Coghlan (2017) interviewed specialised travel agents in South Africa and found that whilst these

agents had an implied influence in conserving tourism, several factors prevented them from giving a full consideration to this when selling to tourists. A common feature of customer decision-making is the booking of tourism services but the literature is not always clear if tourists want to engage in more sustainable behaviours (Budeanu, 2007; Fairweather et al., 2005).

In Finland, the number of high street travel agencies dropped to almost zero due to the dramatic changes in the travel intermediation system resulting from the Internet. Tourists primarily purchase their trips and packages online, and the need of consultation from travel experts decreased (Ritalahti, 2018). The COVID-19 pandemic added to the severe challenges these intermediaries already faced due to numerous lockdowns and worldwide travel restrictions. According to the Association of Finnish Travel Industry (SMAL), Finnish travel intermediators' sales dropped to about 15 % from the pre-pandemic time (Mäki-Fränti, 2021). Finnish travel intermediaries are at a juncture where they must consider strategies for their future business survival and growth. The pandemic raised the discussion of the importance and necessity of travel and its impacts on global warming but it has also offered the opportunity for travel intermediaries to review how they create value for their customers by understanding what now matters to them. Therefore, this chapter investigates the importance of responsibility for Finnish tourists when booking their holidays with travel intermediaries.

2 Literature Review

2.1 The Impact of COVID-19 on Travel Intermediaries

COVID-19 has changed the travel and tourism industry and further future changes are expected in travel intermediation including e.g. travel agencies and tour operators (Bononi, 2020). The European Travel Agents' and Tour Operators' Associations (ECTAA) with its partner organisations all around the world sent a strong demand that governments should agree an aligned and synchronised response to the industry. The response should include clear vaccine and testing standards, easing entry restrictions for fully vaccinated travellers, and providing the needed economic relief to the travel intermediation sector that has already suffered consequences of travel restrictions introduced by the pandemic for too long. The value of travel intermediators in today's world is in understanding the intense complexity of the wide travel and tourism industry. This is more vital now than ever as consumers also try to recover from the pandemic with certainty and confidence (ECTAA, 2021).

The recuperation from the pandemic for outbound travel expenditure including travel intermediaries' sales is still difficult to define. Euromonitor International (2021) emphasises that the schedule of the recovery is difficult to forecast. The outbound expenditure might reach the pre-crises level at the earliest in three years by 2024, but the worst-case scenario is expected to be in six years by 2027. Leisure travel will reach the 2019 level before business travel and package holidays will be popular in Europe after the pandemic. Online meeting tools like

Zoom and Microsoft Teams have replaced business travel. Thus, the urgent need to travel for business could be postponed (Euromonitor International, 2021).

As the pandemic has been a global phenomenon, it has also affected the Finnish travel intermediation sector since spring 2020. According to Mäki-Fränti (2021), the sales of Finnish travel intermediaries dropped almost 90 % from July 2019 to July 2021. However, in August and September 2021 the sales started to rise as tour operators started their flight series to Mediterranean destinations. Furthermore, the demand for trips for autumn and winter seasons was high. Yet, Finns were more interested in European destinations than long-haul destinations (Haukkamaa, 2021). The increased flight supply with still modest demand causes last minute sales with surprisingly low prices. However, this was supposed not to last long (Raeste, 2021). The rising demand and interest in international travel also affects the employment of the experts working in the travel intermediation sector. The share of employed experts has risen from April 2020's 17 % to July 2021's 44 %. Most of the experts have been full-time or part-time suspended during the pandemic, but the number of redundancies has been very low (Mäki-Fränti, 2021). Like in any other country, domestic travel was popular in Finland in 2020 and 2021, as international travel was not recommended and due to the lack of travel packages and flights (Mäki-Fränti, 2021).

The World Travel & Tourism Council (2020) states that people are interested in travelling but need travel experts who can inform them about safe services. Thus, consumers are looking for the human connection to get support in safety issues and quarantine restrictions. Lehtinen (2021) reports that even though fully vaccinated people can travel quite freely in Europe, they ask for more precise information about documents needed when travelling and the use of masks in the destination. Consumers will remain more cautious than earlier when travelling despite the vaccines. The consideration of consumers' request for information about health safety and security is an obvious part of travel intermediaries' responsible business. The further development of online services in travel intermediation is important, but the human interaction cannot be neglected. It is easy to state that the successful future in travel intermediation is to communicate with consumers and adapt to their travel wants in the post COVID-19 world (Raeste, 2021).

According to the report of Euromonitor International (2021) commissioned by ECTAA, leisure tourism will recover faster from the pandemic than business tourism. Especially, package holidays are expected to remain popular in Europe. Package holidays bring to their customer more security for example in the form of insurances that can cover costs of repatriation and knowledge of health-related issues in destinations.

Romagosa (2020) states that the COVID-19 pandemic will change our mobility, socialisation and consumption models including leisure activities such as travelling. The pre-pandemic concern over the sustainability of tourism has strengthened during it. Sustainability can become a tool for recovery in tourism industry after the pandemic and its lockdowns. In this context, sustainability

can also mean quality experiences based on local natural and cultural resources. Destinations and companies surviving the pandemic must re-think what sustainability means when tourists start to return. Moreover, they must understand possible changes in tourist behaviour, which might focus on sustainability and sustainable products and services.

2.2 Sustainable Travel Intentions

Whilst the body of literature on sustainable tourism is advanced, the tourism industry is still grappling with its operationalisation (Ali, 2021). Tourism generates about 8% of world's carbon emissions with transportation being responsible for 50% of industry's totals emissions (Sustainable Travel International, 2022). According to UNWTO (2021) sustainability poses several challenges for the tourism industry such as increasing energy and water consumption, rising CO₂ emissions, scarcity of resources, managing food demand in the destination, declining biodiversity, climate change and extreme weather conditions. To ensure the longevity of the industry, tourism organisations, like travel intermediaries, have an important role in contributing to the industry's sustainability actions. However, the business case for sustainability is usually driven by customers' behaviour.

Tourist destinations recognise 'sustainable tourists' as the most lucrative visitors because their impact on the environment is less and they are likely to spend more (Nickerson et al., 2016; Pulido-Fernández & López-Sánchez, 2016). According to Holmes et al. (2021), some tourists might be more inclined to travel to destinations that are more sustainable and pay a higher price and engage in activities, which preserve the natural and socio-cultural environments. These tourists have higher income and education levels (Juvan & Dolnicar, 2016; Ramchurjee & Suresha, 2015) and feel a stronger moral obligation (Dolnicar, 2010) and environmental identity (Teeroovengadum, 2019) towards protecting the environment. The literature has identified that customers who express concern about the environment will be more oriented towards purchasing green products (Paul et al., 2016) with a higher premium (Teeroovengadum, 2019).

The recognition of such positive tourist intentions discussed above does not always translate into sustainable travel behaviours. Juvan and Dolnicar (2016, p. 86) conclude that tourists are in general environment-friendly and whilst they have no interest to have a negative impact, their behaviour does not always follow their well-intended pre-travel plans. For example, tourists are aware of the climate change and their contribution to it, but this awareness does not always change their approach to travelling (Antimova et al., 2012). Doran et al. (2016) stated that one reason for this behaviour gap when purchasing a trip and travelling is that travel decisions are made in private when the social visibility is close to zero. It appears that sustainable travel options can be sensitive to changes when the social visibility is higher. Juvan and Dolnicar (2016, pp. 80–85) list six groups that explain their real behaviour as the following:

- 1. Denial of consequences it is not that bad
- 2. Downward comparison it could be worse
- 3. Denial of responsibility it is not my responsibility
- 4. Denial of control I would like to, BUT ...
- 5. Exception handling vacations are an exception
- 6. Compensation through benefits actually, I am doing more good than bad

The challenges of the pandemic combined with the proposed shifts in sustainable travel purchase intentions requires that Finnish travel intermediaries comprehend their customers' perception of this topic as they re-adjust their businesses for the future.

3 Method

The data for this chapter was collected through an online questionnaire distributed to the customers of the Association of Finnish Travel Industry (SMAL). This questionnaire was administered during the period of 24 April until 9 May 2021, about one year after the beginning of the pandemic. The aim of the questionnaire was to understand if the COVID-19 pandemic had changed the intention towards responsible travel behaviour of customers of Finnish travel intermediaries.

SMAL (2021) is an association of about 190 travel agencies, tour operators and incoming agencies and 110 other industry stakeholders like transportation companies, accommodation providers, international travel intermediaries, educational institutions, consultants, media, and technology companies. The total sales of SMAL's member companies in 2019 was over 2 billion euro that covered about 95 % of Finland's travel intermediary sales. The members employed in the same year about 2,500 people both in Finland and abroad.

An online questionnaire was selected as the method to collect empirical data because SMAL and its working group on responsible tourism wanted to acquire a large data set from a wide population as quickly as possible. The questionnaire included closed and open-ended questions to allow respondents to provide more detailed answers. SMAL distributed the survey to its members, and they were asked to forward it to their customers. A total of 1,096 valid responses were returned. As the focus of this research is on the perceptions of the clients of the Finnish travel intermediaries, the results presented below are a qualitative analysis as the open questions were specifically designed to enabled detailed responses. Questionnaires are typically associated with quantitative research methods. However, SMAL was interested in obtaining data representing the opinions and insights of wide-ranging customers and this approach increased the reach of the project to respondents. The replies to open-ended questions made the qualitative analysis a better tool to describe results to reach the aims of the study.

4 Findings and Discussion

4.1 Perception of Responsible Travel of Finnish Travel Intermediaries Customers during COVID-19

The respondents of the survey were clients of Finnish travel intermediaries, or to be more exact, the members of their online platforms and social media channels. The results of the questionnaire identified that 'responsibility' would be more of a consideration in Finns' future travel choices than before the pandemic with 73% of respondents stating this. These findings about Finnish tourists align to the previous research which explains that the COVID-19 has resulted in changes in travel attitudes (Eichelberger et al; 2021; Gössling et al., 2021) perhaps signalling a change towards more responsible tourist behaviour. Examining the findings more in depth, almost one fourth of the sample indicated that the social, environmental and/or political aspects of the destination and the services of the supplier would be important factors for them to consider when making travel choices. These results highlight that supplier must demonstrate that they are adopting responsible practices and communicate them to prospective tourists.

Here, travel intermediaries can create value by supporting destinations and local suppliers in developing their green credentials but also providing this information in a readily accessible format for the tourists to support their decision-making. According to Ramagosa (2020), the COVID-19 pandemic will change travel behaviour like any other consumption behaviour, and it has strengthened the concern of sustainability. The COVID-19 pandemic may have caused a shift in sustainable holiday bookings, and the travel choices identify tourists being open to responsible tourism (Budeanu, 2007). Also, Finnish tourists have re-thought how they consider sustainability in their holiday purchases.

4.2 Finnish Travel Intermediaries' Customers' Purchasing of Travel Products

The questionnaire results indicated that almost 90 % of the respondents felt that conservation of the local culture is important when travelling. Over 80 % thought that purchasing local services and products are essential whilst 80 % of participants emphasised the importance of the destination countries' equality, human and children's rights. These results were also echoed in further results as respondents were asked to choose the top three factors of responsibility they would consider when making travel decisions. The factors selected were:

- 1. Preservation of local culture
- 2. Children's rights, purchasing of local services and products, equality and human rights and
- 3. Garbage disposal and circulation.

The behaviour of tourists at the destination has an impact on the well-being of the local community (Budeanu, 2007). These findings show that Finns are concerned about their socio-cultural impacts on the host destination by respect-

ing local culture, ensuring fair rights and how they disposed of waste (Dias et al., 2021). Travel intermediaries can use this knowledge to leverage destinations to develop their sustainability concepts by showing the relevance to the tourists decision-making process.

4.3 Further Expectations of Travel Intermediaries Post-COVID-19

In addition to understanding the responsibility of the customers of Finnish travel intermediaries, SMAL and its members were interested in the customers' expectations of travel intermediaries after COVID-19 due to the industry's slow recovery. The most important one was that intermediaries would create circumstances for safe travel again. The pandemic has caused tourism customers to prioritise health safety concerns (Jiang & Wen, 2020). According to Bononi (2020), travel intermediation has changed during the pandemic. ECTAA (2021) emphasised that governments all over the world should give tourism industry clear guidelines to ease travelling and make it safer. The World Travel & Tourism Council (2020) states that there is a need of travel experts to have the correct information on safe services and support in safety issues like quarantine restrictions. Some of the ways Finnish tourists expected these intermediaries to meet these expectations were by keeping flexible terms of agreement and the price level reasonable (17% of respondents) and being open and transparent in their communication about the health situation in the destinations with agile reaction to changes (16 %). Furthermore, some respondents expect a wide destination supply to be available like it was before the pandemic (16%).

5 Conclusions

This chapter provides insights into Finnish tourists' responsible travel intentions during the COVID-19 pandemic. It shows a change in the mindset of Finnish tourists to being more responsible when travelling abroad. These findings contribute to the growing body of knowledge on changes in tourists' behaviour resulting from a crisis and highlighting the importance of sustainability and responsibility as a mega-trend. It also signals that radical challenges to the tourism system (such as tourism coming to a halt) can provide the stimulus for growing awareness and creating positive changes.

Travel intermediaries' role has changed in the last two decades due to the Internet and it is a new channel for more flexible travel purchasing. New platforms and forums also allow access to the wide highway of information including shared peer-to-peer content. Good service and friendly experts do not anymore fill the needs of sophisticated customers who have much more travel experience than before. Yet, the COVID-19 pandemic has resulted in a new interest in travel intermediaries due to the plethora of fast changing lockdowns and travel restrictions in almost every country of the world. This chapter demonstrates that creating a niche about the provision and sale of responsible travel options can be advantageous for travel intermediaries. The findings also show that tourists seek out proof for responsible behaviours from suppliers. Therefore, the expectation is that experts working as travel intermediaries will have

all the needed information. This presents another opportunity for them to create value for the tourist in the way the information is presented to support responsible decision-making.

This research focused on intentions rather than the actual travel behaviour. Juvan and Dolnicar (2016) state that in general, tourists appreciate the environment and do not want to have negative impacts on it, but the actual behaviour does not always align to intended plans. Therefore, given the complexity of the pandemic, it is difficult to determine how this will achieved in the post-pandemic world. Future research can focus on tourist behaviour pre-trip, in-trip and post-trip to understand intention vs. realised intentions. The post-trip aspect is important in investigating the longer-term impacts of tourists' responsible behaviours in their everyday lives hence contributing to wider sustainability concerns.

From the Finnish perspective, there are some key questions for the industry to consider. Such questions revolved around what is the next step in tourists' purchasing and consumer behaviour in Finland and outbound destinations? The findings also point to a move towards ethical thinking as Finns showed concern about human, workers', and children's rights. This can propel a discussion about the Finnish travel industry's role in ensuring decent working conditions in the tourism industry. This is not easy to tackle but it can become an area where the Finnish travel industry takes a lead.

This chapter is based on a questionnaire whose data was analysed more qualitatively due to the nature of the research aim. Future research can undertake quantitative driven research to measure and text travel intentions. Furthermore, SMAL and its members were interested in a holistic picture of the customer insights rather than causal relationships. It is evident that sustainability and responsibility will become key priorities for travel intermediaries if actual demand matches intention.

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Circular Economy in Tourism and Hospitality – a Nordic Perspective

Abstract: Circular economy (CE) has been identified as a way to overcome current challenges like climate change and overconsumption of resources. This study focuses on the communication of actions towards CE in three Nordic hotel chains. The data analysed comprises webpages, annual reports and sustainability reports published by the hotel chains on the Internet. The findings indicate that the hotel chains have not yet fully embraced CE, instead the focus is on taking individual actions such as minimising waste and reducing the use of plastics. To fully live up to the requirements of CE, hotels should collaborate with industry partners to create innovative solutions, e.g. for recycling, retaining ecosystems, sharing assets and dematerialising. The public sector has an important role in supporting these efforts.

Keywords: Circular Economy, Sustainability, Hotels

1 Introduction

Climate change and loss of biodiversity along with pollution and overconsumption of resources have become major global issues during the past decades. One solution offered to cope with these challenges is transitioning towards the Circular Economy (CE). Compared to the currently dominating linear production models threatening the ecosystems and overusing raw materials, CE is an economic system where input and waste are minimised.

There is still a lack of research about CE in tourism and hospitality (Martinez-Cabrera & Lopez-Del-Pino, 2021). Most of the CE studies are from heavy industries with huge material flows, e.g. manufacturing and construction industries (Julião et al., 2019; Rodriquez et al., 2020; Vargas-Sánchez, 2018). During the past two to three years, there has been a slowly growing number of studies about CE in tourism and hospitality, mainly about food waste (e.g. Gretzel et al., 2019), but much of the research is comprised of literature studies with a scant focus on and applicability to business cases (Julião et al., 2019). Two exceptions are the studies by Rodrigues-Anton and Alonso-Almeida (2019), and Sorin and Sivarajah (2021) analysing CE in hotel chains. More studies are likely to be published in the coming years as circularity gains more prominence as an economic model.

The European Union (EU) and individual governments heavily promote CE, and more companies are about to start embracing the concept in their strategies and operations. It has been highlighted that there should be more examples of how tourism companies adopt CE (Jones & Wynn, 2019; Rodriquez et al., 2020; Vargas-Sánchez, 2018). This study responds to that call. Hence, the aim of this study is to gain an understanding of the focus areas of CE in the hotel industry in the

Nordic countries. The data collected and analysed in this study comprises documents such as annual and Corporate Social Responsibility (CSR) reports and company websites. Three hotel chains in the Nordic countries were chosen for this study, two (Scandic and Nordic Choice hotels) of them having hotels in most Nordic countries, whereas Sokos Hotels is mainly a Finnish chain, with a couple of hotels in Estonia and Russia. Even though tourism is often seen as a service industry, some sectors have extensive material flows within the hospitality sector, hotels among them. There is a growing interest in CE to address them (Manniche et al., 2021) as CE is seen as a solution for balancing environmental conservation with economic growth (Julião et al., 2019).

2 Literature Review

2.1 Defining CE

Research about CE is conducted in different fields, resulting in quite a few definitions of CE in academic articles. Clearly, there is a lack of shared understanding of the terminology of CE. CE is sometimes used synonymously to sustainability, but it can also be perceived as merely recycling products and materials (Aminoff & Kovacs, 2019).

According to the European Commission (2015), CE can be defined as an economy "where the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste minimised" (p.2), thus also often being referred to as "closed-loop" economy (Rodríguez et al., 2020). Larsson (2018) defines CE as "an economic system where production and distribution are organised to use and re-use the same resources over and over again" (p.12). According to Sitra (2021b), "the CE is an economic model that aims to optimise the system as a whole and tackle the root causes of biodiversity loss, climate change and depletion of natural resources" (p.6).

The Ellen MacArthur Foundation (EMF) – founded in 2010 to accelerate the transition to CE – is the most highly respected authority in CE. Its definition has since gained ground, and it is currently the most recognised definition of CE (see, e.g. Morseletto, 2020; Rodríguez et al., 2020). EMF states that CE can be seen as "a continuous positive development cycle that preserves and enhances natural capital, optimises resource yields, and minimises system risks by managing finite stocks and renewable flows" (Ellen MacArthur Foundation, 2015).

2.2 Background of the CE

Humans are heating up the planet and extracting resources beyond its capacity (Dasgupta, 2021; Intergovernmental Panel on Climate Change [IPCC], 2021). The current resource- and carbon-intensive linear economy, the so called "take-make-waste" or "cradle-to-grave" economy, is an unsustainable economic system (Circle Economy, 2021). Many countries, organisations and businesses around the world are now looking for an alternative. CE seems to allow us to combine economic growth and employment while taking care of the most distressing threats to our existence, and to focus on the targets of the Paris

Agreement: limiting warming of the planet below the 2-degree mark (Circle Economy, 2021; Sitra, 2021a).

In recent years, there have been many global decision-makers, activists and high-profile thought leaders who have given their voice to the urgent challenges pressuring our planet. The most powerful voices have been prominent persons like the Swedish environmental activist Greta Thunberg with her urgent messages in global platforms about the climate crisis, the world-renowned naturalist and film-maker David Attenborough (2020) with his memoir "Life on our Planet", Bill Gates (2021) with his book on how to combat climate change with technological innovations, and Partha Dasgupta (2021) with his Dasgupta Review about the connection between the economy, nature and loss of biodiversity. The latest IPCC (2021) report also stresses the responsibility of humans in decreasing the temperature on the planet and demands immediate actions. CE is a sustainable development strategy that many see as a key to changing the future of our planet for the better. However, less than 10% of the world economy is circular now, leaving a 90% circularity gap (Circle Economic, 2021).

The currently dominating linear economy relies on cheap and easily accessible resources (Boluk et al., 2019; European Commission, 2017; Manniche et al., 2017; Vargas-Sánchez, 2018). In the future, resources will not be so readily available, and their prices will soar. The world is facing an unparalleled global crisis due to the shortcomings of the current linear model. There is an urgent need to transform the way production, design and consumption presently take place (Circle Economy, 2021).

Governments around the world are offering economic stimulus programmes in the wake of COVID-19, and those could be used for circular investments. The EU Recovery plan for Europe – the largest stimulus package ever in the EU – allocates funds to digitalisation and green investments, both positively contributing to CE if planned well (European Commission, 2021b). The EU is promoting CE also with its Green Deal (European Commission, 2021a) and Circular Economic Action Plan (European Commission, 2020), which pave the way for EU carbon-neutrality by 2050. Individual countries have expressed an interest in embracing CE. For example, Finland has vowed to make CE its economic system by 2035 (Ministry of the Environment, 2021), the same year as the country aims to be totally carbon neutral. In Finland, over one-third of the population is familiar with the term CE, which is the highest rate of all Nordic countries. The population is also more positive towards reducing their consumption than the other Nordic populations (SB Insight, 2019).

The EU Circular Economy Action Plan (European Commission, 2020) includes initiatives for the entire life cycle of products, encompassing product design, promoting CE processes, fostering sustainable consumption, and aiming to ensure that the resources used are kept in the EU economy for as long as possible. The new EU Circular Economy Action Plan is a prerequisite to achieving the EU's 2050 climate neutrality target and to stopping biodiversity loss. CE could potentially be a "4.5 trillion-dollar business opportunity" (WBCSD, 2017). Sitra

(2016) states that the potential value of CE in Finland could be around 3 billion euro by 2030, whereas the Ellen MacArthur Foundation (2015) studies indicate that the total value of the global CE could be 1.8 billion euro annually by 2030. Improvements in EU resource productivity can lead to significant reductions in GHG emissions and increases in regional employment (Rizos et al., 2017). The European Commission has estimated that jobs directly associated with CE are already 3.9 million (IISD, 2020).

2.3 CE Models and Frameworks

As a concept gaining acknowledgement since the late 1970s, CE was originally discussed in terms of the 3R principles of Reduction, Re-use and Recycle. Later, the CE framework expanded to the 6Rs of Reuse, Recycle, Redesign, Remanufacture, Reduce and Recover (Manniche et al., 2017; Vargas-Sánchez, 2018). In CE, the same resources are used and re-used repeatedly (Larsson, 2018). Further Rs of CE added lately are Repurposing, Rethinking, Repair, Rehabilitation, Regeneration, Refurbishment, which all stress the importance of closing the production loops (Vargas-Sánchez, 2018). Products need to be designed to be used for longer, resold, repaired, recycled, and upcycled into new products. In CE, there is no waste, all the energy used is renewable, prices reflect the total production costs, and the economy is focused on collaboration and links between different stakeholders (SB Insight, 2019).

The "business action framework" CE model by Ellen MacArthur Foundation calls for ReSOLVE (table 1): Regenerate (e.g. shift to renewable energy and materials), Share (share assets, e.g. rooms, cars, appliances), Optimise (e.g. increase efficiency, eliminate waste), Loop (e.g. remanufacture products, recycle materials), Virtualise (e.g. travel, books, music etc.) and Exchange (e.g. replace old non-renewable with advanced materials, apply new technologies) (Ellen MacArthur Foundation & McKinsey Center for Business and Environment, 2015). The ReSOLVE framework helps companies to identify key actions for their work towards circularity.

2.4 CE Models in Tourism and Hospitality

It is possible to reach climate targets only if we change the way we produce and consume products and services (Circle Economy, 2021; Ellen MacArthur Foundation, 2019), including tourism. Tourism contributes to the emissions heating up our planet, with its around 5% contribution of the global greenhouse gas (GHG) emissions due to transport-related activities only (UNWTO, 2021). As the tourism industry faces concerns over its big environmental footprint, sustainability and CE initiatives are much called for. Tourism is one of the world's largest industries: Prior to the pandemic, tourism accounted for around 10% of the global workforce and GDP (WTTC, 2021). Tourism is an industry that engages a large part of the worldwide population, and it has opportunities to spread awareness of CE to the general public.

Tab. 1: The ReSOLVE framework

Action	Examples	
Regenerate	Shift to renewable energy and material Reclaim, retain and restore the health of ecosystems Return recovered biological resources to the biosphere	
Share	Share assets Re-use, second-hand Prolong life through maintenance, design for durability, upgradability etc.	
Optimise	Increase performance/efficiency of the product Remove waste in production and supply chain Leverage big data, automation, remote sensing and steering	
Loop	Remanufacture products or components Recycle materials Digest anaerobically Extract biochemicals from organic waste	
Virtualise	Dematerialise directly (e.g. books, CDs, DVDs, travel) Dematerialise indirectly (e.g. online shopping)	
Exchange	Replace old with advanced non-renewable materials Apply new technologies Choose new product/service	

Source: Ellen MacArthur Foundation & McKinsey Center for Business and Environment, 2015

Consumers are increasingly demanding more responsible alternatives, and support for sustainable business is growing in both developed and developing economies (Close, 2021). The popularity of online searches relating to sustainable goods has increased by 71 % globally since 2016 (EIU, 2021). For many companies, CE initiatives are seen as part of their overall sustainability and CSR activities. CE offers opportunities for cost savings, reputational improvements and competitive advantage (Vargas-Sánchez, 2018).

Most of the CE examples come from the heavy industry. Tourism as a service industry has been regarded as less interesting from a CE perspective as material flows are limited. However, sectors within tourism and hospitality have substantial material flows, such as hotels with their demand for textile, furniture, and food. In the future, with the expected changes in consumer behaviour and EU legislation, there will be more pressure on the hospitality industry to embark on CE as well. So far, in tourism and hospitality, CE efforts have concentrated on waste, water and energy management (Manniche et al., 2017).

In recent years, many tourism companies have started communicating their work towards the UN Sustainable Development Goals (UNSDGs) in their CSR reports. CE relates to all UNSDGs, but particularly to UNSDG #12, "Responsible Consumption and Production" (SB Insight, 2019). The tourism industry can play a major role in achieving the UNSDGs and encouraging the economic system's transformation through promoting CE practices to its customers and suppliers (Schroeder et al., 2019).

In CE, waste from one company becomes valuable raw material for another business, and resources are valued instead of wasted. Their value even increases along the way in upcycling, signifying cradle-to-cradle design (Rizos et al., 2017). Food waste could become energy in the tourism context, as is already the case at the Crowne-Plaza Hotel in Copenhagen (Manniche et al., 2017). There are already inspiring examples of companies with CE oriented business models (e.g. avoiding food waste with ResQ: https://www.resq-club.com/) and Sitra – the Finnish Innovation Fund – publishes a list of innovative CE companies for information and benchmarking (Sitra, 2021c; Sitra, 2021d).

So far, many tourism players have focused on sustainability activities such as reducing negative impacts of their operations, but that is not enough in a CE system. There needs to be more recycling, enhancing the value of resources to have a positive environmental effect, upcycling, re-using, restoration and using renewable energy sources (Ellen MacArthur Foundation, 2015; Manniche et al., 2017; Rizos et al., 2017; Vargas-Sánchez, 2019). CE is an effective way to solve the contradiction between economic development and environmental protection (Vargas-Sánchez, 2018). It allows destinations and tourism companies to grow while reducing emissions and resource usage and turning to renewable energy systems and reduced food miles through local purchasing and urban farming, i.e. achieving a profitable low carbon economy. Transformation to CE requires cooperation with other companies and industries as well as forming long-term relationships within the supply chain (Manniche et al., 2017; Vargas-Sánchez, 2018). Further, as countries like Finland are aiming for a carbon-neutral future in the next few years, public authorities will have increased pressure, as expressed by Vargas-Sánchez (2019), resulting in more tourism and hospitality companies boosting the circularity of their businesses.

3 Methods

Organisations produce a huge number of documents and information about their activities such as annual reports, financial accounts and webpages. Many of these are prepared for external stakeholders to justify themselves in the public eye. Many of these documents are an important part of their CSR and marketing communications. The documents are also a valuable source of information for consumers who have become even more demanding and want to know more about the level of responsibility of the service providers they choose to use (EIU, 2021). Analysing this kind of secondary source material has a long tradition in qualitative research (Atkinson & Coffey, 2004). According to Saunders et al. (2009), secondary data is often analysed in combination with primary data, but it is possible to base a whole study on documents such as e-mails, websites and diaries. This research is a conceptual study of qualitative nature, where only secondary data is used.

This study relies on websites and various sustainability-related reports of the three largest Nordic hotel chains (table 2). The documents were found by searching the hotel chain name and the word "CE" in the search engine Google.

In the process, it was noted that the chosen hotel chains offer more news and examples of circularity in Finnish than in English on their websites. However, for this study with an international audience, only documents in English were used. The method adopted for this study follows the methodology of the study conducted by Rodriguez and Alonso-Almeida (2019) focusing on CE in four different hotel chains. In this study, the content of the documents was analysed during June-August 2021. Thereafter CE initiatives were identified and categorised into the ReSOLVE framework created by the Ellen MacArthur Foundation (2015). A review of the initiatives was conducted and, as the last step, a comparative analysis was made.

Tab. 2: Overview of data analysed

Company	Material	Reference
Scandic	Company website about sustainability	Scandic 2021a
Scandic	Annual and sustainability report	Scandic 2020
Scandic	Guidelines for sustainable procurement	Scandic 2018c
Scandic	Other sustainability policies and guide- lines relating to CE	Environmental Policy: Scandic 2018b Code of Conduct: Scandic 2018a Whistleblowing Service: Scandic 2021b
Sokos Hotels	Company websites about sustainability	Sokos Hotels – Responsibility: Sokos Hotels 2021a S Group – Responsibility – The CE: S Ryhmä 2021c
Sokos Hotels	Green key programme	Sokos Hotels 2021b
Nordic Choice	Company website about sustainability	Nordic Choice Hotels 2021a
Nordic Choice	We Care annual report	Nordic Choice Hotels 2020b
Nordic Choice	Annual report	Nordic Choice Hotels 2020a
Nordic Choice	Whistleblowing	Nordic Choice Hotels 2021b

Source: Authors' work

Studying the communication about the CE actions of the largest hotel chains in the Nordic market offers perspectives into how major players in the tourism and hospitality industry have embraced CE. Scandic Hotels (2020) have altogether 280 hotels in the Nordic countries (except Iceland) as well as Germany and Poland, Sokos Hotels have 49 hotels in Finland, Estonia and Russia (S Ryhmä, 2021a), and Nordic Choice Hotels (2020a) under their different brands have a total of 205 hotels in the Nordic and Baltic countries.

4 Findings

The findings are divided into three parts: First, the overall efforts and commitments by the hotel chains towards a sustainable future are presented. Next, an analysis of the hotel chains' overall communication about CE is provided. Finally, a summary of the concrete actions towards CE communicated by the chosen hotel chains is presented according to the ReSOLVE framework developed by the Ellen MacArthur Foundation (2015).

4.1 Sustainability as a Starting Point for CE

Scandic Hotels is a forerunner when it comes to corporate social responsibility in the hotel sector. The work started already in 1993, and over the years, the chain has become well known for its sustainability efforts, especially regarding environmental sustainability. The CEO Jens Mathiesen states in the annual report of Scandic (2020, p. 5) that:

For us, sustainability is a natural part of our business and all of our operations are characterized by a sustainable approach. Our corporate customers and hotel guests are also making greater demands we need to live up to. I know that our focus on sustainability also motivates our team members and makes them feel proud, which is absolutely critical for us to be able to deliver good service. Scandic operates according to the UN Global Compact's ten principles for human rights, labor law, environment and anti-corruption.

The annual and sustainability report of Scandic (2020, p. 18) stresses as well that UN's Sustainable Developments Goals are always in focus when their operations are developed. As the report claims:

We stand firmly behind the Paris Climate Agreement and the UN's Sustainable Development Goals (SDGs) and we constantly evaluate our ability and possibility to contribute to sustainable development. To this end, we formulate measurable goals related to the areas where the company, its employees and its stakeholders have the greatest potential to make an impact. The areas where we can have the most significant impact are reducing food waste, promoting diversity and inclusion and ensuring that our hotel operations have the lowest possible climate impact.

In 2017, Scandic decided to focus on four main areas in their work for sustainability: 1) CO_2 emissions, 2) diversity and inclusion, 3) health, and 4) waste. In 2020, 96.9 percent of Scandic's waste was recycled, which is an increase of 0.2 % compared to 2019. From a CE perspective, waste is the most relevant issue (Scandic 2020).

Scandic offers several documents on its sustainability section of the website, e.g. Environmental Policy (Scandic, 2018b) and Code of Conduct (2018a). Scandic (2021b) and Nordic Choice Hotels (2021b) have also developed a "Whistle-blower service", meaning that anyone can anonymously report about suspect behaviour, including that relating to CE issues. That way the hotels can find out about behaviour that is not in accordance with its guidelines and tackle the issues without delay.

Also, Sokos Hotels strive to be a forerunner in sustainability issues and have for years focused on developing the operations in a sustainable way (Sokos Hotels, 2021b). Sokos Hotels is one of the brands under the S Group (S Ryhmä, 2021a) network of companies in the retail and service sectors. The chain has been recognised as Finland's most responsible hotel brand by the Europe-wide Sustainable Brand Index (2021) survey for nine consecutive years. Food waste has been one of the issues that have improved.

Sokos Hotels are committed to following the Green Key sustainability programme (see https://www.greenkey.global/), which is an international certification developed especially for the hotel industry. The Green Key organisation will audit the actions taken for sustainability. Thus, the hotels receiving the certificate are obliged to follow the guidelines. The Green Key programme (Sokos Hotels, 2021a) comprises several activities such as communication, water and energy use, food and green areas. In 2021, many individual hotels under the Sokos Hotels brand have also joined the Sustainable Travel Finland label, aiming to show the sustainability commitment to their customers and other stakeholders (S Ryhmä, 2021c).

Nordic Choice Hotels have developed a programme called "We Care" for the efforts towards sustainability. The programme identifies five main focuses for responsibility: 1) sustainable hotel operations, 2) food revolution, 3) diversity, 4) local social responsibility and 5) ethical trade (Nordic Choice Hotels, 2021a). For Nordic Choice Hotels, fighting climate change is a key issue. The hotel chain has also removed all unnecessary plastics from their hotels by the end of 2019 (Nordic Choice Hotels, 2020b). Their main vision regarding sustainability is summarised as follows on the responsible section of their website (Nordic Choice Hotels, 2021a):

We have high goals and a broad commitment. Therefore, we measure our success based on 3 different areas: People, Planet and Profit. We would love to be evaluated on all three levels. Completely transparent. So you can sleep with a clear conscience.

Nordic Choice Hotels (2020b) offer detailed explanations about their activities and targets regarding the "We Care" programme. They have created concepts that will have a lower environmental impact on the guest experience, e.g. Sweet Dreams Stay, which means that guests actively forego room cleaning, and the hotel donates the money to UNICEF. The hotel chain also informs customers about food waste and nudges guests toward more responsible behaviour. There are also detailed descriptions of the UNSDGs that the hotel chain is working towards achieving. In the "We Care" report (Nordic Choice Hotels, 2020b), there is no mention of CE, though.

4.2 CE – Main Message

All hotel chains analysed communicate extensively about their work related to sustainability and responsibility. However, CE is less discussed, at least in their communication material.

In the report "Scandic's guidelines to sustainable procurement" (Scandic Hotels, 2018c, further revised 2021) prepared for internal and external stakeholders, Scandic defines CE and the actions taken towards it. Scandic (2018c) identifies the ReSOLVE framework presented in table 1 as a key framework for procurement. In the guidelines, Scandic (2018c) discusses sustainable business operations from different angles such as what chemical substances should be avoided to what metals are acceptable. From a CE perspective, the need to procure the

right type of plastics, electronic devices and textiles (recyclable) are discussed in detail. The aim is that all processes of Scandic should be implemented without waste. One main strategy for this is to rent as many products as possible.

Nordic Choice Hotels do not mention the concept of CE in the material studied. However, the "We Care" reports include clear targets for managing waste and minimising energy use and the report discusses why the targets are important and what is done to reach the goals. It is also reported how well the company reached those targets, with inspiring examples from individual hotels. Some of the focus areas of their work towards sustainability are directly related to CE. For instance, the company (Nordic Choice Hotels, 2021a) argues on its sustainability section of the website that

Of all the food that is produced in the world, 33 % ends up as waste. Reducing food waste is something that all our hotels work on. Our hotel restaurants conducted tests and managed to determine that smaller plates lead to less food waste. By decreasing the plates by a few centimeters and putting up a sign with a prompt to finish the food, food waste was reduced by 20 %.

Sokos Hotels is not communicating their activities focusing on sustainable issues with the CE terminology either. The most relevant CE activity discussed is waste management. On the S Group sustainability website (S Ryhmä, 2021c), there is a section devoted to CE. It mainly deals with the plastics and energy policies of the network of companies, including hotels.

The Green Key programme followed by all Sokos Hotels provides clear guidelines for waste, water and energy management, and sustainable mobility. It encourages hotels to minimise the amount of waste, for instance, through recycling and by finding alternative ways of using replaced products and materials. Renewed products can be sold or given to charity or re-used by other companies in the production process (Sokos Hotels 2021c). It is required that hotels with the certificate do not use disposable items. On the Sokos Hotels (2021a) website section explaining the Green Key programme, there are a few concrete actions and suggestions mentioned regarding these issues. All waste from electrical devices must also be recycled and a special bin is required for gathering this kind of waste. However, all that is said about energy, water and waste on the Sokos Hotels (2021b) responsibility website section is this statement:

We reduce our energy consumption in accordance with S Group's ambitious goals and invest in the production of renewable energy. Finland's clean water is a valued natural resource and quenches the thirst of our customers. We use water responsibly and closely monitor our own water usage. Improved recycling and reduced use of plastics are everyday goals for us.

4.3 Communication of CE Activities by the Hotel Chains

In the final part of the analysis, the concrete CE activities mentioned by the chosen hotel chains were applied to the ReSOLVE framework developed by Ellen MacArthur Foundation (2015, table 1). The framework could be adopted by tourism businesses as it is not as manufacturing centered as many of the

other CE models. It was also adopted by Scandic (2018) in its report about sustainable procurement.

Table 3 summarises the communication of the concrete CE activities by the chosen hotel chains. The activities were coded under the corresponding parts of the framework model. The first column of the table introduces the name of the action, the second column the recommended activities under the Ellen MacArthur Foundation (2015) framework, and the third column the concrete activities the chosen hotel chains have undertaken so far.

All chains communicate their efforts towards CE at least to some extent. Most attention was given to food waste, perhaps not surprisingly, as the potential savings from reduced raw material use at hotel restaurants can be great. There were also many examples of recycling textiles and furniture mentioned by the hotel chains.

Based on the analysis in this part, it can be concluded that all hotel chains in focus in this study have started to act towards CE. Still, most of the issues communicated to stakeholders are issues also discussed in the context of sustainable development and sustainable hotel operations. Circular business models are still not fully developed, as CE also calls for new innovations within the supply chains.

5 Discussion

It has been argued that hotel chains often focus on sustainability issues in general or just attempt to reduce negative impacts and emissions instead of adopting a more holistic CE business model (Manniche et al., 2017). In CE, more must be done than just reductions. Especially collaboration with suppliers to find new innovative ways of using recycled products is crucial.

Although all three hotel chains in this study have long-running sustainability programmes, and they are all known for their focus on issues related to responsibility, such as diversity and accessibility, none of them seems to have embraced CE entirely yet. Their CSR reports and websites do not go beyond a few isolated mentions of the word CE or examples of circularity without using the actual term CE. However, there have been a few attempts to introduce more circular thinking in the hospitality business recently, e.g. in the form of waste reductions (Scandic; Sokos Hotels), renewable energy initiatives (Nordic Choice Hotels; Sokos Hotels), replacing single use items and re-using containers, ending the use of unnecessary plastics (Nordic Choice Hotels), purchasing guidelines (Scandic, Nordic Choice Hotels, Sokos Hotels), re-use of textiles by other companies and recycling furniture (Sokos Hotels).

More transparency and more information about CE related actions would make it easier to analyse the actual level of circularity. Another issue to note is that not all circularity related news is translated to English on Sokos Hotels website. The hotel chains should understand that CE is of growing interest also to the general public and to their foreign customers, too, as consumers are becoming more

Tab. 3: Communication of CE activities by the hotel chains

Action	Recommended activities	Examples of activities taken by the hotels
Regenerate	Shift to renewable energy and material Reclaim, retain and restore health of ecosystems Return recovered biological resources to the biosphere	Scandic: Prefer energy from sustainable renewable sources that is not impacting biological diversity Sokos Hotels: Offering chargers for electric cars in their garages Nordic Choice Hotels: using renewable energy whenever possible → 80 % of hotels have signed green/renewable electricity contracts
Share	Share assets (e. g. cars, rooms, appliances) Re-use, second hand Prolong life through maintenance, design for durability, upgradability etc.	Nordic Choice Hotels, Scandic: Offering hotel rooms at greatly reduced rates for remote workers and students for reduced rates during the pandemic Sokos Hotels: Re-dressing furniture
Optimise	Increase performance/efficiency of product Remove waste in production and supply chain Leverage big data, automation, remote sensing and steering	Scandic, Sokos Hotels, Nordic Choice Hotels: Avoiding food waste, sorting (bio)waste, offering and highlighting local and organic products Nordic Choice Hotels: Reducing transport, deliveries and chemicals Scandic, Nordic Choice Hotels: Imposing environmental demands on suppliers (Scandic: purchasing guidelines; Nordic Choice: Sustainable Trading focus + started stakeholder dialogues regarding CO ₂ emissions)
Loop	Remanufacture products or components Recycle materials Digest anaerobically Extract biochemicals from organic waste	Scandic: Electronic devices bought from suppliers offering takeback and recycling Sokos Hotels: Recycling and re-using materials such as bedlinen and furniture Nordic Choice Hotels: Clear targets for recycling (99 % target for waste-sorting)
Virtualise	Dematerialise directly (e.g. books, music, travel) Dematerialise indirectly (e.g. online shopping)	Scandic, Sokos Hotels, Nordic Choice Hotels: hotel information in electronic form (e. g. on TV screens instead of booklets), marketing informa- tion and booking options on websites
Exchange	Replace old with advanced non-re- newable materials Apply new technologies Choose new product/service (e. g. multimodal transport)	Scandic, Sokos Hotels, Nordic Choice Hotels: Removing plastics from hotel rooms Scandic: Electric cars; energy efficient showerheads Nordic Choice Hotels: Detailed requirements for new hotel buildings, fixed fixtures and equipment; Example: replacing incandescent and halogen light bulbs with LED bulbs

Source: Based on the ReSOLVE framework by Ellen MacArthur Foundation & McKinsey Center for Business and Environment, 2015

aware of the need to embrace CE solutions. Thus, it would make sense to communicate about CE actions more openly, also in English.

One example of how the CE principles could be communicated to the public is to highlight what happens to all the textiles used by hotels. The production process of textiles not only rely on huge amounts of water and chemicals, but also cause pollution and emissions (European Environment Agency, 2021). The starting point for Scandic is to rent products such as textiles when possible (Scandic, 2018c). Typical textiles being rented are sheets, towels and carpets. For instance, the Nordic Choice Hotel chain has recycled duvets and produced nightshirts for hotel guests with re-used textiles. Thus, the hotel chain works together with companies in the supply chain renting textiles, like the Lindström group (see https://lindstromgroup.com/), to find solutions for how the material can be re-used.

Sokos Hotels (2021c) have taken some concrete activities towards circularity with a partner: When one of their larger hotels in Helsinki got renovated, its beds, blankets, pillows, curtains and night tables got to continue their lives with the help of a Finnish company named Freshrent which recycled or cleaned and renovated the old materials. Some of the items were good enough to be sold to private homes, smaller hotels and houses for construction workers.

Examples like the above ought to become more common in the future when hotels start to take more concrete actions towards circularity. It will also be interesting to see when the first hotel run with the principles of CE will open in the Nordic countries – the QO hotel in Amsterdam is an example in the Netherlands, a country which is a forerunner in CE. QO Hotel was built up to 33 % with material from a demolished skyscraper, and the carpets in the hotel are from recycled fishing nets (Eniday 2020).

6 Conclusion

The main reason for intensified discussions about CE is that our current economic system is unsustainable with its ever-increasing use of natural resources and overconsumption. Tourism and the hospitality industry must be involved in finding solutions for challenges such as climate change and loss of biodiversity, plastic waste and air pollution, transport and emissions. There is an urgent need for all companies and their supply chains to leave the linear economy behind and embrace the circular one.

This study indicates that the CE actions of the selected Nordic hotels are still rather sporadic and ad hoc, lacking a holistic approach to CE. In order to start embracing circularity, hotel chains should adopt circular business models such as products and materials as a service, sharing platforms and circular partnerships, which would increase the overall circularity of products and materials. Communication of sustainability, CSR and CE activities is still a work in progress. However, all studied hotels are already involved in sustainability certification programmes, with Scandic Hotels and Nordic Choice Hotels revealing their progress with the UNSDGs. However, it would be essential to take a more holistic approach towards circularity and explore its potential together with their partners in the supply chain, destination management companies and

other stakeholders. CE is not something that a company can embark upon on its own, it needs heavy support from the public sector and other stakeholders as well.

The COVID-19 pandemic has highlighted all the risks linked to the current system, impacting lives and jobs, supply chains and entire economies. With its inherent resource extraction and waste production problems, our current system results in environmental degradation, loss of biodiversity, climate change, and pollution. The global pandemic offers an opportunity to invest in a transformative COVID-19 recovery strategy and in more sustainable circular systems, which would allow economic, social and environmental healing and recovery both in the short term and in the longer term (Ellen MacArthur Foundation, 2020). The public sector plays a pivotal role in regulation, incentives and infrastructural development for CE. In market economies, companies must realise that actively looking for solutions linked to more sustainable outcomes can be a competitive advantage as a growing number of consumers look for responsible ways of consumption and travel.

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How Accessible is Tourism Education for an Accessible Tourism Future? A Perspective of Educators and Gatekeepers of Disabled People

Abstract: Scholars show the interdependent relationship between the quality-of-service delivery and the capacity acquired by tourism practitioners from tourism education. Extant literature shows that the content in tourism education material fails to reflect skills and knowledge to handle disabled people in the tourism industry. Yet there is a symbiotic relationship between teaching methods and educators' extent of preparing learners to handle disabled people in tourism. The chapter investigates if learners are equipped to serve disabled people in tourism. In-depth face-to-face interviews with tourism educators and key informant interviews with gatekeepers of disabled people in South Africa were conducted. Creswell's qualitative analysis framework guided the data analysis carried out with Atlas.ti 8. Findings show the absence of competencies among educators to develop content for learners to manage disabled people in tourism. The study identified success factors for the co-creation of accessible tourism education that produces sustainable and resilient education products.

Keywords: Disability, Impairment, Disabled Learners, Least Restrictive Teaching and Learning Environment, Accessible Tourism Education.

1 Introduction

Generally, tourism education has addressed societal and manpower needs since the 1970s (Nhuta et al., 2015; Tribe, 2010). There is an increase in the literature linking tourism education and disability. In the same vein, there is a relationship between the quality-of-teaching methods and educators' extent of preparing learners (disabled and non-disabled ones) to be able to handle disabled people in education (Le Roux, 2018). The chapter aims to investigate if learners are equipped to serve disabled people after graduating from a tourism education provider in South Africa.

Scholars acknowledge the evolution of disability tourism to accessible/inclusive tourism (Darcy et al., 2020). In principle, tourism accepts disability as central in accessible tourism, hence the need to involve those with access needs. But in practice, disability is still not yet understood beyond infrastructure, legal compliance, corporate social responsibility and public relations perspectives. Educators rely on intuitive know-how when teaching learners to handle disabled people in tourism. The chapter defines accessible tourism education as the process that prepares disabled and non-disabled students with tourism competencies.

The authors regard the terms sustainable and resilient as having different meanings. Contextualised sustainable accessible tourism education is concerned with meeting the needs of the present without compromising the ability of future generations' educational and societal needs (host communities including vulnerable population groups like disabled people), environment and profit-making (Polat & Hermans, 2016). At the same time, resilient accessible tourism education can be understood as an outcome of accessible tourism education to produce a graduate that creates innovative mechanisms for recovery from tourism shock using sustainable practices. Therefore, the authors describe sustainable and resilient accessible tourism education as teaching and learning that prepares disabled and non-disabled learners to have skills and knowledge to enable optimal participation of everyone (disabled people included) in tourism. However, there is a shortage in content within the tourism teaching material to develop proficiencies to serve the diversified needs of disabled people professionally in post-crisis/tourism shock.

Although accessible tourism education is understudied, the success of accessible tourism is part of the future success of tourism post-COVID-19 pandemic (UNWTO, 2020). Darcy and Dickson (2009) defined accessible tourism as enabling everyone with access requirements to function independently and with equity and dignity through delivering universally designed tourism products, services, and environments. This definition includes all people travelling with children in prams, disabled people, and seniors (Darcy et al., 2020).

This chapter focuses on accessible tourism education before the COVID-19 pandemic from the perspectives of educators and disabled counterparts. Accessible tourism education is essential in South Africa. Haarhoff and de Klerk (2019) cited the South African Tourism Annual Report (2016) to highlight that more than 66% of international tourism markets like tourists from Europe and the Americas were seniors with access needs. In 2016, the tourists mentioned above spent 20 billion South African rands (ZAR) on leisure, accommodation, and food in South Africa (Haarhoff & de Klerk, 2019). Many people older than 50 years (both international guests and locals) have access needs similar to disabled people. Yet, usually, such people do not prefer to be 'labelled/identified' as disabled people. At the same time, traditional tourism skills development has challenges in preparing learners to serve disabled people in tourism.

2 Background to the Study and Research Questions

Tourism education takes different forms like formal (curricula-based/pedagogy), informal (andragogy) and non-formal (daily life experiences) (Saner et al., 2015). The said forms are either proactive or reactive in addressing tourism market-driven human resource needs (Nhuta et al., 2015). The historical background of tourism education does not show the involvement of vulnerable population groups. Tourism education lacks to discuss different travel behaviours, characteristics of disabled people within the content of the teaching material and the least restrictive teaching and learning approaches. The least restrictive

tive teaching and learning approaches refer to co-creating and using universal design instructions for all learning needs of disabled and non-disabled learners within shared teaching and learning spaces (Mangope et al., 2018; Saner et al., 2015). Mangope et al. (2018) recommend that tourism education planners acknowledge the diversified tourism market needs and implement policies that mainstream both disabled and non-disabled people in tourism.

Generally, the needs of the tourism stakeholders are addressed by content (teaching resources) delivered and assessed according to curriculum outcomes (De La Fuente-Rodes et al., 2016). Previous research looked at the curriculum (analysing the documents, processes, and procedures) and non-disabled students without giving attention to disabled people gatekeepers and the educators' perspective. Tourism education aims to reduce ignorance of a wide range of labour and consumer markets. It can bring systemic inclusion to disabled people while accumulating knowledge, skills and learnt behaviours to accommodate every individual in tourism (De La Fuente-Rodes et al., 2016). It can only enhance sustainable disability inclusion as a way of thinking while not viewing accessible tourism as a niche market segment. Such concurs with Darcy et al. (2020), who believe that disability tourism has transformed to include all access-need tourists. In this instance, the accessible tourism market is not limited to people who acquired temporary or permanent impairments at/during birth, ageing and from incidents and accidents (Luiza, 2010).

De La Fuente-Rodes et al. (2016) and Mangope et al. (2020) believe that tourism education fosters systemic bias on disability. The outcomes of the above view are perceived to offer limited opportunities for disabled people in tourism. On the one hand, educators seem not to realise that the current education environment may negatively affect the growth of accessible tourism. On the other hand, De La Fuente-Rodes et al. (2016) revealed that disabled people-gatekeepers are neither involved nor engaged in meaningful dialogues that enhance accessible tourism education co-creation. Nonetheless, success factors for accessible tourism education can allow non-disabled people to acquire know-how in handling disabled counterparts. Hence, the chapter provides means to establish accessible tourism education that fosters sustainability and resilience beyond classroom walls. The impact would be felt when the students graduate and join the tourism sector, continuously working towards accessible tourism. The chapter reviewed extant literature as the first part of answering the overall research question.

3 Literature Review

For accessible tourism education to exist in the future, the current tourism education should get insights from extant accessible tourism literature that characterises access tourism market segments (Darcy, 2010; Darcy et al., 2020). Darcy et al. (2020) believe that disabled people who desired to participate in tourism/travel were not able to travel in the past because of inaccessible transport and accommodation. Disability tourism used to be a niche (specialised tourism); however, it has become accessible/inclusive tourism (Darcy et al.,

2020). Recently, accessible tourism has been deemed one of the avenues for recovery from the adverse impacts induced by the COVID-19 pandemic on the tourism industry worldwide (UNWTO, 2020).

3.1 Skills and Knowledge to Handle Disabled People in Tourism

Academic scholarship on disability often justifies the importance of inclusion, with global estimates that disabled people make up 10–20% of the world's population (Darcy et al., 2020; Disabled World, 2016). Disability and tourism research gained momentum while travel grew in sophistication; however, there has been a greater appreciation that constraints vary with the type of impairment, experienced disability, and level of support needs (Darcy et al., 2020; Darcy, 2010; Darcy & Buhalis, 2011) across the sectors of the industry (Buhalis et al., 2012). Research led to a re-conceptualisation of the understanding of disabled persons' embodied ontology within tourism (McKercher & Darcy, 2018). This implies that competent human capital is essential, especially for the learners prepared with skills and knowledge for the industry by formal, accessible tourism education.

The accessible tourism education concept was derived from 'inclusive/accessible tourism', which Biddulph and Scheyvens (2018) define as transformative tourism in which marginalised groups are engaged in ethical production or consumption of tourism and sharing its benefits. Inclusive tourism researchers believe that the conceptualising of 'marginalisation' and 'accessibility' are divergent rather than convergent (Darcy et al., 2020). Therefore, Darcy et al. (2020) believe that there is a need to focus more exclusively on skills and knowledge within accessible tourism for those with access requirements, which are not shared with other marginalised identities. However, tourism education can learn a lot from inclusive tourism (Higgins-Desbiolles, 2006; McCabe, 2009) to complement the understanding of accessible tourism education. The quality of tourism is just as good as the competencies possessed by the provider (Airey & Tribe, 2006; Nhuta et al., 2015).

3.2 The Future of Tourism Education as Accessible Tourism Education

Tourism education is conceptualised as teaching and enhancing learning to develop the ability to pacify one's beliefs and intentions to reasoning and morals (Naziev, 2017). The essence of tourism education is to foster community cohesion while enhancing the sustainability of community well-being. However, what makes sustainable and resilient accessible tourism education thrive is still undiscovered in developing and developed countries. Nonetheless, the chapter presents an African context, particularly in South Africa, as the post-1994 era witnessed a transformation in access and skills acquisition within the formal education system (De La Fuente-Rodes et al., 2016). However, the inclusion of disabled people in tourism became popular after the ratification of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD, 2006) by South Africa. Though, tourism education is still inaccessible for disabled people and not yet facilitating non-disabled people to acquire competencies to

serve disabled counterparts in the tourism industry. According to De La Fuente-Rodes et al. (2016), tourism education should re-consider the inclusion of disability because, in South Africa, tourism educators perceive

- the needs of disabled people are unnecessary additional costs,
- they do not have content to teach on disability in tourism,
- there is no statistical evidence for content in teaching and learning materials to consider disabled people in tourism,
- they lack know-how acquired from formal tourism education to prepare learners to handle and manage disabled people.

The above notions are worsened by limited research on disability in tourism education in South Africa. Based on the current authors' teaching experience, the lack of disability-inclusive aptitude among educators results from the following aspects:

- The absence of disability-inclusive competencies in tourism education.
- Limited collaborative relationships between tourism education and disabled people organisations (DPOs) in South Africa have worsened the gap.
- The absence of tourism education frameworks and standard guides for disability inclusion like disability-inclusion toolkits and action plans.
- The absence of documented learning and travel behaviour of disabled people.
- Limited agreeable contextualised processes that can facilitate a change in societal-learnt behaviours and attitudes about disability/impairments.

The above-mentioned educational aspects are missing in traditional tourism skills development (education), resulting in nurturing ignorance among educators and learners when managing disabled people in tourism. If disabled and non-disabled students acquire tourism competencies within Least Restrictive Teaching and Learning (LRTL) processes (Bekirogullari et al., 2011). In that case, they can provide a similar environment to their peers in the tourism environment (Bekirogullari et al., 2011). Within this stand, South Africa has a theoretical model that attempts to inform systemic disability inclusion in tourism human capital development, presented below.

3.3 Existing Model for Accessible Tourism Education

A tourism human capital development model was developed within the South African education environment to contribute toward the inclusion of disabled people, as shown in figure 1.

Part 3: Management of Sustainability Aspects by Industry Stakeholders

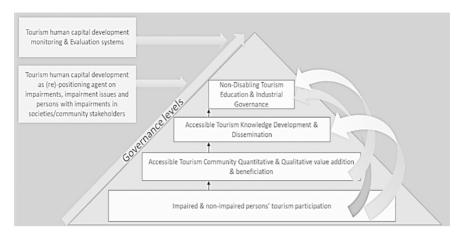


Fig. 1: The Accessible Tourism Human Capital Development (ATHCD) model Source: Adapted from Makuyana 2020, p. 246

The ATHCD model originated from a doctoral study that attempted to contribute to the inclusion of disabled people – a previously marginalised South African population group. According to figure 1, success factors can enable formal tourism education to improve the empowerment of non-disabled human resources (educators included) to handle/manage disabled people, like students and colleagues. Success factors also enable disabled people to access tourism education as the success factors can guide and facilitate the co-creation of a non-disabling education environment. The ATHCD model provides a basis for co-creating a non-disabling tourism education environment. The success factors in figure 1 provide insights into the influence of national tourism education policymakers on the implementors, the tourism education providers for accessible tourism education. It implies that sustainable and resilient accessible tourism education thrives when tourism education planners establish meaningfully engaged DPOs. Such can facilitate the development of mainstream accessible tourism education:

- Policy, procedures, and processes (teaching and learning frameworks included)
- Standard guidelines uphold access, independence, dignity, and choice to acquire tourism qualifications.

The model assumes that a consistent bottom-to-top dialogue among stakeholders before, during, and after implementing disability inclusion at the grassroots where the impact is felt, monitored, and evaluated at the education-business level is essential. Figure 1 illustrates success factors that are explained as follows:

Non-disabling tourism education and industry governance refer to the regulatory systems and processes that foster interactions of an organised society's laws, norms, power, or language over socioeconomic ecosystems. In this case,

South Africa's tourism education is under the jurisdiction of the Department of Higher Education and Training (DHET) and the National Department of Tourism (NDT). Hence the success factor mentioned above can be implemented by the following steps:

- Step 1: the DHET and NDT should amend and synchronise policies into mainstream documents and legal instruments. Such enhances a clear and enforceable mechanism that co-opts competencies that would address social injustices within the tourism knowledge and skills empowerment. As indicated in figure 1, the public authorities' role is to create non-disabling tourism legislative frameworks (laws, by-laws, policies, rules, regulations, and directives).
- Step 2: Tourism education providers and the local government structures should partner with the citizens (civil society), traditional and formal leadership, and civil society organisations in the co-design, co-creation, co-implementation and co-monitoring of disability inclusion. In addition, the above is crucial when implementing repositioning strategies, education and awareness to address the imbalance of views on access to formal tourism education to embed the inclusion of disabled people.
- Step 3: DHET and quasi-public authorities should provide overarching toolkits and action plans to guide tourism education, including curriculum and staff development to incorporate disability inclusion.

Non-disabling (accessible) tourism knowledge development and dissemination refer to the success factors that address existing tourism education flaws to establish accessible tourism education. The current tourism teaching resources have a void in mainstreaming disabled people. This conveys challenges in the creation of non-disabling teachable tourism skills and knowledge. On the one hand, this void discourages tourism educators from creating systemic nondisabling teaching and learning-interactive space. On the other hand, there is no support from the higher education system regarding tourism curricula, content, and delivery mechanisms (teaching and learning methods). There is a relationship between tourism educators' capacity (knowledge and skills on disability inclusion) and the ability to develop comprehensive expertise on disability inclusion among the learners. Knowledge plays a role in co-creating and mitigating challenges when making a non-disabling (accessible) tourism education environment. The knowledge includes information to help disabled people to exercise their choice of tourism. Unless tourism educators acquire capacity (knowledge and skills on disability inclusion), the ability to develop comprehensive expertise on accessible tourism education will remain an issue for debates, with minor changes. Nonetheless, tourism education providers should amend policies towards mainstreaming skills and knowledge on disabled people through:

- reviewing tourism curricula, content, and teaching methods toward the least restrictive teaching and learning.
- encouraging tourism educators/researchers to research and publish knowledge rooted in partnerships and collaborations on disability inclusion with disabled people.
- developing teachable/teaching resource materials to have content on disability and inclusion.
- developing universal designed instructions/universal teaching methods to foster teaching and learning of disabled and non-disabled learners in a shared virtual and physical space.
- creating a teaching and learning environment that upholds interactive exposure among disabled and non-disabled people for the comprehensive understanding and interpretation of disability throughout the learning processes at the institution. At the same time, it implies the need to initiate tourism education-industry-disabled people dialogues to address employable accessible tourism competencies needed for accessible tourism labour and consumer markets.

Accessible tourism community qualitative and quantitative value addition and beneficiation comprise an optimised tangible and non-tangible perceived actual and potential value (Makuyana & Saayman, 2018). Society is the source of tourism (labour and consumer) markets. Therefore, Human Capital Theory advises that education engraves quantitative and qualitative value addition and beneficiation (extrinsic and intrinsic) (Baptise, 2001). Thus, tourism education can enhance beneficiation by acquiring the capacity to handle disabled and non-disabled peers.

Non-impaired and impaired persons' tourism participation should foster inclusive education and industry. The mentioned model seeks to enhance equitable access and acquisition of skills in tourism education for fair involvement and empowerment of the society and workplace (Makuyana & Saayman, 2018). Accommodating disabled people can bridge the 'silence' maintained towards sustainable inclusion and accommodation approaches in tourism education (Makuyana & Saayman, 2018). As highlighted by the results of Bisschoff and Breedt (2012), Buhalis and Darcy (2011), Chikuta et al. (2017), Darcy (2010), Darcy and Buhalis (2011) and Snyman (2002), impairments (temporary and permanent) are a life phenomenon. In support of the above notion, the twenty-first-century high-tech education and value chain uphold the use of assistive, supportive devices (assistive decision-making systems included) and support structure for everyone. Hence, the essence of the accessible tourism human capital development model is to inform sustainable socioeconomic participation of humans regardless of whether or not having impairments.

The implementation of disability inclusion should enhance accountability and enforceability while addressing results from disabled people's needs analysis. It makes disability inclusion be tracked using monitoring and evaluation criteria

throughout the different levels of governance (national, provincial, and local). This makes the inclusion of disabled people (re)positioned as normalcy within socioeconomic spheres of the multi-facets of the tourism value network through tourism education. In that case, accessible tourism education can create information as primary and secondary knowledge sources that contribute to repositioning strategies like education and awareness using media and social media (Makuyana & Saayman, 2018). According to Makuyana (2020), stereotyping perceptions, attitudes and behaviours toward disability and disabled people are changeable by an inclusive narrative within the education environment. The following section explains the applied research method used for the study.

4 Approach

This chapter is an element of an overall unpublished doctoral study that adopted a qualitative approach inspired by Creswell and Poth (2018). The study gathered participants' perspectives, and reality emerged from their work experience toward accessible tourism education that prepares learners for future accessible tourism. The target population comprised all educators and organisations for disabled people in South Africa. As advised by Creswell and Poth (2018) and Smith (2012), purposive sampling was used to recruit participants. The sample size was 17 tourism educators and six national representative organisations of disabled people in South Africa. The data collection tools were in-depth face-to-face interviews and key informant focus group discussions (Alshenqeeti, 2014). The participants had knowledge and expertise in tourism education and the disability sector. Based on the extant literature, the interviewer asked the following questions to approach the overall research questions:

- What are the occupations and work experiences of the participants?
 The aim of this question was validate the data source in terms of its suitability to receive the desired narratives that embed lived experiences missing in the extant literature.
- Do disabled and non-disabled people access tourism education (skills and knowledge) to be competent when handling disabled people in tourism?
 This question attempted to gather data missing in the existing literature that reflected limited access and misconception about disabled people and their desire to participate in tourism.
- What are the participants' perceived success factors for accessible tourism education?
 The last question attempted to gather opinions towards the greater inclusion
 - The last question attempted to gather opinions towards the greater inclusion of disabled people in tourism education.

The data collector interviewed 17 tourism educators who have more than six years of work experience at their workplace. Moreover, the interviewer reached six disability activists (leaders) from organisations for disabled people in South Africa using key-informant focus group discussions. The latter were more re-

laxed about expressing genuine opinions while being with peers who shared similar situations and personal experiences. Hence, the interviewer conducted the key informant focus group discussions in the participants' boardrooms at their respective organisations.

The collected data were analysed using Creswell's (2014) qualitative data analysis framework. Data saturation was reached after seventeen face-to-face in-depth interviews and two key informant focus group discussions which had a total of six participants. The interviewers recorded all the interviews to uphold the trustworthiness of the data, as Alshengeeti (2014) recommended. The authors transcribed the gathered data into text. Data were cleaned by reading several times while uncovering insights and perspectives of participants using inductive and deductive coding as advised by Graebner et al. (2012). The authors then organised and prepared a thematic analysis using a coding framework developed from the literature reviewed (theoretical framework) in this study as advised by Eisenhardt cited in Gehman et al. (2018). The authors used interpretive coding to fragment and reorganise data. At the same time, they were identifying contextualised themes and decontextualising researchers' experiences, as advised by Miles et al. (2013). The authors then re-read the codes and underlying data while grouping the codes (themes and constructs) into categories based on thematic or conceptual similarities, as Charmaz (2014) advised.

The authors developed analytical memos as part of the researchers' reflections during coding concerning the codes, the phenomenon, the informants, and their interrelations as bridging the distinctions between coding, analysis, and results, as advised by Saldaña (2015). The authors developed these memos based on intuition, hunches, and serendipitous occurrences related to disability inclusion in tourism education. While the coding process and analytical memorising enable the emergence of patterns in the data, they only help and do not determine them, as advised by Saldaña (2015). Atlas.ti.8 was used as a computer-aid analytic tool that allows immersing data for in-depth analysis. This research led to the identification and elaboration of an accessible tourism education environment for the future of accessible tourism.

5 Findings and Discussion

The findings show participants shared similar and contrasting views, as presented below.

1. Access to the acquisition of skills and knowledge to serve disabled people in tourism

The findings reflect all 17 tourism educators' narratives as consistent in that tourism education is for everyone. However, it was acknowledged that the curriculum, content, delivery, assessment, and outcomes do not explicitly incorporate disability or accommodate disabled people. In contrast, six leaders of DPOs view tourism education as fostering systemic exclusion of disability and

disabled people from accessing and acquiring tourism competencies to handle and manage disabled people in tourism.

All 17 tourism educators' narrative reflects the low participation of disabled people due to a lack of interest in studying for a tourism degree. For example, only two disabled students pursue the said degree with the School of Tourism Management at North-West University in South Africa. A contrast emerged from the six gatekeepers of disabled people who opine that tourism education is inaccessible to disabled students because the educators are reluctant to engage them in disability inclusion. Nonetheless, all 17 educators acknowledged the dilemma they experienced in teaching and enhancing learning for both disabled and non-disabled students concurrently. The six leaders of DPOs and 17 tourism educators agree that disability inclusion in tourism education is relatively new, intuitive, and sympathy-skewed. 17 tourism educators concurred that tourism education is void of knowledge and human capital capacity on disability. Moreover, all 23 participants agreed that training/skills development is crucial for accessible tourism education.

Six leaders of DPO's responses reflect that access to acquire tourism competencies has intrinsic and extrinsic value addition to disabled individuals. Hence, staff development needs to equip know-how on disability inclusion (Gröschl, 2011). 17 tourism educators had mixed feelings about acquiring disability know-how. Eight tourism educators opined that there is no statistical evidence for them to stretch themselves and develop such competencies. The other eight shared a similar view with six leaders of DPOs that creating sustainable, accessible tourism education is imperative for the future of tourism for everyone. Only one tourism educator was not sure how he felt in this regard.

All the 23 participants from both groups concurred that accessible tourism education could give disabled learners access to tourism education. Hence, the inclusive communicable message that provides information to prospective disabled and non-disabled people is critical in enrolling learners who have decided to acquire professional tourism competencies for the tourism industry.

2. Willingness and buy-in to invest in research on disabled people in tourism

Tourism educators' narratives show the lack of interest in either research or investing in the investigation to understand disabled people for accessible tourism education. All sampled educators explicitly expressed the inadequacy of either facts or statistical evidence for an argument toward accessible tourism education. Fifteen educators explicitly expressed concern if disabled people can complete the tourism programs. The above contrast access tourism researchers who believe disabled people are heterogeneous and should be given choices to participate in tourism as supported by professional service delivery.

All participants from both groups concurred on the need for a sector-based toolkit and action plan for tourism education providers. Such would guide disability-inclusive content, teaching and learning policies, among other policies that enhance the implementation of accessible tourism education. In addi-

tion, all six gatekeepers discouraged the separation of mainstream policies and disability policies within one learning institution because it brings confusion when implementing and monitoring an accessible tourism education environment.

3. Co-creation of an inclusive learning environment for learners to acquire the know-how to handle disabled people

All 23 participants from both groups perceived the need for disabled peoples' gatekeepers and tourism education providers to forge dialogues to develop and adopt LRTL and expertise to cater to disabled and non-disabled learners within same-shared teaching and learning space. Six disabled peoples' gatekeepers believe inclusive skills and expertise can build resilience, capacity, and capability to handle and engage disabled learners and colleagues in tourism. All 23 participants from both groups recommend collaborating to enhance research, exchange programmes, interactive exposure, and visits where disabled people participate in tourism, which can change the narrative for accessible tourism education. The above share similarities with Luiza's (2010) and Disabled World's (2016) findings, which reflect that interactive exposure with socioeconomic active disabled people and knowledge of disability enhance proactive and reactive mechanisms towards engaging such people and their support structures.

Six disabled people's gatekeepers perceive the need to create an environment inclusive of the educational needs of disabled and non-disabled learners to achieve measurable, accessible tourism education (learning) outcomes. On the one hand, ten tourism educators feel uncomfortable with reactive responses in creating an inclusive learning environment whenever a disabled student discloses their impairment(s). On the other hand, seven educators paid more attention to physical environmental accessibility. Generally, teaching methods, curriculum, content, and learning outcomes have not received as much attention as gatekeepers want for the inclusion of disabled people in tourism. Findings also concur with Ndlovu (2019) that inclusion includes universal designed instructions that enhance teaching and learning while addressing different learners' needs without using a 'special needs' approach.

4. Perspectives of tourism educators and gatekeepers on the inclusion of disabled learners

17 tourism educators view disabled learners as leading to extra costs within the tourism education system and quickly regard disabled learners as unable. While six leaders of DPOs feel disabled learners are regular learners who are part of diversity among the cohort. Hence, educators cannot question ability before allowing individuals to participate and learn to exercise choice while pursuing potential and willingness to try.

A model that summarises the participants' perceived success factors that contribute to accessible tourism education is presented in figure 2. It shows the following interactive success factors that enhance accessible tourism education:

- the co-creation of disability-inclusive skills and knowledge (content),
- disability-inclusive education planning approaches,
- disability-inclusive legislative frameworks,
- disability-inclusive education providers' marketing and communication using communicable language and media,
- networking and collaborative relationships between the education sector and disability sector,
- investment in continuous research to understand the needs of disabled people in tourism, and
- disability-inclusive teaching and learning methods, processes, and procedures within the tourism education environment.

The implementation should be monitored and evaluated at the local-tourism education provider (community) level by the organisations of disabled people and educators for a balance on social return on investment assessment and impact-driven assessment. The interactive factors thrive if educators and civil society understand disability and acquire know-how in handling disabled people in tourism.

6 Conclusions

The chapter aimed to contribute to questions on the accessibility of tourism education (skills and knowledge) to prepare disabled and non-disabled learners to handle disabled people in the tourism industry. The findings show that educators and disabled people's gatekeepers agree that the current formal tourism education is inaccessible to disabled learners and does not prepare all learners to handle disabled people in tourism. Therefore, there is a symbiotic relationship between know-how about disability, educators' view, capacity and readiness to attend to disabled people in tourism. Hence, if tourism education is not preparing learners to be able to handle disabled people in tourism, intervention would be essential. Accordingly, success factors have been postulated through a sustainable and resilient accessible tourism education model that would contribute to equipping learners to handle disabled people in tourism. Furthermore, participants concurred that there is a need to understand the tourism needs of disabled people. Such can enable mainstream tourism education to synchronise teaching methods, content and resources (educators included) for training. Nonetheless, a misunderstanding emerged from the existence of a tourism education policy on disability that is not clear on accountability on inclusion before, during and after training. The chapter recommends the co-creation of tourism education towards accessible tourism education through access and acquisition of tourism competencies by all learners. In addition to that, the growth of accessible tourism due to professional know-how in managing access-need tourism market segments would be enabled. Consequently, this will contribute to the future of accessible tourism education. However, the study is limited in not having all public and private tourism stakeholders' perspec-

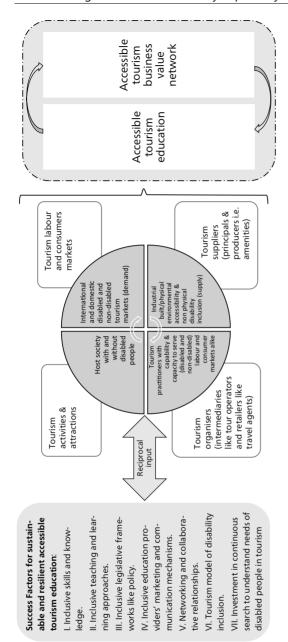


Fig. 2: Model for success factors for sustainable and resilient accessible tourism education

Source: Authors' work

tives. Therefore, it is recommended that future studies bring up such a consolidated view when assessing disability inclusion in tourism education.

Ethical consideration

This paper is a part of a comprehensive study conducted by Makuyana (2020), and responses of tourism educators and DPOs (gatekeepers) only contributed to the development of this chapter. The study obtained ethical clearance from the North-West University through the EMELTEN-REC. The Ethics No. is NWU-00248-18-A2.

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Part 4: Towards Sustainable and Resilient Tourism Futures: Strategies to Overcome COVID-19 Induced Issues

Marna (Herbst) Swanepoel, Peet van der Merwe

Motives-Based Clustering of Scuba Divers at Ponta do Ouro, Mozambique

Abstract: Marine tourism forms a sizable part of the tourism industry, of which scuba diving is a popular marine tourism activity. One such scuba diving hot spot is Ponta do Ouro, Mozambique. This research aims to segment the diverse market of Ponta do Ouro, grounded on divers' travel motives. An exploratory research design was used with a quantitative method to collect the data and 313 valid questionnaires were completed. A factor analysis identified five motives as factors. Five cluster market segments derived for the market of scuba divers of Ponta do Ouro, namely socialisers, novice enthusiasts, casuals, advanced fanatics and novice fanatics. The results undoubtedly show that the scuba diver market in Ponta do Ouro can be segmented. The profile and travel motives of the divers' market to Ponta do Ouro have been identified, and the different market segments of the divers to Ponta were determined.

Keywords: Marine tourism, Scuba diving, Travel motives, Marketing, Segmentation

1 Introduction

Tourism is seen as one of the world's largest industries, with marine tourism being one of the fastest-growing types in the industry (Cooper & Hall, 2013; Damanaki, 2016) and one would expect an increase in research in the field. In the tourism industry, marine tourism is the only tourism sector based on tourists and visitors who take part in both active (scuba diving, snorkelling) and passive (sunbathing) leisure. These tourist vacation expeditions or activities are on or in shorelines, coastal waters and their immediate hinterlands (Nulty et al., 2007). The marine environment is a prime venue for undertaking a variety of activities such as boating, deep-sea fishing, kayaking, surfing, free diving, snorkelling and scuba diving (Garrod & Wilson, 2003; Higham & Lück, 2008; Moskwa, 2012; Seymour, 2012; Orams, 1999). Last mentioned is also the focus of this research, namely scuba diving.

The word scuba is an abbreviation for "self-contained underwater breathing apparatus", which means equipment humans use to breathe underwater (Dimmock & Musa, 2015, p. 52; Garrod & Gössling, 2008, p. 92). The scuba diving industry is successful in creating business and job opportunities (Dimmock et al., 2013; Lucrezi et al., 2017). Ponta do Ouro is a famous scuba-diving place in Mozambique where the popularity of scuba diving has increased over the last two decades (since the end of the 25-year Civil War) (Lucrezi et al., 2017).

Ponta do Ouro (figure 1), also Ponta d'Ouro in English, meaning tip of gold, is situated along the southern coast of Mozambique and forms part of the PPMR (the Ponta do Ouro Partial Marine Reserve). Ponta do Ouro represents the

southernmost part of the marine reserve; the town is located 15 km from the South African Kosi Bay border post (Lucrezi et al., 2017; Mozambique Happenings, 2017). The PPMR was established in 2009 and is currently under evaluation by the United Nations Educational Scientific and Cultural Organisation (UNESCO) to become a world heritage site. Ponta do Ouro and the PPMR are sought-after destinations for scuba diving, and in earlier years, before the establishment of the PPMR, the majority of tourists to this area were scuba divers (Bjerner & Johansson, 2001; Daly et al., 2015; Lucrezi et al., 2017). Lucrezi et al. (2017) indicate in their research that half of the tourists to Ponta do Ouro are scuba divers, this contributes to a large percentage of tourists. As a result, there are numerous businesses such as diving charters making a living from scuba diving (Dimmock et al., 2013).

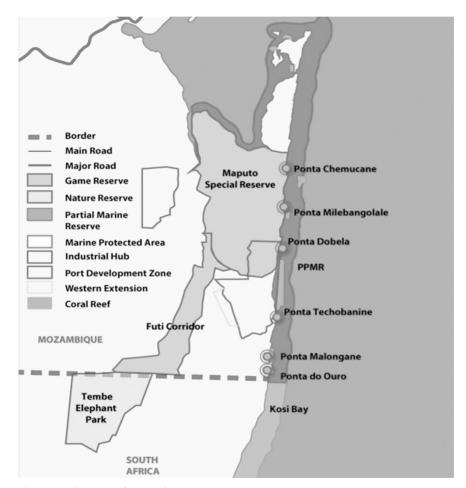


Fig. 1: Locality map of Ponta do Ouro

Source: Symons, 2017

With the just mentioned in mind, it is essential to conduct market segmentation research to ensure that scuba diving in Mozambique, in this case, Ponta do Ouro, is sustainable. Market segmentation can help with identifying different markets as well as the high spenders, and this makes it easier for product owners to directly target these individuals to come and dive, thus making it more sustainable, especially with the threat of market stagnation, as indicated by Lucrezi et al. (2017). Market segmentation assists in sustainability by making it easier for product owners (dive operators) to target the correct market. Therefore, less money is spent unnecessarily on marketing and further attracts more tourists that contributing to profitability (Lucrezi et al., 2017).

Determining the different market segments (clusters) of scuba divers visiting Ponta do Ouro will help diver operators to develop better marketing strategies and products (Middelton, 1996; Moscardo et al., 1996). Understanding the market segments plays a vital role in successful business management since it helps to identify and satisfy the different market segments. Satisfied tourists can become loyal tourists, who, in turn, will motivate other potential tourists to travel to a specific destination, in this case, Ponta do Ouro (Ranjbarian et al., 2017). One method to segment markets is by using tourist travel motives. In the past, this form of segmentation has been successfully applied by Dolnicar (2006), Herman et al. (2016), Mapingure and Du Plessis (2018), and Tschapka and Kerns (2013). Therefore, this research aims to segment the diverse market of Ponta do Ouro, grounded on divers' travel motives. Tschapka and Kerns (2013) indicated the importance of using motives for theory development and segmentation of tourist markets.

2 Literature Analysis

The literature analysis focuses on the following key aspects: marketing, market segmentation, travel motives and previous research conducted in market segmentation (cluster analysis).

2.1 Marketing

Marketing is among the most critical factors of a successful business. Marketing aims to maximise growth and generate profit over time (Saayman, 2006). Marketing is a process of matching the desires and needs of consumers with what a business offers, intending to distribute ideas, goods and services and finding opportunities to create exchanges, which will satisfy customers' (here divers') unmet needs (Dolnicar et al., 2018; Pike, 2008). Marketing management is defined as selecting the target markets (clusters), keeping them, and increasing the number of customers by creating high-class customer value (Kotler & Keller, 2012). The main aim of marketing is to help customers or tourism product owners, such as scuba diver operations to find and create a competitive advantage above their competitors, which in turn will help them to grow and excel their product; therefore, understanding that marketing principles lead to better producers and for consumers (Burnett, 2008).

2.2 Market Segmentation

Palacio and McCool (1997, p. 236) define market segmentation as "a process by which a large, potentially heterogeneous market is divided into smaller, more homogeneous components or segments". The process of market segmentation is used to detect potential tourists and to create specific tourism products and experiences that satisfy their needs and demands. It is also beneficial in terms of the contribution it can make to the marketing of tourism. Mortimer et al. (2009, p. 10) echo this by stating that a "market segmentation strategy is a specialisation strategy in which you target and cater to a narrow type or group of customers." This strategy provides the advantage that allows one to tailor the product (or service) and one's entire marketing effort to a clearly defined or smaller group with specific characteristics. McDonald and Dunbar (2004, p. 34) define market segmentation as "the process of splitting customers or potential customers in a market into different groups or segments within which customers share a similar level of interest in the same, or comparable set of needs satisfied by a distinct marketing proposition." This process attempts to explain the differences between customers, turn these differences into an advantage, and assist in determining the right marketing mix. Segmentation is also a creative process with the purpose of satisfying customer needs and not those of the company or business. Through this, the identification of new opportunities for markets, products and services can transpire (McDonald & Dunbar, 2004).

Market segmentation lies at the core of successful marketing. It can be referred to as a decision-making tool and key building block in the fundamental task of selecting target markets and designing an appropriate marketing mix (Dolnicar et al., 2018; McDonald, 2010). According to Dolnicar et al. (2018), and Holloway and Robinson (1995), market segmentation can achieve specific goals. These include the following:

- Identifying where a business currently stands and where they want to be in future.
- Reflecting and highlighting what a business is good at (compared to their competition).
- Reflecting on whether an existing product should be adapted and remodelled, or whether a new product should be presented.
- Gaining insights into the wants and needs of customers.
- Spending patterns of customers.
- Providing a better understanding of customers and their differences.
- Achieving market dominance in the long term.

Selecting an appropriate basis is a key step in market segmentation, and establishing a suitable basis requires a simple understanding of the chosen market. A variety of bases is used to identify and apply segments, and marketers can use a single basis for segmentation, more than one basis, or a combination of bases. The most common bases for market segmentation include demographic, geographic, psychographic, lifestyle and behavioural segmentation (Dolnicar et al.,

2018). Demographic features identify individual consumers or, for instance, scuba divers and include features such as gender, age, income, race, socioeconomic status, and family structure of divers (Dolnicar et al., 2018; Holloway & Robinson, 1995; Saayman, 2006). Geographic features include information obtained on where people live and can be seen as the original market segmentation criteria (Dolnicar et al., 2018; Kotler et al., 1999; Saayman, 2006). Psychographic segmentation means that tourists or customers are divided into different groups based on their psychological traits and aims to provide an understanding of them in terms of the way they live, personalities, which external factors they respond to, what they consider as important, and how they spend their leisure time (Dolnicar et al., 2018; Holloway & Robinson, 1995; Wedel & Kamakura, 2010). Behavioural segmentation marketers divide consumers (in this case scuba divers) into groups based on knowledge, attitude, use or response to a product. Behavioural segmentation can further be grounded on activities, frequency of use and loyalty. Behaviour variables include benefits sought by the buyer, occasion, readiness to buy a product, user status, usage rates, loyalty status, motives and attitude towards the service or product (Dolnicar et al., 2018; Strydom et al., 2000; Wedel & Kamakura, 2010). For this research, motives were used as a behaviour segmentation method.

2.3 Travel Motives

Travel motives refers to a set of needs that cause a person to participate in a tourist activity (Swanson & Horridge, 2006). Geen et al. (1984; cited in Chen et al., 2008) define travel motives as the operation of inferred intrapersonal processes that direct, activate and maintain behaviour. Thus, travel motives refer to the reasons why tourists decide to engage in something, the time they are willing to expend to sustain the activity and how intensely they will pursue it (Dörnyei, 1994; Mill & Morrison, 1985).

Mainly, studies on travel motives do attempt to answer the question 'why': Why do tourists choose to visit a specific destination? Why do these tourists return to a certain destination? Why do people travel in general? Travel motives as an integral part of travel behaviour are the starting point of decision-making and a key element for understanding it. What motivates tourists differs from one person to another. There are three main reasons for investing in the understanding of travel motives. Firstly, they are elements in designing product or service offers. Secondly, travel motives have a close relationship with satisfaction. Thirdly, they are key elements in understanding the decisions of visitors (Crompton & McKay, 1997; Li et al., 2016). The studies of Bentz et al. (2016), Edney (2012), Geldenhuys et al. (2014), Kler and Tribe (2012), Lucrezi et al. (2013), and Meisel-Lusby and Cottrell (2008) state that, by understanding divers' motives and what makes them enjoy their dives, can assist operators with proper dive tourism management, market segmentation, developing a better product and gaining a competitive advantage.

Research conducted in Sodwana Bay on two different occasions, both of which had focused on diver motives, found that divers had four primary motives for diving, namely personal challenge, discovery and exploration, devotion, and relaxation and escape (Geldenhuys et al., 2014). Lucrezi et al. (2013) found that, in general, divers visiting Sodwana Bay do so to relax, to get away, to spend time with family and friends and to have fun. Research conducted by Tschapka and Kerns (2013) on scuba divers in Australia identified seven different motives al components, namely personal challenges, adventure, relaxation, novelty, stature, learning and hunt. Edney (2012) found that divers in Micronesia primarily do so to enjoy the underwater environment and to see artefacts and shipwrecks. Kler and Tribe (2012) reveal that the reason for diving is because of the 'feelgood feeling' that goes with it and that diving promotes positive experiences that lead to "the good life". Research was done in the Florida Keys. USA, distinguished between the motives of beginner divers and more experienced divers, and the results show that beginner divers' motives were for the challenge of scuba diving and the experience that goes with it, whereas more experienced divers, on the other hand, want to see shipwrecks and use their scuba gear (Meisel-Lusby & Cottrell, 2008). In these studies, it is clear that the travel motives differ between dive destinations, which supports why research on the travel motives of scuba divers is essential for different diving sites, in this study Ponta du Ouro.

2.4 Scuba Divers Market Segmentation

Limited studies were found on the market segmentation of scuba divers. The following were accessible: The first study that was investigated was that of Ellilä (2017). This research examined the consumption behaviour of Chinese scuba divers. In this study, the researchers made use of age and gender to profile and segment the market. The segmentation or profiling applied to the divers' behaviour regarding scuba gear, brand of scuba gear and attitudes towards technology. The research did indicate that there are differences between the age and gender of scuba divers. Therefore, this research's point of departure differs from research currently under discussion, where the focus is on travel motives as a segmentation method.

Research from Bentz et al. (2016) on scuba divers' motives identified four clusters: socialisers, shark and manta divers, biodiversity seekers, and explorer divers. Findings show that the socialisers wanted to spend time with family and friends, seek adventure and expand their knowledge, while the other clusters were motivated to dive by the presence of marine life such as sharks and manta rays, rock formations, an abundance of fish species and the underwater visibility. This research is in line with what this study would like to determine, and it would be interesting to see what clusters derive from this study

The research of Tschapka and Kerns (2013) used cluster analysis with k-means clustering to segment the participants and then make comparisons between the clusters. Cross-tabulation with an exact Pearson chi-square test was conducted

to test whether there were significant differences. Based on participants' involvement, five clusters emerged: The low-interest challenge seekers, the involved socialisers, the challenges seeker beginners, the detached pros and the self-expression-seeking socialisers. Again, this is in line with what this research would like to determine, and it would be interesting to see what the current study results will produce. As there are so few studies on scuba divers' travel motives and clusters, this research will therefore add to the knowledge in this field, making this research important to the diving fraternity.

3 Method

3.1 Research Design

For this research, the researchers made use of a confirmatory research design with the selected method of quantitative research using questionnaires to gather the data. A non-probability sampling method, more specifically convenience sampling, was used. This method is ideal for this research as it refers to situations where the selected population elements are conveniently and easily available (Maree & Pietersen, 2007); therefore, it was the available scuba divers at each dive operator within the case study destination who formed part of the research.

A structured questionnaire was used to collect data that were problem-specific to this study. The development of the questionnaire was based on research conducted by Swanson and Horridge (2006); Geen et al. (1984) cited in Chen et al. (2008); Pearce (1982) cited in Yoon and Uysal (2005); Mill and Morisson (1985) and Dörnyei (1994). The questionnaire included several sections relevant to the study and was determined by the aim of the research. Section A captured socio-demographic and geographic details (visitor profile), and section B focused on the divers' motives for diving at Ponta do Ouro. The Likert scale that was used to measure motives for diving was a five-point Likert scale, where 1 = strongly disagree and 5 = strongly agree.

For this research, the population consisted of the divers at the selected dive operators, at the time of the survey, in Ponta do Ouro. The selected dive operators were Back to Basics Adventures, Blowing Bubbles, Gozo Azul, Oceana, Scuba Adventures and Whaler. Trained fieldworkers were stationed at different dive operators. The data were gathered during the school holidays of April 2017, October 2017 and April 2018. The fieldworkers approached divers after a dive and introduced themselves while explaining the research, asking the scuba divers if they were willing to participate. Those willing to participate were handed a structured questionnaire, which was collected once completed. Four hundred and forty-one (441) questionnaires were distributed, and a total of 313 were completed and usable.

Data were captured, making use of Microsoft Excel. The Statistical Program for Social Sciences (SPSS) was used. A factor analysis was conducted to indicate the travel motives that were considered important to the respondents. Factor analysis (Principal Component Analysis, PCA) can be explained as a method used to

uncover the dimensions of a set of variables by determining which items, referred to as factors, 'belong together' in the way they are similarly answered, and the purpose of a factor analysis is to describe the variance/covariance relationship among these factors (Maree, 2016; Terblanche, 2012). A cluster analysis was conducted and can be described as a confirmatory analysis to establish how this research compares to previous work done in this field (Statistics Solutions, 2018). An analysis of variance (ANOVA) was conducted to determine whether there was any significant difference between respondents' motives. Maree and Pietersen (2007) confirm that an ANOVA test, combined with Tukey's multiple comparison test, is done when one wants to compare independent groups and is used to measure the variables that need to be compared between independent groups based on their average scores on a quantitative variable.

3.2 Ethical Clearance

The research went through the following ethical clearance process: the research proposal and questionnaire were submitted to a scientific committee of the research entity. After acceptance by the committee, the university issued the researchers an ethical clearance number. The ethical number for this research is EMS2016/11/04-02/09.

4 Discussion of Results

The results section consists of the socio-demographic results, travel motives and cluster analysis to determine the different market segments.

4.1 Socio-Demographic Results

The socio-demographic results are discussed in the following paragraphs below starting with the gender of the respondents, moving to the age, level of education, marital status, whether the respondents have visited Ponta do Ouro before, their dive qualification and lastly, how long the respondents have been diving with the number of dives they have logged.

1. Gender

The majority of the respondents were male (64%), while 36% were female. This is in accordance with the results of a study done in the Florida Keys by Meisel-Lusby and Cottrell (2008), who identified that the majority of scuba divers are male (78%). Lucrezi et al. (2018) researched divers in Portofino, Italy, and similar results were derived, which indicated primarily male respondents. Geldenhuys et al. (2014), who conducted research at Sodwana Bay, South Africa, found that 62% of divers visiting Sodwana Bay are male. It is clear from these findings that scuba diving is a male-dominated activity.

2. Age

The profile of the respondents (divers) are as follows: They are younger adults between the ages of 20 and 30 years (40%), which is in accordance with the

work of Giddy (2018), where the majority of the respondents were in the same age group. The average age was 36 years for this study. Research by Meisel-Lusby and Cottrell (2008) and Seymour (2012) indicated divers to be in their mid-thirties.

3. Level of education

Moving from age to the level of education, the majority of the respondents have a degree (36 %), diploma (27 %) or were post-graduates (19 %). This agrees with Seymour (2012) and Tschapka and Kerns (2013), whose results show that the biggest percentage of their respondents have a diploma or degree. Therefore, one can conclude that scuba divers are well educated.

4. Marital status and Origin

52% of the respondents were married, followed by 47% who were not. This is in accordance with the results of Schoeman et al. (2016), who also found that 46% of scuba divers are unmarried. 81% of the divers in Ponta do Ouro are South Africans, while 9% are from European countries (Austria, France, Germany, Netherlands, Norway, Portugal, Scotland, Spain and Switzerland).

5. Previous visitations

51% of the respondents had visited Ponta do Ouro before for diving, while 49% indicated that it was their first time visiting for diving. Those who visited before indicated between one and five times (79%). The respondents' average number of nights stayed was 5.4 nights for this study. Research by Geldenhuys et al. (2014) showed that scuba divers tend to be loyal to diving sites.

6. Dive qualification and number of dives completed

The majority of the respondents were open water divers (36%), with the next certification level of advanced divers at 34%. Similar results came from research by Hammerton (2017) who showed that 38% of respondents were open water divers and 24% advanced divers. The most significant percentage of the respondents have been diving for five years (55%), whereas 4% have been diving for more than 20 years. The average number of previous dives for the respondent group was 259 dives. Research by Hammerton (2017) indicates that the average number of dives logged for scuba divers in eastern Australia is 213, and Saayman and Saayman (2018) found that divers in Portofino, Italy, did 401 dives. The current research showed that the average number of dives per year is 31, which agrees with Saayman and Saayman's (2018) results, with an average number of 31 dives per year for divers in Portofino, Italy.

4.2 Travel Motives of Scuba Divers

This section discusses the results obtained from the factor analysis of travel motives of divers to Ponta do Ouro. To determine the travel motives of scuba divers, factor analysis was conducted using a principal component analysis with

Oblimin rotation with Kaiser normalisation. Five factors were identified from 28 items labelled

- i. destination attributes,
- ii. dive site attributes,
- iii. personal interest,
- iv. socialise and relaxation and
- v. ease of access.

These factors accounted for 60% of the total variance explained. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .924, which is highly acceptable and the Cronbach's alpha coefficient ranges from .699 to .886. This indicates that all five factors have adequate construct reliability (a>0.6) (Field, 2009; Hair et al., 1995; Pietersen & Maree, 2007). The inter-item correlations range from .413 to .471 and the mean values from 3.7284 to 4.0373 with Factor 1 as the lowest and Factor 5 as the highest.

Five factors (travel motives) were identified. They are as follows: Factor 1, 'Destination attributes' (Cronbach's alpha is .886 with a mean value of 3.7284. This factor is ranked as the least important motives); Factor 2, 'Dive site attributes' (mean value of 3.9858 and the Cronbach's alpha is .793, making this factor the fourth most important factor); Factor 3, 'Personal interest' (Cronbach's alpha of .842 and a mean value of 4.0238, the third most important factor); Factor 4, 'Socialise and relaxation' (mean value for this factor is 4.0252 and the Cronbach's alpha is .777, making this factor the second most important factor) and Factor 5, 'Ease of access' (Cronbach's alpha of .699 and mean value of 4.0373, making it the most important factor) (table 1).

Tab. 1: Factor analysis for travel motives of scuba divers

Factor label Total variance explained: 59.53 %	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
	Destination attributes	Dive site attributes	Personal interest	Socialise and relaxa- tion	Ease of access
Ponta offers good shopping op- portunities	.832				
There is a variety of attractions to visit	.743				
Ponta offers quality restaurants	.651				
To meet new people	.628				
To participate in a diving course	.605				
To socialise with other divers	.495				
It was on my bucket list to dive here	.474				
I never know what to expect from each dive	.454				
To explore a new destination	.398				

Factor label	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Total variance explained: 59.53 %	Destination attributes	Dive site attributes	Personal interest	Socialise and relaxa- tion	Ease of access
The marine life is well protected in Ponta		.688			
To dive in an MPA		.557			
Ponta offers beautiful scenic beauty		.547			
Ponta is a world-class diving site		.519			
To learn more about specific marine species		.424			
To enhance my knowledge as a diver			689		
To escape from routine			686		
To develop my diving skills and abilities			663		
Dive operators adhere to safety regulations			649		
Good weather and climate			479		
Ponta offers a unique diving experience			454		
To rest and relax				732	
To experience peace and tranquillity				662	
To find relief from everyday tension				520	
To experience the exotic atmosphere of Ponta				490	
To spend time with friends and family				474	
Diving sites are easily accessible					656
Diving here is value for money					577
Ponta has quality beaches					401
Cronbach's alpha	.886	.793	.842	.777	.699
Mean value	3.7284	3.9858	4.0238	4.0252	4.0373
Inter-item correlation	.464	.436	.471	.413	.436

Extraction method: Principal component analysis with Oblimin-Kaiser normalisation Source: Authors' work

4.3 Cluster Analysis: Market Segmentation

A hierarchical cluster analysis was conducted to segment the market, using Ward's clustering algorithm based upon Euclidian distances. As indicated in figure 2, a five-cluster solution was selected; the results were used to identify the

clusters, as well as the significant differences (p<.05). This identifies groups with similar profiles of motives and strengths.

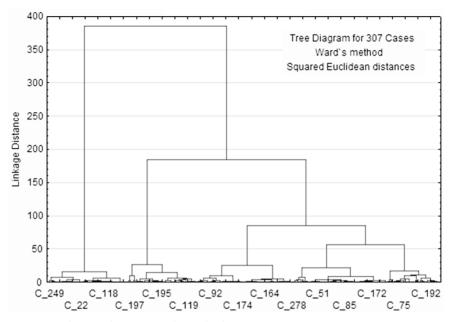


Fig. 2: Five-cluster solution - Ward's method

Source: Authors' work

Table 2 reveals the cross-tabulation of the demographic aspects of the divers.

From the results, it is clear that there are significant differences between the different five clusters regarding education and first-time visit. For Cluster 1, most divers' education status is matric, Clusters 2 and 3 have a degree and Clusters 4 and 5 a diploma. Clusters 1 and 4 are more regular visitors, whereas the other three clusters are mostly first-time visitor.

	Cluster 1 Socialisers	Cluster 2 Novice enthusiasts	Cluster 3 Casuals	Cluster 4 advanced fanatic dive	Cluster 5 Advanced fanatic dive	Pearson's Chi-square	Sig p-value
Gender	Male: 70 %	Male: 60 %	Male: 64 %	Male: 72 %	Male: 58 %	3.496	.478
Education	Matric 33 %	Degree 46 %	Degree 45 %	Diploma 35 %	Diploma 38 %	39.128	.001 *
Marital status	Married: 51 %	Married: 42 %	Married: 47 %	Married: 42 %	Married: 46 % Single: 46 %	23.469	.492
Occupation	Civil service: 30 %	Civil service: 46 %	Civil service: 46 %	Civil service: 32 %	Civil service: 46 %	58.370	.030 *
Country	SA: 91 %	SA: 90 %	SA: 81 %	SA: 70 %	SA: 75 %	19.290	.082
First visit	No: 74 %	Yes: 52 %	Yes: 65 %	No: 64 %	Yes: 55 %	20.899	.001 *
Dive certifi- cation	Advanced: 40 %	Open Water: 37 %	Open Water: 35 %	Advanced: 40 %	Open Water: 40 %	40.455	.145

Tab. 2: Cross-tabulation with Ward's method results for scuba divers at Ponta do Ouro

Source: Authors' work

Based on the ANOVA and Tukey's post hoc multiple comparison results for scuba divers at Ponta do Ouro, it is evident that the cluster does have significant differences. The difference between the clusters is found in the following: years diving, dives logged, dives per year and all the travel motives (destination attributes, dive site attributes, personal interest, social and relax, ease of access).

5 Discussion and Implications

From the results, five clusters or market segments were identified based on the travel motives of divers visiting Ponta do Ouro. These market segments will be discussed next:

Cluster 1 (market segment 1) is named 'socialisers' and is obtained from the fact that the most important motive for them visiting Ponta do Ouro is to 'socialise and relax'. Tschapka and Kerns' (2013) research on the market segmentation of scuba divers also identified a similar cluster, the involved socialisers. This cluster has dived for nine years plus and has locked the least number of dives (102 dives) of the five clusters. This cluster is primarily male (70%), originates from South Africa (91%) and has the highest married percentage (51%) of the five clusters with the youngest average age. This cluster stays the longest of the five segments, namely six days (table 2). It also was not their first visit to Ponta do Ouro (74%), and they have an advanced diver qualification. The marketing implication to attract this cluster is straightforward, namely to provide areas or facilities where this market can socialise and relax. This can be in the form of a bar and restaurant area at the dive operation. Dive operators who wish to attract this market can organise small events/entertainment in the evenings, such as

^{*} Value below .05: there is a significant difference between the mean values

Tab. 3: ANOVA and Tukey's post hoc multiple comparison results for scuba divers at Ponta do Ouro with effect sizes

4 & 5	0.16	0.24 **	0.23 **	0.49 ***	0.31 **	0.10	3.93***	3.97 ****	2.93 ****	2.78 ****	2.52 ****
3 & 5	0.05	0.15	0.11	0.29 **	0.27 **	0.26 **	3.07 ***	3.36 ***	3.07 ***	3.24 ****	2.20 ****
3 & 4	0.11	0.10	0.12	0.63 ***	0.47 ***	0.33 **	1.50 ****	1.42 ****	0.80 ****	0.34 **	1.14 **** 0.91 **** 2.20 ****
2 & 5	0.04	60.0	0.12	90.0	0.21 **	0.34 **	1.43 ***	1.35 ***	1.27 ***	3.12 ****	1.14 ****
2 & 4	0.12	0.16	0.10	0.52 ***	0.44 **	0.41 **	2.80 ***	2.22 ****	2.05 ***	1.33 ****	1.69 ****
2 & 3	0.01	0.07	0.02	0.21 **	0.08	0.12	1.91 ****	0.94 ****	1.79 ****	1.31 ****	1.09 ****
1 & 5	0.12	0.19	0.51 ***	0.44 **	0.30 **	0.52 ***	2.87 ***	1.46 ****	1.65 ****	0.81 ****	1.17 ****
1 & 4	0.27 **	0.48 **	0.29 **	0.14	0.49 ***	0.57 ***	0.44 **	1.71 ****	1.17 ****	2.11 ****	1.57 ****
1 & 3	0.16	0.38 **	0.40 **	0.61 ***	60.0	0.39 **	0.82 ***	0.57 ***	0.41**	2.13 ****	0.81 ***
1 & 2	0.16	0.32 **	0.39 **	0.48 ***	0.11	0.31 **	1.92 ****	0.26 **	0.80 ****	0.94 ****	0.15
Sig	.769	144	680.	* 100.	* 100.	* 100.	* 100.	* 100.	* 100.	* 100.	* 100.
F-ratio	0.454	1.725	2.040	9.870	7.099	4.869	206.486	127.267	123.745	158.407	82.387
Cluster 5 Advanced fanatic dive	36	9	1	9	318	41	4.5857	4.6644	4.7119	4.7483	4.6497
Cluster 4 Advanced fanatic dive	38	2	2	17	708	46	2.9256	3.2726	3.3553	3.4340	3.3270
Cluster 3 Casuals	37	2	2	4	118	28	3.5578	3.7723	3.7230	3.5973	3.8063
Cluster 2 novice enthusiasts	37	2	2	2	168	24	4.1077	4.1391	4.3013	4.0622	4.2137
Cluster 1 Socialisers	35	9	2	6	102	16	3.1473	4.023	3.9186	4.4314	4.1512
	Age	Nights in area	People paying for	Years diving	Dives logged	Diver per year	Destination attributes	Dive site attributes	Personal interest	Social & relax	Ease of access

* Value below .05: there is a significant difference between the mean values, ** small differences of mean values ($\geq 0.2 - \leq 0.45$), *** medium differences of mean values ($\geq 0.46 - \leq 0.79$), ****large differences of mean values (≥ 0.80)

Source: Authors' work

artists (singers), bands and comedians. These divers will be attracted by these small events, which allow for socialisation and enjoying accompanying divers.

Cluster 2 (market segment 2) is named 'novice enthusiasts'. Their main motive for visiting Ponta do Ouro is personal 'interest and accessibility'. The novice enthusiasts are 36 years of age and stay for five nights, which is shorter than the first cluster. They have been diving for only five years and have logged an average of 168 dives (third-most dives of the five clusters), with an average of 24 dives (second-lowest number) per year (table 3), which indicates that they are beginner divers, but enthusiastic about scuba diving. To attract this market segment, it is suggested to provide the opportunity to enhance their diving knowledge and skills. Therefore, a more advanced diver training course or information sessions about marine life will appeal to this market segment.

The third cluster (market segment 3) is named 'casuals'. The name is given to this group as a result of their travel motives, of which all motives had a low rating. They had the least number of years (4 years) diving and the second-lowest number of dives (118). They are new to the area (most are first-time divers) and have an open water qualification. 'Ease of access' was rated as the most important motive for visiting Ponta do Ouro (table 3), and they had the second shortest duration of stay at Ponta do Ouro. To attract this market segment is difficult, as they are not as serious about diving and one gets the feeling they just wanted to see Ponta do Ouro (64 % first-time visitors and ease of access are important). The best marketing strategy for this market can be by providing them with diving packages and highlighting the easy accessibility of Ponta do Ouro for South Africans (15 km from the border). The access road is also newly built.

The fourth cluster (market segment 4) is named 'advanced fanatic diver'. These divers have been diving the longest, ten years plus; they are advanced divers and had the most dives (average 700 dives). Tschapka and Kerns (2013) identified a cluster named the detached pros, which is similar to this cluster. The cluster of this research rated the travel motives identified the lowest (average 3 = neutral). Respondents' average age is 38 years and they are usually staying for five nights. This was not their first visit, with 64 % who visited Ponta do Ouro previously, indicating that these are experienced and skilled divers (table 3). The majority of respondents are male (72%), are married (42%), and have a diploma (35%). This segment of divers visiting the destination to dive, are active and committed divers. Dive operators must provide quality diving products with highly experienced diving masters or guides to attract this market or keep attracting them. A loyalty system can be considered for these divers, where they can get a discount on dives and accommodation or bonus dives. Added diver operators that invest in well-qualified and experienced diving guides can use this as an attraction for these divers. Working with reserve authorities and getting their approval to lower a shipwreck in the Ponta do Ouro bay might be a possible idea to attract this market. The wreck can be at a maximum depth of 30

metres, making this an advanced dive and a new attraction for diving. If the shipwreck is approved, it will also serve as a type of artificial reef over time.

Cluster 5, or market segment 5, was identified as a 'novice fanatic diver'. They obtained this name as they have been diving only for five years but have logged the second-highest number of dives and dive second most per year (logged 317 total dives and average 41 dives per year). This cluster rated all the identified travel motives the highest, with an average of 4 to 5 on a five-point Likert scale. The novice fanatics are once again male (58 %), have a diploma (38 %), 46 % are married as well as 46 % are single and come from South Africa (75 %). To attract this segment, one has to give the divers a mixture or blend of options, including diving packages, better training and skill development opportunities, and time to socialise and relax (highest rating). Quality diving products and good service can also attract this market, seeing that they are still novice divers, but 'fanatic' about the sport and have logged the second-highest number of dives per year as mentioned above.

Looking at the results from the research conducted and considering that unforeseen events and circumstances can happen, it can be said that the dive operators have to be resilient and able to adapt to the changing context, for instance regarding COVID-19. The resilience theory means that "change is fundamental and the only constant we can depend on" (Lew et al., 2020 p. 457). Out of the four phases, re-organisation, growth, consolidation and collapse of this theory, Lew et al. (2020) assume that systems do not need to move through all four and that the collapse phase can be avoided if the system (dive operators) maintain cultures of exploiting opportunities, rising from innovation and creativity. Particularly, local communities are severely impacted by the pandemic (Brouder et al., 2020). The dive operators of Ponta do Ouro ensure multiple job opportunities for families in the community. With the pandemic and no international travel, a great loss of income leads to a loss for the local economy. Within this loss, Brouder et al. (2020) are of meaning that the opportunity to rebuild tourism and to generate a sustainable income again exists, which will secure a more resilient and sustainable local economy again. It is important to note that the results of this research are mainly applicable to this research population of this study and should be carefully considered to generalise to the broader diving community as convenience sampling was used.

6 Conclusion and Recommendations

This research aimed to do a motives-based segmentation of the diver market visiting Ponta do Ouro. Five distinct clusters (segments) were identified. Therefore, the research was successful in its aim, and the main contributions of this research are the following: Firstly, the profile and travel motives of the diver market to Ponta do Ouro have been identified, and secondly, the different market segments of the divers to Ponta were determined. Thirdly, this information can now be used by Ponta do Ouro's dive operators to improve their products and develop better marketing strategies, especially post-COVID times.

Lastly, this research shows again that the diving market cannot be generalised as the diving market differs from dive site to dive site and each diving site or destination must conduct its own market segmentation.

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The Socio-Economic Impact of the COVID-19 Pandemic on Ecotourism: A Case Study of Wadi El Gemal National Park in Egypt

Abstract: The novel coronavirus (COVID-19) pandemic has impacted ecotourism and the local community in Wadi El Gemal National Park (WGNP) in Egypt. The pandemic has resulted in a substantial drop in park visitation, shutdown of local ecotourism businesses, and a loss of jobs and income sabotaging ecotourism's role in promoting ecologically sustainable activities in the park and improving the socio-economic conditions of the local community. The objectives of this research were to (i) document the impact of COVID-19 on ecotourism and the local community, (ii) outline COVID-19 coping and recovery measures for the community and ecotourism sector; and (iii) develop a conceptual model outlining community response to the pandemic and the collaborative management strategies adopted. Literature review and expert opinions were adopted as data collection methods. This chapter sheds light on the socio-economic implications of COVID-19 on WGNP's ecotourism sector, while offering initiatives for increasing shock resilience.

Keywords: Ecotourism, Socio-Economic Impact, COVID-19, Sustainable Management, Wadi El Gemal National Park (Egypt)

1 Introduction

Located in the Southern Red Sea region in Egypt, Wadi El Gemal National Park (WGNP) is considered an ecotourism hotspot for its rich marine and terrestrial natural resources as well as its unique cultural heritage (Sarhan, 2016). The local Ababda people, largely known for their nomadic lifestyle are the native inhabitants of WGNP and have lived in the area for many centuries now. For hundreds of years, they depended on fishing and grazing as their primary profession. They also used to trade local products such as charcoal, herbs, and medicinal plants (Bos-Seldenthuis, 2007). Due to the recent ecotourism development in the national park, the Ababda people became more engaged in and dependent on this sector as one of the main sources of income and livelihood support (Shehata, 2018).

The recent COVID-19 shock to the tourism industry has resulted in a significant negative socio-economic impact on this local community. A substantial drop from 70,000 to a few hundred visitors per year in the park (M. Ali, personal communication, August 15, 2020) has led to a shutdown of the majority of local tourism businesses leaving hundreds of local people with no jobs or income (M. Gad, personal communication, September 4, 2020). In response to the pandemic, key stakeholders in the local community (e.g. local Ababda people, private tourism sector, NGOs, and local government) have jointly cooperated in

managing such impacts through the implementation of a set of socio-economic development programmes among other interventions. As a result, the community resilience has improved. It is contended that a resilient community has the ability to modify the environment via purposeful, collective action, and needs the community as a whole to cope successfully with and learn from crises or disruptions (Patel et al., 2017).

This book chapter provides a review of the ecotourism situation in WGNP and its socio-economic impact on the local community. The objectives of the research were to (i) document the impact of COVID-19 on ecotourism and the local community, (ii) outline COVID-19 coping and recovery measures for the community and ecotourism sector; and (iii) develop a conceptual model outlining community response to the pandemic and the collaborative management strategies adopted to ensure the long-term sustainability of ecotourism in WGNP. This research presents the first empirical data on the community-led collaborative governance in light of the COVID-19 pandemic in WGNP, Egypt.

2 Methods

2.1 Study Area

Located in the Southern Red Sea region in Egypt, the area of Wadi El Gemal whose name means 'valley of the camels' was officially declared a national park in 2003 (Elhalawani, 2013). WGNP was designated as a national park in order to protect and conserve a unique marine and terrestrial ecosystem, which is extremely rich from a botanical, landscape, and wildlife viewpoint (Mahmoud, 2010; Mahmoud & Gairola, 2013). Moreover, it includes various archaeological sites of great significance (Khallaf, 2009). The park is a vast area of land and coastal water; it covers an area of around 7,000 km²; 4,770 km² of land and 2,000 km² of sea (Baha Eddin, 2003). It encompasses numerous varied ecological habitats (e.g. mangroves, coral reefs, and desert valleys) and an abundant array of bird and animal species many of which are endangered (Sarhan, 2017; USAID, 2008).

There are few human settlements within the park including Abu Ghosoun, Hamata, Qulaan and Wadi El Gemal villages (Patrick, 2012). Abu Ghosoun village is considered the central village in WGNP and is comprised of roughly 150 households occupied by approximately 2,000 inhabitants (Shehata, 2018). The village is a place where tourists buy drinks, food, and traditional local handmade crafts. It is also a place for tourists to interact with the local people and learn about their culture (Patrick, 2012). The local Ababda of WGNP who are known for their nomadic lifestyle have resided in the area for millennia (Bos-Seldenthuis, 2007). They relied on grazing (shepherding sheep, goats, and camels) and fishing as their primary sources of income for hundreds of years (Shehata, 2018). They also traded local items including charcoal, herbs, and medicinal plants (Baha Eddin, 2003; Elhalawani, 2013).

These local pastoral people still practice a traditional lifestyle where they are largely in harmony with their natural environment. They have their own tradi-

tions, habits, and cultures (Shehata, 2018), and are known for their hospitality and good humour (Bos-Seldenthuis, 2007). The Ababda people have grown more active in and dependent on tourism as one of their key sources of revenue and livelihood support as a result of the recent growth in tourism in the national park. The local Ababda men have found a place in the ecotourism sector working as drivers, tour guides or chefs, while the women work in the production and sale of handicrafts (Tawfik & Sarhan, 2021).

2.2 Research Approach

For this study, a case study approach was adopted. A case study is "an in-depth examination of an extensive amount of information about very few units or cases for one period or across multiple periods of time" (Neuman, 2011, p.42). Through investigating specific cases, complex details of social processes become more evident. This clarity provides researchers with an opportunity to establish far-reaching descriptions and justifications that can apprehend the intricacy of social contexts (Neuman, 2011). Hence, a case study approach was deemed useful for this study as it provides an in-depth examination of the WGNP case. The authors employed a qualitative approach to this study, relying on a comprehensive literature review, expert opinion, as well as the first author's prior knowledge of WGNP, having worked on conservation and community development projects and initiatives there from 2014 to 2021.

2.3 Data Collection and Analysis

The search engines Google Scholar, Web of Science, Scopus, and Science Direct were used to search for and identify relevant literature. 'COVID-19 and tourism in WGNP, Egypt'; 'COVID-19 and community ecotourism'; 'Socio-economic impacts of COVID-19 on ecotourism'; and 'COVID-19 shocks and ecotourism', were among the search phrases used to identify academic publications and technical reports. In order to validate data from academic sources and authors' field experiences, expert opinions were sought from a protected area, ecotourism, and community development professionals at the WGNP area.

To achieve the research objectives, a documentation analysis was performed. The obtained data were organised into focused and useful information. Identifying the effects of the COVID-19 pandemic on community-based ecotourism in WGNP was also part of the data analysis. Based on the case study analysis, a conceptual model explaining how the community was able to cope with and recover from COVID-19 shocks was developed. The model serves as a diagnostic tool for assessing and enhancing livelihood sustainability in light of biophysical, socio-economic, and health shocks.

3 Findings

3.1 Ecotourism in WGNP

Tourism is considered one of the most important sources of income for Egypt. It is vital to national economic growth and a key provider of jobs (Elmahdy, 2020;

Puri-Mirza, 2020). Travel and tourism accounted for around 12% of Egypt's gross domestic product (GDP) in 2018 (Elmahdy, 2020). Approximately 88% of the direct travel and tourism derives from leisure expenditure and 12% from business expenditure (Puri-Mirza, 2020). International tourists spent around 12.2 billion US dollars in Egypt in 2018. The largest inbound international markets were Germany (13%), Russia (12%), the UK (7%), Saudi Arabia (6%) and Italy (3%). The tourism industry provides around 2.5 million jobs, representing approximately 10% of total employment in Egypt (Elmahdy, 2020). Tourism in the southern Red Sea (where WGNP is located) is predominantly mass tourism where most travellers book package tours through foreign tour operators (Eddin, 2003). Most tourists are either on leisure or diving trips (Eddin, 2003). Leisure tourism mainly involves desert safari, swimming, sunbathing, relaxation, and other recreational activities (Eddin, 2003; Elhalawani, 2013).

According to the International Union for Conservation of Nature (IUCN), ecotourism is defined as:

Environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features – both past and present) that promotes conservation, has low visitor impact, and provides for beneficially active socio-economic involvement of local populations (Ceballos-Lascurain, 1996, p. 20).

Ecotourism is rapidly increasing in biodiversity hotspots, and advocates assert it can accomplish economic and conservation development goals (Brandt et al., 2019). This sector has become a key driver of socio-economic change and economic growth in many locations worldwide (Brandt et al., 2019). Ecotourism aims to mitigate negative impacts on natural environments and local communities (Thompson et al., 2018; Weaver & Lawton, 2007), promote the preservation and conservation of nature (Cater, 2009), allocate financial benefits via sustainable livelihood schemes (Bramwell, 2014; Li, 2006; Tao & Wall, 2009; Thompson et al., 2018), and progressively support human rights for empowered local communities (Scheyvens, 2011; Thompson et al., 2018). The amount of money spent on ecotourism is projected to be 10 times more than that spent by the UN Global Environment Facility and official aid agencies on conservation projects (Brandt et al., 2019; Kirkby et al., 2011; Waldron et al., 2017). This sector accounts for around 40 % of gross domestic product (GDP) in some countries and is growing at a rate of 10% per annum in other countries (Brandt et al., 2019; WTTC, 2019).

WGNP is currently considered one of the most important ecotourism hotspots in Egypt for its unique terrestrial and marine resources as well as its rich cultural heritage (Khaleal et al., 2008; Sarhan, 2018). There is a variety of sites and ecotourism attractions such as sandy beaches and shores fringed by coral reefs amongst the most beautiful and pristine in Egypt (Nassar et al., 2021). The park received about 70,0000 tourists in 2019, almost all foreigners, predominantly German and Italian tourists (M. Ali, personal communication, August 15, 2020).

The other nationalities reportedly visiting the national park are British, French, American, Russian, and Scandinavian tourists (Khallaf, 2009). An array of nature-based tourism activities is undertaken by local and international tourists in the park (Baha Eddin, 2003). In the marine and coastal areas, beach tourism, diving, and snorkelling are the main ecotourism activities. Whereas safari, sight-seeing excursions, trekking, camping, biking, cultural heritage, and birdwatching are undertaken in the desert area of the national park (Tawfik & Sarhan, 2021).

Ecotourism in WGNP involves a number of stakeholder groups (Elhalawani, 2013). The main stakeholders are the national park, local NGOs, hotel owners, tour operators, dive boats, local tour guides, 4x4 vehicle owners and drivers, and desert safari companies (Sarhan, 2015). Ecotourism has the potential to support the socio-economic growth for the park's stakeholders. It creates economic opportunities for the private sector, benefits the local community and improves their livelihood conditions (Moneer, 2021; Tawfik & Sarhan, 2021). Furthermore, this sector offers business opportunities, jobs, and an alternative source of income to local people as well generating revenue for WGNP which supports its management (Elhalawani, 2013).

Ecotourism supports nature conservation in the national park and provides educational opportunities for ecotourists, local community and other stakeholders (Khaleal et al., 2008). It also promotes the sustainable use of natural resources, provides ecological experiences to travelers, generates social and economic benefits, and helps engage the local community in biodiversity conservation. Hence, the effective planning, management, and promotion of ecotourism in the national park is a priority (Eddin, 2003).

3.2 The Socio-Economic Impact of the COVID-19 Pandemic on Ecotourism

3.2.1 At the Global Level

The continuing increase in international travel is perceived as a driving force in global emergence and spread of virulent diseases (Elmahdy et al., 2017). These include the Ebola virus, Zika virus (Elmahdy et al., 2017; Massad et al., 2016), and most recently the novel COVID-19 virus (Abbas et al., 2021). It has been speculated before that the spread of persistent life-threatening infectious diseases will make international travel be identified as a personal risk (Elmahdy et al., 2017; Scott & Gössling, 2015). Subsequently, travel may be amply and stringently regulated to prevent the spread of any infectious diseases among tourist destinations (Elmahdy et al., 2017; Haukeland et al., 2021; Scott & Gössling, 2015). In addition, the fall in tourism and travel can also be explained by an increase in 'tourophobia' which occurs as a result of crises' catastrophic effects (Çakar, 2021).

The COVID-19 pandemic is the most recent example of such virulent life-threatening diseases which has caused substantial disruptions in the global economy (Abbas et al., 2021). As envisioned, the pandemic has instigated a sudden standstill to international travel and significantly affected the tourism industry (Abbas et al., 2021, UNWTO, 2021a). Political responses to the coronavirus outbreak have led to dramatic changes to global travel; border crossing restrictions along with the shuttering of entire communities virtually in an effort to slow down the spread of the virus has eliminated the tourism economy in many regions (Goodwin, 2020).

The global spread of COVID-19 was noticeably attributed to the tourism and travel industry, and with continued effort to control the virus spread, the industry faced tragic consequences and suffered overwhelming financial losses (van der Merwe et al., 2021). Leisure, travel and tourism activities showed a sharp decline globally coming to 2.86 trillion US dollars, which measured to more than 50 % revenue losses (Abbas et al., 2021). For several developed and less developed countries, tourism is considered a main source of government revenue, employment, and foreign exchange remunerations. Without this fundamental source, numerous countries face substantial reduction in GDP and a rise in unemployment rates.

The same accounts for ecotourism, the COVID-19 pandemic had brought this sector to an almost complete halt. COVID-19 and the subsequent shutting of ecotourism sites in various parts of the world have had a long-lasting negative impact on wildlife, protected areas and the communities that safeguard them (UNWTO, 2021b). The socio-economic impacts are, among others, closure of businesses, job and revenue losses, and loss of prospects for funding projects for community development (Hambira et al., 2021). Impacts on protected areas include adverse influences of the pandemic on conservation capacity, finances, and management effectiveness as well as a negative impact on the livelihoods of local communities (Hockings et al., 2020). Moreover, the pandemic has an impact on human health i.e., illness and death that further reduced the capability of relevant organisations to manage ecotourism and protected areas (Spenceley et al., 2021).

Prior to the COVID-19 pandemic, protected areas globally received approximately eight billion visits and created about 600 billion US dollars annually (Balmford et al., 2015). The WTTC (2019) estimated that wildlife tourism has created 21.8 million jobs globally. These figures suggest that the socio-economic losses of ecotourism due to the pandemic are vast.

3.2.2 At the WGNP Level

For several years, ecotourism has helped to protect and preserve nature, and safeguard biodiversity in WGNP (Sillence, 2015). It has also provided socioeconomic benefits for the communities living in and around the national park (Child, 2009; KON-TIKI, 2015). The Ababda local community benefits through business opportunities, employment, and social projects (Tawfik & Sarhan, 2021). The recent COVID-19 shock to ecotourism in the national park has resulted in a significant negative socio-economic impact on the local community (Spenceley et al., 2021). A substantial drop from 70,000 to a few hundred visitors per year in the park visitation has led to a shutdown of most local ecotourism

businesses leaving hundreds of local people with no jobs or income. Many local people have lost their jobs as tour guides, drivers, and chefs. Furthermore, local women and girls who used to sell the traditional handicraft products to tourists pre-COVID-19, have also lost an important source of income (Spenceley et al., 2021). In such small communities, losing jobs and sources of income is challenging as opportunities are very limited.

The pandemic had disrupting and overwhelming consequences, not only from a socio-economic viewpoint, but also in terms of nature conservation. The shutdown of ecotourism sites and businesses had a significant impact on the national park. This includes the lost revenue from entrance and user fees, reductions in government budgets allocated for tourism management, and the declining rates of international development assistance agencies' support for ecotourism advancement in the park. In addition, some of the local community members who lost their jobs had to undertake some unsustainable practices such as hunting and overfishing which threatens the natural environment (M. Gad, personal communication, September 4, 2020). Besides the local community and the national park, the pandemic has also affected the private sector. Hotels and tourism companies in the area had to completely shut down. As a result, several support-services and businesses have stopped operating, hundreds of workers lost their jobs, and revenue from ecotourism dropped significantly which had (and still has) an enormous impact on the local economy and local and foreign investment (DEG, 2021).

3.3 WGNP Local Community Response to the Pandemic

3.3.1 Consultation and Planning Phase

The outlook for ecotourism in WGNP remains uncertain. The COVID-19 pandemic is still strongly affecting the area, and local and international visitor numbers at the park continue to be quite low (Spenceley et al., 2021). To adequately respond to this crisis, the local community in WGNP had to have a clear plan and strategy (Sarhan, 2020). Accordingly, stakeholder groups (including representatives of local government, local Ababda people, private tourism sector, Abu Ghosoun village council, Department of Social Affairs, Department of Public Health, local NGOs, Abu Ghosoun Village Youth Centre, the Women Handcrafts Centre, informal community leaders, and development and public health experts) worked together to soften the pandemic's blow, at least partially, and have taken notable prompt actions to support the local people and reactivate ecotourism in the national park. These stakeholders have jointly cooperated to develop and implement a COVID-19 Crisis Management Plan (Sarhan, 2020). This plan aimed to mitigate the negative health impacts of COVID-19 on the local community, and thus, improved the socio-economic resilience of the community. The plan also aimed to provide alternative sources of income and improve the livelihood conditions of the local people. In the long-term, this plan aims to revitalise ecotourism in the national park (DEG, 2021).

The COVID-19 Crisis Management Plan was prepared by Abu Ghosoun NGO in close consultation with all other stakeholder groups to determine the necessary steps and actions to mitigate the pandemic's negative impact. Abu Ghosoun NGO facilitated stakeholder consultation meetings to identify potential issues and discuss solutions and interventions. During the preparation of the plan, relevant reports, plans, and information related to COVID-19, and response measures including local and international best practices for the pandemic were reviewed. Stakeholders were consulted about the potential contribution of each party and the required technical and financial resources. It has been agreed that the local NGO, namely, Abu Ghosoun NGO is the entity responsible for facilitating the implementation of the plan (DEG, 2021, Sarhan, 2020).

Financial support for implementation of the plan was provided by the private tourism sector (e.g. hotels and tourism agencies) and funding from international development assistance agencies. The NGO and other stakeholders provided in-kind contributions to support the implementation. The implementation of the plan commenced in July 2020 and continued for 18 months until December 2021 (DEG, 2021). Currently the local NGO in coordination with other stakeholder groups are assessing if it is required to update the plan and extend the implementation period (figure 1).



Fig. 1: COVID-19 Crisis Management Plan Timeline

Source: Authors' work

3.3.2 Implementation Phase

The plan provided a set of short- and medium-term actions to help improve the community response to the shock. These include healthcare measures, socio-economic support projects, awareness raising programmes and a tourism recovery strategy. A collaborative governance structure and adaptive management model was designed to provide an institutional framework for the implementation of the plan. A steering committee was formulated and comprised of representatives of the community stakeholders to oversee the implementation, monitoring and evaluation of the plan. The local Abu Ghosoun NGO was selected to be responsible for the implementation of the plan in close coordination with the other stakeholders.

After the consultation phase, a number of interventions were introduced (table 1). Personal protective equipment (PPE), hand sanitisers, cleaning detergents and single use facial masks were provided to the local community. Dietary supplements and food were also provided to the local people. The local Health

Unit in Abu Ghosoun area in WGNP has been upgraded to improve its capacity to deliver enhanced healthcare services. Furthermore, a set of revenue generation projects were established and implemented to support the livelihood of the local people, especially women. These include beekeeping projects, Village Saving and Loan Association (VSLA), and a few other micro-scale projects (DEG, 2021).

Tab. 1: Components of the COVID-19 Crisis Management Plan

Consultation and Assessment	Physical Interventions	Soft Interventions	Management
 Stakeholder's consultation meetings Best practice on COVID-19 mitigation Communication and community engagement plan Baseline assessment 	 Masks, protection material (PPE) etc., Nutrition supplements to local people Awareness raising centre Clean and disinfect public areas Renovation of the local health unit Revenue generation projects 	 Training on public health, community resilience, etc. Videos on social media & awareness materials Post COVID-19 Tourism Recovery and Re-branding Strategy for WGNP 	 Crisis management team Financing Monitoring, evaluation, and communication system

Source: Authors' work

Several training sessions on community resilience, crisis management, public health, safety measures, sanitising methods, and hygiene were provided for local community members. Awareness-raising materials (e.g. posters, flyers, etc.) and educational videos were developed and disseminated to increase the local community's awareness of the pandemic and the recommended mitigation measures. In addition, a Post COVID-19 Tourism Recovery and Re-branding Strategy for WGNP was developed to help restore and reactivate ecotourism in the park (DEG, 2021). The COVID-19 Crisis Management Plan is currently being implemented through a collaborative governance arrangement. The local Abu Ghosoun NGO is responsible for coordinating the stakeholders' efforts and administering the implementation of the planned actions. Monitoring, evaluation, and communication systems were developed and utilised to ensure the effective management of the plan (DEG, 2021). The indicators from the monitoring suggest that the management plan has achieved its planned objects so far. However, this initiative may need to be executed over time hoping that the measures put in place to improve the socio-economic condition and ecotourism will be successful.

The response of the local community in WGNP to the COVID-19 pandemic provides a comprehensive model for community collaboration during pandemic times (figure 2). A collaborative governance arrangement was utilised, and adaptive management strategies were developed and implemented. The introduced interventions outlined in the model provided immediate support to

the local community to mitigate the impacts of the pandemic. Moreover, the model has the potential to ensure the long-term sustainability of ecotourism in WGNP and improve the socio-economic conditions for the local community. The case study demonstrates that local communities are able to play an important role in reducing the risk and effects of catastrophes. Local communities have the ability to activate inherent resilience capability to deal with and recover from natural disasters such as COVID-19. Community-based initiatives appear to offer realistic opportunities for managing and lowering risks, as well as assuring long-term solutions. This demonstrates that risks can be minimised, and losses decreased when disaster mitigation focuses on lowering local vulnerabilities and enhancing the capacities of vulnerable populations.

4 Conclusion

Similar to other locations in the world, WGNP has been affected by the COVID-19 pandemic. The pandemic has resulted in a drop in ecotourism visitors. In

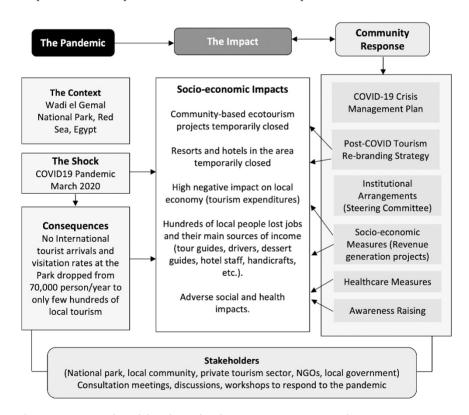


Fig. 2: A conceptual model outlining local community response to the COVID-19 pandemic and the collaborative management strategies for the long-term sustainability of ecotourism in WGNP

Source: Authors' work

addition, the health, social, economic, and environmental impacts on the local community have been immense. To cope with the COVID-19 shock, the national park's stakeholders and beneficiaries of ecotourism have collaborated and jointly designed and implemented a COVID-19 Crisis Management Plan to mitigate the impacts.

A limitation of this study was the lack of quantitative data on the COVID-19 pandemic's shocks at WGNP which is due to the unavailability of published data. Nevertheless, the utilisation of peer-reviewed scientific papers and other data sources ensured the validity of the findings. To date, there has been very little empirical research on ecotourism in WGNP. Future research may focus on assessing governance of the ecotourism sector in the park. Furthermore, issues that need further consideration include environmental and socio-economic impacts of ecotourism in the park. The assessment of success and sustainability of the WGNP community response to the pandemic and its potential for replication at other national parks and/or local communities is another area that needs to be investigated.

This case study provides a good example on the role of a community-led collaborative governance, adaptive management, effective stakeholder collaboration and engagement for improving the community's socio-economic resilience during pandemic times. This initiative may need to be executed over a longer time so that the measures put in place to improve the socio-economic conditions and ecotourism will be successful. The findings of this study could help policymakers devise strategies for assuring the long-term management of community ecotourism initiatives in a changing operational environment caused by pandemics. To that end, the current management approach for coping with and recovering from COVID-19 shocks can be used to adjust the current community ecotourism model and make it more robust.

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Chinese Family Dynamics within RV Drive Tourism in Quaran-cation: Development of a Conceptual Framework in/post COVID-19 Tourism

Abstract: Tourism research needs to respond to COVID-19 pandemic influences on spending family holiday time. The widely recognised quarantine and social distance policies during the pandemic created a window of opportunity for Quaran-cation, referring to Quarantine vacation. The tendency of Quaran-cation, e.g. Recreational Vehicle (RV) tourism, applies, among others, to Chinese families who have cultivated the habit of avoiding mass tourism. The dearth of research into family travel within RV tourism calls for an interdisciplinary study using qualitative research strategies. In this chapter, a new conceptual framework of RV family tourism is presented which contributes to family tourism research. This research attempts to interpret Chinese family RV tourism in Quaran-cation linked with consumer behaviour as a response to more sustainable and resilient tourism post COVID-19. The conceptualisation of RV family tourism in a specific cultural context proposes directions for further research.

Keywords: Post-COVID-19 Tourism, Family Tourism, RV Tourism, Quaran-cation, Chinese family

1 Introduction

In the context of the rapid spread of the COVID-19 pandemic, the global tourism industry has faced a critical crisis in history (UNWTO, 2020). The current economic situation in the world is unprecedented and devastating for the tourism industry (Florentina & Gabriela, 2022; Gössling et al., 2020; Sheresheva et al., 2020). Each country is justifying its ways of overcoming the crisis including achieving herd immunity or a suppression strategy to combat COVID-19 (Jung et al., 2020). COVID-19 has spread globally and there is no longer any chance for eradication and people must learn to live with it (Baarsma et al., 2020). For instance, the New Zealand government has controlled the pandemic through strict lockdown policies since 2020 but is now faced with the dilemma to save the economy and carry on strict lockdowns with substantial income losses, with people worldwide regarding the elimination strategy as naïve and unrealistic (Cotterill, 2021). In response to post COVID-19 tourism, this study is not going to argue which policy is better. Instead, it focuses on finding a possible alternative product and a better understanding of customer behaviour from the perspective of more sustainable and resilient tourism with the implementation of effective social distancing policy, especially in the event of potential future lockdowns or different alert levels restricting travel in New Zealand. Increasing the resilience of tourism offerings is considered a necessary condition to achieve sustainability (McCool, 2015) and is referred to the alternative travel product of Recreational Vehicle (RV) tourism. RV family bubbles in nature are an emerging market and Electrical Vehicles (EV) are often used in RV tourism. Proper management of electric transportation and distributed energy systems is crucial to saving and storing electric energy for future use (Tiwari et al., 2022). In a tourism context, the development of EV holidays are impacting on the effective transition to more sustainable travel in New Zealand (Fitt & Espiner, 2021).

The COVID-19 social distance policy has had a great impact on the practice of Quaran-cation, which is a new concept of travelling that emerged during the pandemic. In this chapter we understand the term Quaran-cation as a completely self-isolating travel form without interfering with anyone else and minimising unnecessary interaction with crowds during/post-COVID-19 travel. Concerning New Zealand tourism, little research has been undertaken on this topic. This chapter demonstrates the conceptualisation of an ongoing research project on Quaran-cation and draws an emerging and diverse picture of how alternative tourism products may work in/post COVID-19 tourism. The conceptual framework addresses three central challenges in the tourism industry: There are contradictory debates in the literature about sustainability versus economic health (Freytag & Vietze, 2013); sustainability versus transport (mobility) (Hopkins, 2020); and sustainability versus customers' behaviour (Gretzel & Hardy, 2019). Customer's changing behaviour and society's value system play a critical role in a more resilient-oriented shift and consequently are essential for integrative, transdisciplinary, and sustainability-oriented tourism research (Zimmermann, 2018). Building on the conceptual framework presented here, qualitative interviews will be conducted with Chinese families using RV in New Zealand in a second research phase.

A shift to family RV tourism might likely be considered as not sustainable as it is related to the act of moving around using fossil fuels. In this chapter we argue that it is time to move beyond the argumentation that RV tourism cannot be environmentally sustainable. Instead, we argue that RV tourism can offer a resilient product post-COVID-19 and also that environment-friendly attributes of hybrid and EVs may influence how people feel about RV trips, from low carbon emission to a sense of environmental wellbeing (Kershaw et al., 2018). Additionally, RV family tourism tends to pose positive impacts on family wellbeing in the way of activities involved.

2 Sustainability and Resilience in/post COVID-19

The growth of self-drive tourism provides new opportunities to stimulate regional tourism economies including possibilities for remote and rural tourism destinations (Wu et al., 2018; Butler et al., 2021). Camping is an increasingly popular way for tourists to travel within New Zealand and around the world (Espiner, 2020). Zenker and Kock (2020) view a trend towards more remote and less populated destinations to avoid mass-tourism destinations after the COVID-19 pandemic.

Sustainable tourism aims to maximise the positive social, economic, and environmental impacts of tourism in destination communities and environments by promoting ethical consumption and production among tourists and all stakeholders (Department of the Environment [DOE], 1989). However, the United Nations World Tourism Organisation (UNWTO, 2020) states that the future of all tourism destinations for both national and international travel is unclear due to the widespread presence of COVID-19. The global pandemic of the novel coronavirus has struck the international economy and impeded sustainable tourism. To achieve sustainable tourism in terms of economic, environmental, and social impacts, this calls for finding possible alternative and more resilient tourism products and adopting adaptive policies. Revenge travel might hamper some of the sustainable tourism trends, although travel bans are still effective in the Chinese market.

Tourism scholars have argued that resilience captures core aspects of sustainable tourism (Espiner et al., 2017). Tourism-related resilience after catastrophes has provided useful lessons for industry recovery (Mair et al., 2016). Research findings on resilience have focussed on a better understanding of the consumer behaviour response to disastrous events (Tsai et al., 2016). The COVID-19 pandemic provides the opportunity for a reset of mass growth across the touristic landscape and instead chooses a system that fosters more sustainable and equitable growth (Benjamin et al, 2020).

The UNWTO (2020) declares that the COVID-19 pandemic highlights more than ever the role of tourism in rural areas which offer significant opportunities for recovery. At the same time, changes in consumer demand led to tourists looking for less populated destinations, and open-air experiences and activities. In China, for instance, nature and green areas are gaining importance for domestic tourists after the COVID-19 outbreak (Hong et al., 2020). Zhu and Deng (2020) contend that Chinese residents choose rural areas mainly for relaxation and enhancing parent-child relationships. The research on Chinese tourist behaviour linked to the COVID-19 pandemic by Maltseva and Li (2020) identified key messages such as the increasing role of ecotourism, small group priority, and private guides and cars. People are seeking open spaces where tourism density is relatively low allowing for social distancing (Jeon & Yang, 2021). Wen et al. (2020) investigated the potential effects of COVID-19 on Chinese citizens' lifestyle and travel and predicted the growing popularity of free and independent travel, luxury trips, and health and wellness tourism. Furthermore, localism, which means the development of more localised forms of travel, is likely to be a significant theme within successful tourism recovery strategies (Higgins-Desboilles, 2020). The 'home-is-safer-than-abroad' bias has shown that tourists perceive their home country as the safest destination (Wolff et al., 2019). Most scholars believe that destination recovery shall be initiated from domestic markets which is then followed by tourism markets from regional destinations in an international context (Dupeyras et al., 2020; Gössling et al., 2020).

The UNWTO (2021) expects changes in tourist behaviour associated with preferences for nature-based activities, rural tourism, road trips, and health and safety-based isolated areas. Motorhome/Campervan camping is an outdoor recreation form encapsulating activity and accommodation (Brooker & Joppe, 2013). Camping tourism requires a reinvented and sustainable formula for development with the increase in glamping and mobile homes (Milohnic & Bonifacic, 2014). In this chapter, we argue that slowing down the ways of consuming the world's resources and transforming traditional mass travel experiences to more nature-based tourism in EV-RV bubbles can result in more sustainability and resilience in tourism. EV-RV bubbles are still in an embryotic stage in New Zealand with great development potential, while RV bubbles are more mature and discussed in this research.

3 RV Travel in/post COVID-19

RV travel, also referred to as motorhome and campervan trips, is a subset of self-drive tourism (Caravanning Queensland, 2012). Self-drive tourism in China is a relatively new type of tourism (Liu, 2018). Self-drive tourism has been explored by Western scholars (Prideaux & Carson, 2011), such as in Australia (Mahadevan, 2014), USA (Zorn & Suni, 2019), and UK (Cater, 2017). RV travel is considered a mature market in the West, with users from Western countries being described as 'Canadian travelling neo-tribes' (Hardy et al., 2013), 'Australian grey nomads' (Hillman, 2013), 'American snowbirds' (Onyx & Leonard, 2005), or 'independents and caravanners' (Hardy & Gretzel, 2011). However, there are limited studies on RV tourism capturing perspectives from an emerging market such as China (Pearce & Wu, 2017) and self-driving RV in another culturally different country.

Korstanje (2021) emphasises that the uncertainty of the tourism crisis pushes tourism actors to think of alternatives. RV tourism has been an important alternative for many people to escape to less populated and less visited areas to ensure that contacts are limited due to the COVID-19 pandemic (Bilim & Özer, 2021). RV tourism has gained attention associated with the pandemic and has recently been considered as one of the most valuable sustainable tourism movements despite being one of the oldest recreational and nature-based activities (Sengel et al., 2020). COVID-19 poses a challenge to the tourism industry about re-shaping social relationships and tourism movements based on the need for social distance restrictions (Richards & Morrill, 2021). Nature-based types of tourism like camping and caravan trips are important options as many tourists are not willing to stay in populated hotels or other accommodations during an epidemic (Gursoy & Chi, 2020; Richards & Morrill, 2021). People value nature areas even more during the pandemic and participate in camping and caravanning activities in an isolated and secure environment to escape from crowded and risky places (Cohen, 2020). Due to border restrictions and security requirements for international travels, at times, domestic travels provided the only option with a preference for camping and caravanning because tourists were concerned about social distancing (Sengel et al., 2020). Therefore, RV tourism is considered highly attractive to tourists and as a possible alternative in/post COVID-19 tourism. This research focuses on the Chinese family-motorhome/campervan bubble-nature to avoid mass travel interaction in/post COVID-19 pandemic in New Zealand. Compared with the traditional Western RV users' market, the emerging markets such as Chinese RV users show different tourist behaviours which are under-researched.

4 The Characteristics of Contemporary Chinese Society

4.1 Xiaozi

After 1978, with Dengxiao Ping's open-door policy, China has become more westernised with growing affluence and modernisation. Gradually, Chinese people perceived Western culture as an *advanced culture* that closely equates to a *deluxe* life with an idealistic and aspirational lifestyle. Many foreign-brand restaurants or cafes are popular among young consumers in urban China, which enables them to experience the perceived exotic and Western cultures (Maguire & Hu, 2013).

Xiaozi refers to Chinese people who share some common cultural experiences and lifestyles. Xiaozi lifestyle is associated with middle to high level of income (Henningsen, 2012). Xiaozi individuals prefer living in large metropolises such as Shanghai (Henningsen, 2012). The differences between the generations are becoming more significant and Shanghai is seeing the emergence of a 'new petty bourgeoisie' (小布尔乔亚 Xiao Bu er Qiao ya/Xiaozi) whose characteristics are no longer necessarily economic, but are becoming more identity-based (Ping, 2019). However, the relation of Xiaozi to RV user behaviour has not been explored yet.

The word Xiaozi and its relation to individualised freedom has been extensively discussed in academic literature. Gao (2019) evaluated how the construction of the global village relies heavily on its tourism semiotics and contributes to the construction of Xiaozi social identity that values consumerism and hedonism. However, only few studies have focused on how Xiaozi influences tourism experiences. Xiaozi refers to tastes and lifestyles of the middle-class elites who want to distinguish themselves from ordinary city dwellers through their consumer behaviour (Henningsen, 2012), such as participating in long-distance travel to a developed country (Hua & Yoo, 2011), or wine tourism (Duan & Hsiao, 2020). Little attention has been paid to Chinese who have performative Xiaozi tastes, and their lifestyle use of motorhomes as a 'home' for travelling in countries such as New Zealand. The theory of planned behaviour (Ajzen, 2011) suggests that people's attitudes are influenced by their beliefs. We propose that as a unique lifestyle among Chinese, Xiaozi could be an important construct that influences people's behaviour and attitude toward RV tourism in a Western country.

The characteristics of Xiaozi people demonstrate a new type of Chinese tourists. However, a wide and profound impact on Chinese consumer understanding of the concept of Xiaozi is still lacking (Ping, 2019). Some researchers simplify the

term Xiaozi and described it as middle-class aspirations with "candlelight dinners and a glass of wine" (Shepherd, 2011, p. 57). Adopting sociological and anthropological perspectives, invariably Xiaozi depicts young, Western-fashioned ladies (Shanghailaine, 2018), but the definition and dimensional structure of Xiaozi are still unclear and the term is under-researched. In this research, Xiaozi people are defined as 1) having enough financial capital to spend on discretionary consumption; 2) preferring Western culture; 3) having lifestyle-driven attitudes towards spending money on art, fine dining, shopping, and travel; 4) Xiaozi indicating a taste, a lifestyle, and a conception rather than a real class in the political sense.

Camping and caravan tourism has generally been accepted as an escape from daily life to a family vacation and has not been associated with luxury (Brooker & Joppe, 2013). However, a new concept on camping has emerged called glamping – short for glamorous camping – which can be considered as a more luxurious and comfortable form of camping (Brochado & Brochado, 2019). This form of travel may also include adventurous families with young children. Although glamping largely overlaps with the motivations of camping and caravan tourism, it can be distinguished from a classic camping activity with the use of luxury bungalows, tree houses, igloo, and luxury tents (Brooker & Joppe, 2013). With an emphasis on sustainability, glamping can be seen as an alternative for luxury accommodated tourism movements. Brochado and Pereira (2017) state that the environmental concern of tourists is a prominent driver for tourism products' evolution and that tourism sustainability is reinforced by technological progress, for example, the use of solar power, EV or AI applied in RV tourism

4.2 Social Media in China

Social media refers to online applications, platforms, web tools or technological systems that facilitate collaboration and content sharing between community members (Kaplan & Haenlein, 2010). There are different types of social media, however, this research is focused on Chinese social networks such as Wechat, Douyin or Little Red Book as those have gained more attention in Chinese tourism marketing (Agency China, 2021). WeChat plays an active role in various tourism-related interactions with Chinese social networks (Cheng et al., 2019). Douyin, which is TikTok's Chinese version, has over 250 million daily active users in China (Lu & Lu, 2019).

Although tourism information on social media and its role for various behaviours of tourists have received increasing attention from tourism researchers, there is a dearth of research on the influence of social media use of usergenerated content (UGCs) such as Wechat, Douyin or Little Red Book in Chinese family tourism. Social media has significantly impacted travellers' decision-making in tourism (Leung et al., 2013) and studies show that social media is shaping Chinese tourists' behaviour (Pearce & Wu, 2014). Young Chinese self-drive travellers have shown different behaviour from those of the older Chinese generation and their Western counterparts (Liu, 2018). There are few empirical

studies on how social media influences the behaviour of Chinese family tourists. It is critical to have comprehensive investigations into the influence and impact of social media on all aspects of the tourism industry (Zeng & Geritsen, 2014).

By displaying geotagged snapshots of food in Wechat, for instance, young urbanites disclose their everyday consumer experience and performance of Xiaozi tastes, facilitating the self-presentation of their class distinction (Ping, 2019). Du et al. (2020) implicate that TikTok styles can also be an exemplification of Xiaozi lifestyles. Engagement with short-form video platforms can be associated with self-representation and social identity, especially when connected to tourism (Gretzel & Yoo, 2008; Kim & Tussyadiah, 2013). Douyin focuses on young adults in first- and second-tier cities, promoting a Xiaozi lifestyle – a thinner body, a nice face, bigger eyes, and who show off their pretty outfits, including world travel adventures (Huang, 2020). The Chinese family RV users disclose their travel experiences in particular destinations via social media. Aspects of this practice feed into the performance of Xiaozi tastes, facilitating the self-presentation of their class distinction. Figure 1 demonstrates the influence of social media on the travel experiences of Xiaozi and modern Chinese family tourists in different travel periods. Xiaozi can play a constructive role in pre-travel decision-making and post-travel effect. By displaying photos and videos on social media, these Xiaozi identified people disclose their consumer experience during the trip. Aspects of this practice feed into the RV users performance of Xiaozi tastes, facilitating the self-presentation of their lifestyle aspirations.

5 RV in Chinese Family Tourism

5.1 Chinese Family Tourism

The one-child policy enforced from 1980 to 2015 shaped the central role of the child in the family. Parent-children tourism plays an important role in Chinese family tourism (Wu & Wall, 2016). Some Western scholars state that travel experiences can only be based on the interpretation or perceptions of the individual and need to focus on identifying the psychological needs or satisfaction of leisure participation as perceived by the individual (Williams & Buswell, 2003). Traditionally, some family scholars have collected the data only from one part of the family. Khoo-Lattimore's (2015) study on Asian family tourism examined family members' preferences for educational activities at the holiday destination but the data were only collected from the mothers. The in-depth parent-child travel model adopted by Chinese families includes the improvement of the parent-child relationship, education through entertainment, and parents' self-decompression and relaxation (Travel Weekly China, 2021). Thus,

¹ First-tier cities refer to the metropolises that play an important role in national political, economic influences, and other social activities such as innovative ability and high-quality education. There are four recognized first-tier cities in China, namely Beijing, Shanghai, Guangzhou, and Shenzhen. Second-tier cities are defined by lower levels of the above factors than the four first-tier cities including Tianjin, Chongqing, Chengdu, Nanjing, Hangzhou, and Wuhan (Tsai, Chiang, 2019).

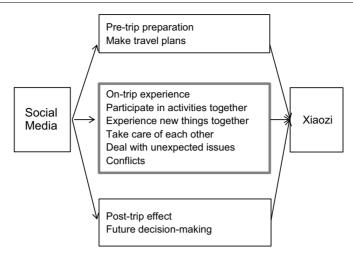


Fig. 1: Chinese Social Media Digital Evidence to Show Off Xiaozi Lifestyle

Source: Authors' work

the influence of sociocultural factors beyond travelling deserves more attention in family tourism research.

While family tourism has been investigated focusing on Western family travel, less is known in the emerging family markets such as Asia (Schänzel et al., 2012; Yung & Khoo-Lattimore, 2018). In recent years, travellers from non-Western countries have underpinned the contemporary tourism world (Cohen & Cohen, 2012). Family members have been one of the most preferred travel companions among the Chinese urban population, as attested by empirical evidence from Shanghai (Lou & Xu, 2008), Xi'an (Zhang et al., 2012), and Changsha (Su & Wang, 2007). By examining the Chinese context, this research project aims to theorise Chinese family tourism holidaying in Western countries. Meanwhile, children and grandparents are rarely treated as active agents which is reflected in the limited research involving children and grandparents. For example, Wu and Wall (2016) observed that many visitors to heritage museums in a Chinese coastal city are extended families.

Our research highlights certain characteristics of Chinese family tourism that are different from their Western counterparts. Although there are similar features in families worldwide, the Chinese family characteristics are shaped by their historical, cultural, political, social (one-child policy), and economic contexts (Wang et al., 2019). Academic studies have generally been slower to include Asian children, although some research on children as tourists is emerging (Allan, 2014). Wu et al. (2019) explored Chinese children's views of family tourism by collecting drawing pictures and sharing stories from children aged 8–11. Khoo-Lattimore and Yang (2020) adopted the same method to study young Malaysian-Chinese children. The findings reveal the collectivistic Confucian value of families and a focus on education during family vacations. Specifi-

cally, the vertical communication between adult children (second generation) and parents (first generation) was guided by filial piety, while parents (second generation) are more education-oriented towards their children (third generation).

It is important to identify the uniqueness of adult children dynamics on holiday by taking into consideration the different generations and gender perspectives within families involving Chinese cultural values. Furthermore, this research aims to focus on Chinese family tourism experiences including the husbandwife dyad, parent-child dyad, gender and (grand)parent-adolescent dyad, within the Chinese cultural context.

5.2 The Characteristics of Chinese RV Travellers

RV travel has increasingly become a fashion product among Chinese tourists (Li et al., 2015). The 'fashion' here defines the period and represents the latest style of behaviour. Self-drive tourism in China, unlike in developed countries, has a short history. The first story of RV travel was published in a fashion magazine and reported the accounts of ten SUV drivers traveling from Beijing to Inner Mongolia (Liu, 1999). Chinese scholars recognised that RV tourism has become a new type of tourism (Ning, 2015; Shen, 2018) and is gaining more attention in China (Zhong et al., 2020). The Chinese government encourages RV tourism and is developing more campsites and other infrastructure (Sohu News, 2018). COVID-19 accelerated the Chinese citizen lifestyles and travel forms such as the growing popularity of free and independent travel (FIT), luxury trips, and health and wellness tourism (Wen et al., 2020). RV tourism has rapidly gained attraction in the Chinese FIT market by allowing the freedom to travel safely.

Chinese RV tourists share some similarities with the more mature Western RV market, but there are also substantial differences. This could be linked to the Travel Career Ladder (TCL) model of travel motivation (Pearce & Caltabiano, 1983) which created a hierarchy of travel motivations based on Maslow's (1970) needs hierarchy theory of motivation. Pearce and Caltabiano (1983) developed the TCL arguing that patterns of motives depend on the travellers' experience accumulation and age. TCL has attempted to identify and measure travel motivation, providing criteria of comparing the Chinese travellers with Western RV travellers.

Pearce and Lee suggested in 2005 that more research, particularly cross-cultural studies, are needed for verification and supplementation of the travel career pattern (TCP) which is still the case for Asian markets. Chinese RV travellers emphasise an interest in local people and building relationships, broadly suggest that these pioneer travellers should be seen as more analogous to experienced Western travellers in their motives rather than naïve or inexperienced tourists (Pearce & Wu 2014). Pearce and Wu (2017) further identified the difference between Chinese RV tourists and more mature RV markets. Their study shows that most of the Chinese informants were in their 20s and 30s travelling with family (either a core family or extended family), while mature RV markets

mostly travel with a partner in relation. However, the influence of social media usage was not investigated in the previous research.

Existing research on family tourism largely contributes to conventional tourism destinations such as cultural attractions, while Chinese tourists' interface with more diversified and emerging destinations is missing. The uniqueness of RV travel can be encapsulated by personal transportation, own accommodation, prepared consumable supplies, and confined space for a group of people who are used to more privacy (Schänzel & Lynch, 2016). Motorhome users are highly mobile, and many utilise campsites as a base from where to explore the surrounding environment. While this might apply to all RV users, Chinese RV users also have their own characteristics. Chinese tourists have intentionally or unintentionally integrated social media into every stage of their travel (Yin et al., 2020). Chinese people also regard the state of balance and harmony between the body and mind, human beings, and the outer world as the goal when engaging in leisure, which is underpinned by Confucisum and Taoism (Zhao & Wu, 2022). This research will explore the Chinese family RV tourists' context to seize the initiative to enrich the existing knowledge about this emerging market.

5.3 Chinese RV Family Activities

Orthner (1975) classifies leisure activities into three categories — namely, individual, parallel, and joint activities. All activities shared with others are designated as either parallel or joint depending on their interactional nature. Parallel activities are group activities in which interaction is either non-existent or limited to reactions regarding the stimuli that evoke their common interest. Joint activities are those that require significant interaction among the participants for the successful completion of the activity. This research adapted Orthner's (1975) classification to show Chinese family RV user activities (figure 2).

On a general basis, motorhome family trip activities and their time proportion are dependent on the family situation. For example, the pervasive use of mobile technology increasingly threatens family functioning dynamics (Gardner & Davis 2013). Alternatively, the dependence on smartphones may potentially lead to the loss or reduced sense of adventure when the tourist is fully knowledgeable about every aspect of a destination (André et al., 2009). Schänzel and Smith (2014) stress the importance of balancing the expectation of family time together while permitting individual time on a family vacation. However, conflicts may occur in the group/joint activities depending on different personalities, individual vs family values, and considering generation gaps. RV travel involves a series of camping activities (Bilim & Özer, 2021). Camping is a form of recreational activity which may include fishing, outdoor cooking, hiking, hunting, swimming, wildlife watching, and photography (Albayrak, 2013; Mikulic et al., 2017). Figure 2 illustrates the level of interaction of family travel activities.

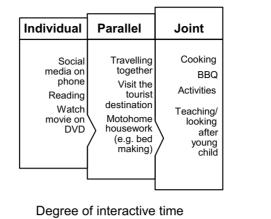


Fig. 2: Level of interaction of Chinese family RV trip activities Source: Authors' work based on Orthner, 1975

Low

6 Conceptualisation of Chinese RV Family Tourism

Though family RV tourism developed in the Western world, it has been found useful for studying family tourism in Eastern cultural contexts. We propose that cultural context may yield distinctive RV family trip experiences. This study focuses on the research outcomes of Chinese RV family tourism as identified in the conceptual framework within the context of Chinese culture. The present conceptual model paves the way for future studies with innovative research methods (figure 3) which can contribute to the methodological development of whole family interviews in family tourism research (Schänzel, 2010). The results that will be obtained in the second research phase from whole-family interviews with Chinese families and insights expressed from their social media platforms will provide theoretical and practical implications.

The proposed Chinese RV family tourism conceptual framework includes adult child's (AC), young child's (YC), father's (F), mother's (M), and grandparents' (G) perspectives, which better reflect the Chinese family structure, along with social media, culture, and time spent in different activities as the integrative agents. It provides a more holistic and broader approach in adopting a whole-family methodology (Schänzel, 2010) to study Chinese family tourism and address the gaps in the relevant areas. The conceptual framework guides the study to further theorise gender/hood, intergenerational issues, social media, and group dynamic dimensions in RV Chinese family tourism. This study aims to interpret Chinese family tourism linked with social media and consumer behaviour by including cultural experiences and social impacts as one inclusive conception in/after COVID-19 tourism. The conception highlights three stages in the data collection process-pre-trip, on trip and post-trip. Figure 3 shows the process of Chinese family travel and the factors affecting RV family trips.

High

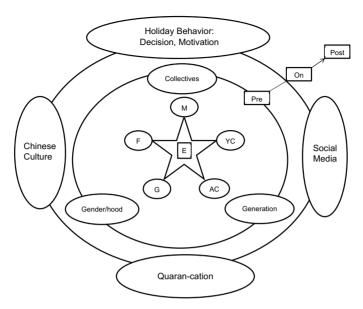


Fig. 3: Chinese RV Family Tourism Conceptual Framework

Source: Authors' work

The boom of Chinese family RV tourism contributes to local economics during and after COVID-19. Sustainable energy, such as solar power and other energy saving technology applied in RV tourism, can make a positive impact on the environment and social development. The innovation of this chapter lies in the fact that it proposes the analysis of emergent tourism development from Chinese family perspectives through RV trips in New Zealand to achieve more resilient tourism in the post-COVID-19 era. Additionally, the discussion of RV trip experiences (E) is not only at the individual level, but also includes M (mother), F (Father), G (Grandparents), AC (Adult Child), YC (Young Child) in different generations and gender/hood to analyse the factors related to family dynamics in RV tourism.

7 Theoretical Implications

The reviewed literature on Chinese family tourism requires close academic attention in/post COVID-19 tourism. One of the shortcomings in family tourism research literature is the limited number of validated measures available to assess Chinese RV family users in Western countries. Further to the preceding implications of the current research, the research aims to theorise Chinese family dynamics within RV drive tourism in Quaran-cation in Western countries. The research comprises an examination of the new but already prominent niche markets of Xiaozi and camping. Four research propositions emanate from the framework, including holiday behaviour, Chinese culture, Xiaozi social media, and family activities in the time dimension. The COVID-19 pandemic in

this conceptual model is perceived to exert a direct or indirect impact on RV users' decision-making. Meanwhile, Xiaozi behaviour is believed to be relevant to Chinese travel behaviour including product preferences and camping models. Furthermore, it needs to be understood that Chinese culture plays a significant role in analysing the Chinese family RV experiences. The use of social media such as Wechat and Douyin in Chinese family tourism onsite travel and reflection of sharing travel experiences will be analysed to examine the influence of social media on Chinese family travel experiences. The conceptual framework guides the methodological approach of this research by adopting whole family research (Schänzel, 2010) which includes the voices of all family members.

This chapter introduces an inclusive conception, which further contributes to the conceptualisation of a more sustainable and resilient form of RV family tourism, as well as enriching the limited number of studies on Chinese family tourism and RV tourism from an emerging market to better research, understand, manage and transform tourism in a COVID-19 environment.

8 Conclusion

New Zealand is consolidating its leading position of controlling the pandemic through strict community lockdowns and intensified control of social distance policies. However, this undoubtedly has had negative influences on the economy including the tourism industry. Motorhome trips provide the possibilities for Chinese families living in New Zealand to travel in/post COVID-19. The proposed conceptual framework indicates opportunities for tourism authorities and marketers to identify the factors that are insightful for the promotion and enhancement of more sustainable and resilient tourism futures after COVID-19. It can offer directions for the development of emerging Chinese family RV users. This conceptual chapter might also inspire tourism marketing managers to launch marketing campaigns that alleviate the adverse impacts on businesses in/post COVID-19 tourism. It emphasises that in/post COVID-19 environments, tourism will be featured by an even stronger commitment to sustainability compared to pre-COVID-19. Additionally, the advantage of New Zealand's natural resilience and isolated location may help New Zealand to overcome the crisis.

Overall, the conceptual framework presented here contributes to the consideration of analysing tourists' behaviours in/post COVID-19. It also can assist the planning and marketing of sustainable-oriented family motorhome activities in the future. The next step of this research will be based on conducting whole family interviews. It is hoped that the findings will be useful to understand and promote motorhome trips by fostering more sustainable tourism in family motorhome trip settings. Additionally, the impact of COVID-19 heightened the sense of awareness of environmental health and people's wellbeing. Quarancation is a feasible and effective tourism alternative in/post COVID-19 if tailored to countries' geographical, social, and epidemic conditions and when collaboration occurs among all the stakeholders involved. RV business suppliers, destina-

tion management organisations and policymakers could position themselves to capture the returning Chinese family market and more sustainability-oriented tourists.

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Tafadzwa Matiza

Post-COVID-19 Domestic Tourism-Led Recovery: The Paradox of Sub-Saharan African tourism

Abstract: The COVID-19 pandemic has exposed the susceptibility of the global tourism industry to external shocks and crisis events. The pandemic has disproportionately and negatively affected the Sub-Saharan African region due to its palpable reliance on international tourism arrivals. More pertinently, while most countries promote domestic tourism as a tourism sector recovery strategy, African countries face some unique challenges in harnessing domestic tourism for post-pandemic recovery. The chapter retrospectively explores and interrogates the inherent constraints of domestic tourism in Sub-Saharan Africa and draws critical lessons and best practices from the literature. This includes relevant cases and policy documents to provide recommendations to mitigate the effect of both the pandemic and the region's inherent constraints to ensure a more sustainable and resilient domestic tourism-led future for SSA, post-pandemic.

Keywords: COVID-19, Domestic Tourism, Sub-Saharan Africa, Tourism Recovery

1 Introduction

This chapter takes a retrospective view of the African tourism environment to unpack the potential paradox of domestic tourism-led post-crisis recovery, focusing on Sub-Saharan Africa (SSA). Illustrated in figure 1, the SSA region encompasses most of the African continent and comprises four main sub-regions: Central, West, East, and Southern Africa (International Monetary Fund [IMF], 2020). With a total population of 1.1 billion people across 46 countries (IMF, 2020; United Nations, 2019), some of the major tourism destination countries in SSA (Nigeria, Tanzania, Malawi, Zambia, Kenya, Uganda, Mozambique, and Zimbabwe) are in the top 10 African nations that account for 75 % of the continent's poor (Beegle & Luc, 2019).

The present chapter results from desk research that interrogates and synthesises contemporary reports and published research on domestic tourism, SSA and the ongoing COVID-19 pandemic. The purpose of the chapter is to explore the inherent challenges faced by SSA tourism destination countries as they strive towards more sustainable tourism futures post-COVID-19. Thus, contributing an African perspective to the contemporary sustainable tourism debate. First, the chapter presents an overview of the impact of the COVID-19 pandemic on global tourism. Second, the chapter interrogates COVID-19 and domestic tourism in Africa before discussing the inherent constraints to post-COVID-19 domestic tourism-led recovery in the SSA region. The discussion is followed by proposals on the way forward through recommendations to mitigate the identified constraints based on best practices from various tourism regions and



Fig. 1: Location of Sub-Saharan Africa Source: Ngoran, Xue & Wesseh, 2016, p. 115

countries worldwide. The chapter concludes with a summary discussion of domestic tourism and sustainable tourism futures in SSA.

2 COVID-19 and International Tourism: An Overview

In 2019, global tourism accounted for an estimated 9.2 trillion US dollars in Gross Domestic Product (GDP) (10.4% of global GDP). It accounted for 334 million employment opportunities across the world (10.6 % of global employment) (World Travel and Tourism Council [WTTC], 2021). This economic performance was buoyed by 1.7 trillion US dollars international and 4.3 trillion US Dollars in domestic tourism-oriented spending globally (WTTC, 2021). However, the contemporary global tourism industry now faces an unprecedented crisis that has exposed the susceptibility and sensitivity of the sector to global shocks and crisis events. In December 2019, the first known cases of the novel coronavirus (SARS-CoV-2) or COVID-19 emerged in Wuhan City, China (World Health Organisation [WHO], 2020). By the end of June 2021 (18 months), the COVID-19 virus had infected an estimated 179 million people globally and had resulted in 3.9 million deaths (WHO, 2021). To put the impact of COVID-19 into perspective, the death toll of the on-going COVID-19 pandemic has surpassed the deaths attributed to the Severe Acute Respiratory Syndrome (SARS) outbreak in 2003, H1N1 (Swine flu – 2009), the Middle East respiratory syndrome (MERS) in 2012 and the Ebola virus (2014-2016) outbreaks combined and many times over (Baldwin & di Mauro, 2020; Global Rescue & WTTC, 2019; Huynh, 2020; Ruiz-Estrada et al., 2020).

In response to the virus outbreak, all countries introduced stringent non-pharmaceutical interventions aimed at stemming the spread of the coronavirus, such as total border closures, travel bans, moratoriums on local travel and nonessential leisure activities, and in some instances, complete lockdowns (Arezki & Nguyen, 2020; Dlamini-Zuma, 2020). To this end, in the first quarter of 2021, 217 destinations worldwide, representing at least 32 % of global tourism destinations, were still under complete border closures, while 34 % were under some form of partial closure (Adinolfi et al., 2021; UNWTO, 2021b). An unintended effect of stringent non-pharmaceutical interventions has been the decimation of international and, to a more subjective (country-specific) extent, domestic tourism demand, along with the erosion of traveller confidence due to heightened risk perceptions (Neuburger & Egger, 2021). By the end of 2020, international tourism arrivals had contracted by an estimated 88 % compared to 2019, resulting in revenue losses upwards of USD1.3 trillion (United Nations Conference on Trade and Development [UNCTAD], 2021; UNWTO, 2021a). At the beginning of 2021, global tourism regions reported significant deficits in international tourism arrivals (UNWTO, 2021b): Asia and the Pacific (-96%): Europe and Africa (-85%); Middle East (-84%); and Americas (-77%). With projected revenue losses in 2021 alone between USD1.7 trillion and USD2.4 trillion, up to 120 million direct tourism jobs are at risk (UNCTAD, 2021; UNWTO, 2021c). With international tourism demand expected to rebound to 2019 levels in most major destinations by 2024 (Livinec & Adjiman, 2021), the Organisation for Economic Cooperation and Development (OECD, 2020) observes that tourism destination countries are pivoting towards domestic tourism-driven tourism recovery. Conservative forecasts indicate that global domestic leisure tourism spend will be the first to recover to at least 9% and 13% of 2019 levels in 2022 and 2023, respectively, compared to international tourism, which will only marginally recover to 2019 levels in 2024 (Livinec & Adjiman, 2021).

3 COVID-19 and Domestic Tourism in Africa

Despite the rollout of vaccines in most developed nations, vaccine access in developing regions such as Africa is limited, and any meaningful herd immunity is still far off (UNCTAD, 2021). Limited access, compounded by the emergence of new COVID-19 variants, has seen a resurgence of travel restrictions and heightened perceived risk associated with international travel to developing regions – further inhibiting international tourism demand (Adinolfi et al., 2021). Before the pandemic, domestic tourism was the predominant global tourism activity – representing up to 73 % of total tourism receipts (USD3.9 trillion) in 2017 (WTTC, 2018a). In 2018, total domestic trips (9 billion trips) were at least six times more than the 1.4 billion international arrivals recorded (UNWTO, 2020a). However, Africa's focus on promoting and attracting international tourists meant no country from the SSA region was in the top 30 nations in domestic tourism trips/receipts globally in 2018 (Morupisi & Mokgalo, 2017; UNWTO, 2020b). This implies that the utilisation of domestic tourism primarily as a

critical stop-gap measure for the current volatility of the international tourism market is a bourgeoning trend

Due to the particularly harmful impact of the COVID-19 pandemic on international travel, contemporary African tourism is in a state of crisis-induced flux. According to the WTTC (2021), in 2020, the African region as a whole experienced a USD83 billion (-49.2 %) deficit in tourism GDP contribution and shed 7.2 million jobs (-29.3 %) - with losses in Sub-Saharan Africa (SSA) significantly less (-46.5 %) than losses experienced in North Africa (-53.7 %). Pre-COVID, developing economy countries (The DRC, Guinea, Libya, Swaziland, and Algeria) were constrained in international tourism by competitive aspects such as stringent visa processes, insecurity, poor quality public resources and tended to heavily rely (97%) on domestic travel and tourism receipts (WTTC, 2018a). However, these countries were not representative of the overt reliance of SSA countries on international tourism receipts. In the period immediately preceding the onset of the COVID-19 pandemic, the African continent attracted only 5 % (70 million tourists) of global international arrivals (UNWTO, 2021d), which translated to up to 51% of the continent's total tourism receipts (WEF, 2019). Alarmingly, this illustrates how African tourism is disproportionately reliant on international tourism arrivals compared to other global tourism regions. For instance, international tourism accounted for 35.1 % of tourism receipts in Europe and Eurasia, compared to 24.1 % of receipts in the Asia-Pacific and only 19.6 % of tourism receipts in the Americas regions, respectively (WEF, 2019).

Current data from the WTTC (2021) also shows that while both domestic and international tourism was adversely affected by the pandemic and its ongoing effects, domestic tourism spending experienced a less adverse decline (–45.0 % change) compared to international tourism spending (–69.4 % change). Notwithstanding the value and the now more inherent importance of domestic tourism to host economies, there appears to be limited academic inquiry into the impact of the COVID-19 pandemic on SSA's domestic tourism. Moreover, domestic tourism's development and optimisation as a post-crisis recovery strategy towards sustainable and resilient tourism futures for African countries are predicated on identifying and addressing region-specific challenges that predate the COVID-19 pandemic. To this end, the conceptual paper explores and discusses the inherent constraints to post-COVID-19 domestic tourism-led recovery for SSA.

4 Inherent Constraints to post-COVID-19 Domestic Tourism-led Recovery

One may argue that the inherent non-COVID-19 related issues of tourism in Africa, as identified by Dieke (2020), precipitated the current paradox of domestic tourism-led recovery in SSA. They include deficiencies in market intelligence related to the international/domestic tourism market mix, socio-political dissatisfaction with tourism, the limited reflexiveness of African governments to market shift and signals due to bureaucracy and skills gaps, and the general

underdevelopment of the African continent (Dieke, 2020). Domestic tourism-driven tourism recovery is a paradox for the SSA region due to a myriad of inhibiting factors. The present paper interrogates some of the critical inherent constraints on domestic tourism. Intrinsic paradoxical factors for domestic tourism in SSA include the impact of institutional/environmental weaknesses and the resulting 'dark continent' axiom, the role of poverty and potential negative perceptions associated with pro-poor tourism, accessibility of domestic tourism, and the value for money conundrum in SSA.

4.1 Institutional and Environmental Weaknesses: The 'Dark Continent' Axiom

Institutional quality and stability are vital to the augmentation of tourism flows (Ghalia et al., 2019). The African continent is prone to civil unrest (Egypt, Kenya, Nigeria) and war (South Sudan, The DRC, Somalia), which has seen the complication of the continent's dependence on international tourism and the introspective approach to domestic tourism (Odeny, 2019). A study of 124 developed and developing countries (Nguyen et al., 2020) shows that institutional and environmental weaknesses create uncertain situations. Such inadequacies are subjective, whereby they have been found to positively impact domestic tourism in lower-middle-income countries versus a negative impact on domestic tourism in higher-income economies (Nguyen et al., 2020). However, with the World Bank (2020) categorising at least 20 of the 46 SSA countries as fragile or conflict-affected, this logic may not hold for SSA. Whereby perpetual and cyclical uncertainty arising from institutional and environmental weaknesses due to poor governance (deficiencies in the design and implementation of policy) are detrimental to domestic tourism consumption (Beegle, 2019; Nguyen et al., 2020), as well as domestic tourism's potential developmental and growthoriented role.

The 'dark continent' axiom is related to the conflict-induced institutional and environmental weaknesses due to internal Afro-pessimism (Mkono, 2019), which influences how trendy or attractive locally travelling is perceived. Lessons from the Ebola outbreak of 2014 suggest an evident ignorance by international tourists of the geography of the African continent, including misnomers such as that the notion that Africa is one big country illustrates how the continent is susceptible to Afro-pessimism. For instance, despite the Ebola outbreak of 2014 being localised in West Africa, tourism demand and arrivals were adversely influenced throughout the continent due to heightened perceived health risk - including East and Southern Africa (Novelli et al., 2018, WTTC, 2018b). The media coverage, insinuations, and government responses associated with disease outbreaks may exaggerate the extent and severity of the crisis, thus impacting tourist perceptions (WTTC, 2018b). Additionally, sociocultural barriers such as ethnocentrism in Africa pose a challenge to domestic tourism development in the region. For instance, Butler and Richardson (2013) observe that a critical antecedent to unlocking domestic tourism activity such as wildlife tourism in South Africa involved demystifying the notion that local tourism activity preserved wealthy Caucasian South Africans and international tourists. Thus, government prioritisation of domestic tourism or the lack thereof may be a critical antecedent to changing African perceptions of tourism on the continent and mitigating the inherent socio-cultural barriers on the continent to catalyse domestic tourism growth.

The WTTC (2018a) views government initiatives such as promoting local locations, improving transport and economic infrastructure, and regional development as critical to domestic tourism consumption. A view corroborated by Massida and Etzo (2012) suggests that non-economic factors such as the proficiency of a destination in managing and organising its tourism resources are increasingly impacting potential domestic tourists' consumptive decision-making. For instance, Morupisi and Mokgalo (2017) acknowledge that domestic tourism in Botswana was stunted until the government launched the Country's Botswana Tourism Master Plan (2000), which advocated for and promoted domestic tourism. The case of Rwanda reflects the positive influence of institutional and environmental stability due to government prioritisation and promotion of sustainable domestic tourism – with the country benefitting from the resultant 14% annual pre-COVID growth rate in domestic tourism (WTTC, 2018a).

4.2 The Role of Poverty

The continent is synonymous with endemic and extremely high levels of poverty. Before the COVID-19 pandemic, at least 70 % of the world's poor lived on the African continent (Beegle & Luc, 2019; Hamel et al., 2019), and except for Mauritius (ranked 66th globally), 17 SSA countries were ranked between 142nd and 189th out of 189 globally on the Human Development Index as a proxy for poverty (Nwani & Osuji, 2020). A burgeoning African middle class translated to a 23 % drop in poverty levels on the continent between 1990 and 2015. However, this progress was moderated by a booming population on the continent, and Africa remains the global bastion of poverty (Human, 2021). In 2018, an estimated 50% of the worldwide population in both developed (such as the USA, Japan, and Germany) and developing nations (including China and India) were classified as 'middle-class', with this progression in economic class signalling an upsurge in spending power and discretionary income that can be utilised for engaging in tourism (WTTC, 2018a). However, recent economic modelling suggests that due to the impact of the COVID-19 pandemic, a new poor segment is emerging in SSA's urban centres, meaning that up to 49.7 % of the SSA region's 'poor' now reside in urban areas, compared to 18 % before the pandemic (Beegle & Luc, 2019; Lall et al., 2017; Montes et al., 2020). This implies that significantly fewer African urban residents may afford domestic tourism. Recent 2021 statistics suggest that at least 36 % (490 million people) of Africans (mostly in SSA countries) now live in extreme poverty (Human, 2021).

Disposable income is a critical antecedent to travel motivation as an intrinsic push consideration for tourists (Luvsandavaajav & Narantuya, 2021). Empirical

evidence from Spain shows that poverty is an obstacle to domestic tourism (Altintas & Tuzunkan, 2017). At the same time, in domestic tourism in Macedonia, an increase in household disposable income could be correlated to a rise in domestic tourism consumption (Gogoski, 2017). Pertinently, empirical evidence (Tan, 2016; WTTC, 2018a; Yang et al., 2014; Zhang, 2020) emerging from China, the world's second-largest domestic tourism market (Zhao & Liu, 2020), illustrates the importance of disposable income to the growth of domestic tourism. The emergence of China as one of the world's largest domestic tourism markets is attributable to the country's growing middle-class and disposable income, which economically empowers them to engage in domestic tourism. However, the average African survives on less than USD635 a year, compared to those considered poor in the developed world at a threshold of USD12,140 per adult annually (Human, 2021; Nwani & Osuji, 2020). The literature (Gunter & Smeral, 2016; Massida & Etzo, 2012; Rudež, 2018; Song, Li, Witt & Fei, 2010) establishes a discernible correlation between disposable income/private consumption and both domestic (Massida & Etzo, 2012) and international (Rudež, 2018) tourism demand. Within the SSA context, the veritable lack of disposable income (amongst the majority of the populace) to engage in tourism is thus acknowledged (Butler & Richardson, 2013; Mbaiwa et al., 2007) as a pertinent challenge for domestic tourism in Africa.

4.3 Pro-poor Tourism

Tourism traditionally provides employment opportunities for the low-skilled and often marginalised members (youth and women) of local communities surrounding tourism attractions (Morupisi & Mokgalo, 2017). This dimension of tourism buoys the notion of Pro-Poor Tourism (PPT). Touted as an integrative and inclusive approach to tourism-led poverty alleviation, PPT, as the name suggests, is tourism that focuses on bringing a net benefit to the poor members of society (Scheyvens, 2007). Appropriately implemented, pro-poor tourism involves the sustainable integration of the local communities surrounding tourism destinations into the local tourism value-chain, or at the very least, the trickle-down of tourism revenues from national governments to local tourism destination communities (Christie et al., 2013). However, as with other African government-driven initiatives, PPT has primarily failed due to institutional weaknesses in allocating and investing the requisite public resources (Beegle, 2019).

More pertinently, the association of PPT with the African continent (Rogerson, 2006; Scheyvens, 2007), while well-meaning, may have the unintended effect of associating tourism within the continent with the poverty alleviation agenda. Such an association may be detrimental to how local tourists perceive domestic tourism, especially those who see tourism as an aspirational activity. PPT may be critiqued for being capitalist and profiteering due to its focus on mass international tourism (tourists from the global West) as the cash cow for PPT (Harrison, 2008). Thus, the drive for pro-poor may also have inadvertently diluted and undermined the role and value of domestic tourism in SSA, particularly if the

tourism offer is associated with poverty alleviation and employment creation for local communities through enhanced international tourism arrivals (Harrison, 2008; WTTC, 2018a), which are now non-existent due to the COVID-19 pandemic.

4.4 Accessibility of Domestic Tourism

One of the significant constraints to SSA tourism is the limited accessibility of tourism attractions to both domestic and international tourists due to deficiencies in air and road transport networks, lack of security and safety due to high criminal activity, as well as public health resource limitations (Christie et al., 2013). In the case of SSA, accessibility constraints of domestic tourism extend to local citizens having limited access to information about tourism attractions. In Botswana, poor marketing and development of local tourism assets are cited as barriers to access to domestic tourism (Mbaiwa et al., 2007). Beyond poor marketing, Ghalia et al. (2019) observe that cultural aspects influence tourism equally, such as language. In a study on barriers to domestic tourism in South Africa, Butler and Richardson (2013) submit that limited knowledge and awareness of local tourism attractions due to a lack of marketing and promotion-oriented information in local vernacular languages was a significant barrier to domestic tourism.

Tourism infrastructure development is correlated to tourism accessibility (Manwa & Mmereki, 2008). For instance, China's ascension to one of the world's largest domestic tourism markets is partly attributed to the government's investment in rail and air networks which facilitated increased access to the country's tourism attractions through low-cost transport options for domestic tourists (WTTC, 2018a). Pre-COVID-19 capital investment by African governments in tourism had been correlated with domestic tourism growth. For instance, in the case of Mozambique, an average 15.8 % increase in capital investment in tourism between 2008 and 2017 was attributed to an 11.6% annual growth in domestic tourism spending, while in the case of Mali, a 9.1 % growth in investment contributed to an 11.5 % growth in domestic travel in the Country (WTTC, 2018a). However, according to the World Bank (2020), the COVID-19 pandemic has induced the first recession in SSA in 25 years, potentially undoing five years of poverty-reducing growth and plunging 40 million more Africans into extreme poverty. The pandemic-induced economic crisis suggests that SSA governments may not prioritise tourism and domestic tourism promotion through infrastructure development and improved accessibility due to financial challenges and more pressing macro-environmental challenges such as unemployment and increased pressure on public resources.

4.5 The Value for Money Conundrum

A study found that Italian tourists generally prefer to engage in international tourism than domestic tourism (Massida & Etzo, 2012). In a bid to exploit such preferences, developing country tourism destinations have traditionally prioritised and promoted international tourism, thus focusing a significant proportion

of their limited resources on managing their perceptions and promoting their destination brand images within the global market at the expense of their domestic markets (Alipour et al., 2013; Morupisi & Mokgalo, 2017). This created the prevalent value deficit for African domestic tourism – since African tourists are not targeted with the appropriate value proposition to engage in domestic tourism, promoting international tourist product bias and an under-developed domestic tourism value chain (WTTC, 2018a). In Botswana, Morupisi and Mokgalo (2017) observe that African tourists have a predisposition for engaging in international outbound tourism instead of domestic tourism, based on the notion that international travel offers experiences different from mono nature-based products such as national parks.

During crisis periods, tourists, like any other consumer, become more circumspect about their consumptive behaviour, tending to economise more by either seeking cheaper alternatives throughout the tourism value-chain or avoiding tourism activity altogether (Rudež, 2018; Smeral, 2016). Within the African context, the challenge lies in balancing the willingness of domestic tourists to pay for local tourism products and the value proposition of domestic tourism products – particularly considering that domestic tourism is viewed as an economisation strategy by tourists, whereby international tourism is substituted with domestic tourism in response to crises events such as recessions (Rudež, 2018).

4.6 Willingness to Pay for Local Tourism Products: The Potential Challenge(s) of Pricing

Pricing is a critical antecedent to domestic tourism, with tourists tending to be more sensitive to price within the context of domestic tourism compared to international travel (Massida & Etzo, 2012). A Chinese study inversely correlated increases in domestic tourism demand to domestic tourists' pricing and price sensitivity (Tan, 2016). Realising this nexus, national governments are inclined to apply discretionary pricing to mainstream domestic tourism in their countries (WTTC, 2018a). Within the African context, pre-COVID-19 lessons can be drawn from the case of Botswana, which implements a high/medium/low pricing mix for its tourism, whereby the sustainability of ecologically sensitive tourist areas is ensured by applying a high price/low volume policy. In contrast, medium to low pricing models are implemented in other tourism locations (Morupisi & Mokgalo, 2017). Empirical evidence from Macedonia supports this approach, whereby seasonal versus non-seasonal pricing was correlated to increased domestic tourism consumption (Gogoski, 2017).

However, crisis-induced price restructuring may be a double-edged sword for SSA, primarily if implemented by countries as a stop-gap measure to offset costs associated with the COVID-19 pandemic and boost revenues. For instance, in South Africa, the South African National Biodiversity Institute (SANBI) announced its adoption and implementation of a dual pricing system for non-South African and South African residents visiting the Kirstenbosch National

Botanical Garden (South African National Biodiversity Institute [SANBI], 2021). While domestic tourists' price increases were marginal, foreign tourists are expected to pay up to 150 % more than South African residents. The literature does caution that in the absence of fundamental improvements in the quality and efficiency of tourism supply, price increases and 'pricing wars' do not necessarily improve tourism destinations' competitiveness, nor do they necessarily stimulate demand (Khandeparkar et al., 2020). The COVID-19 pandemic has triggered a pricing conundrum for SSA whereby the critical questions will be if crisis-hit tourism suppliers would be willing to reduce prices for locals in an attempt to stimulate local demand? Will domestic tourists be willing to pay for cheaper-priced tourism products? Will international tourists be helpful to offset the costs of this compromise once international tourism resumes?

5 Some Considerations for SSA

Conservative estimates suggest that most of the global tourism sector will recover to pre-COVID-19 levels in 2024 and primarily be driven by domestic tourism (Livinec & Adjiman, 2021; OECD, 2020). More pertinently, the World Bank (2021) believes that the recovery and emergence of a significant proportion of SSA countries from the economic effects of the COVID-19 pandemic are in part predicated on the recovery of their tourism sectors. This points to a critical symbiotic relationship between domestic tourism-led tourism sector recovery and the overall economic recovery of SSA economies post-the-pandemic. However, pre-COVID-19 domestic tourism data from SSA suggests that domestic tourism in SSA may not be optimal for the proliferation of domestic tourism-led sector recovery. Moreover, inherent pre-pandemic constraints have been exacerbated by the effects of the pandemic and may further inhibit domestic tourism in the region.

Pre-COVID projections suggest that emerging tourism destinations in SSA such as Ghana, Kenya, Côte d'Ivoire, and Angola would reduce their extreme poverty levels to below 5% of their populations by 2030 (Hamel et al., 2019). That combined with the projections that by 2050 at least 50% of Africa's population of 1 billion people will be under the age of 25 years old (World Bank, 2020), suggests that while optimistic in the long-term, domestic tourism may not be poised to grow in the region in line with the 2023–2024 tourism growth and recovery trajectory (IMF, 2020) due to the inherent challenges of poverty. Increasing poverty levels in the SSA region may be beyond the control of most governments due to, in part, the effects of various national states of emergency induced by the COVID-19 pandemic. Notwithstanding poverty as a crucial obstacle to domestic tourism, some inherent constraints are within the purview of national governments that intend to take on the challenge of promoting domestic tourism-led recovery and ultimately overall economic recovery post-the-pandemic.

Quality institutions and stable environments catalyse tourism, with the absence of conflict being the most conducive for tourism promotion and growth (Ghalia

et al., 2019). For instance, in the decade ending in 2017, average GDP per capita growth linked to environmental stability was correlated with increases in domestic tourism spending in certain countries, including Mozambique, Rwanda, Tanzania, and the Côte d'Ivoire (WTTC, 2018a). Hence, institutional and environmental stability will be vital in creating conducive environs for promoting domestic tourism in SSA. As a cautionary statement and regarding the Ebola outbreak of 2014, the WTTC (2018b, p.10) concluded that up to 90% of the economic losses that occurred during crises events were not directly related to the crisis itself but resulted from the "[...] uncoordinated and irrational efforts of the public to avoid infection". Implying that while justifiable, in the future, SSA governments will need to moderate and balance their non-pharmaceutical interventions with environmental considerations for the sustainable recovery of their respective domestic tourism sectors. One approach is the short-term prioritisation of vaccination of citizens, which will prompt the subsequent relaxation of moratoriums on local travel and leisure activities.

Regarding the other inherent constraints to domestic tourism in SSA, including perceptions related to and concerns about pro-poor tourism, the accessibility of domestic tourism, and the value for money conundrum, Dieke (2020) refers to the 3 A's that are generally accepted as the pre-requisites for tourism development: attractions, accommodation, and access. There is no question that SSA has suitable domestic and international tourism attractions. However, the prudent allocation of fiscal resources and investment in the requisite public resources to develop critical infrastructures such as transport networks and accommodation facilities and the facilitation of access to tourism services are pertinent inhibitors to domestic tourism in SSA. Based on the recommendations of international tourism bodies (UNWTO, 2020a; UNWTO, 2021e; WTTC, 2018a), the following measures may be adopted for the promotion and growth of domestic tourism:

1. National and local government prioritisation and investment

National and regional government and quasi-government entities within SSA countries need to urgently launch financing interventions in the tourism sector, primarily targeting the development of domestic tourism-oriented resources. Such interventions may include a reduction in value-added tax, tax holidays on income, as well as discounted tariffs for using public facilities such as airports and state-owned tourism attractions for domestic tourism activity. Such savings would be passed on to domestic tourists via sales promotions, i.e., discounted travel and accommodation packages. Additionally, funding through windfalls from such interventions may be channelled and utilised by tourism suppliers to promote domestic tourism through marketing campaigns that stimulate demand for domestic tourism in the region. Non-financial interventions for governments without the fiscal capacity to intervene financially may include small initiatives like creating long weekends by moving public holidays or commemorative days to a Friday or Monday. This will create long weekends that entice or incentivise locals to travel locally on short excursions, which will

boost domestic tourism demand. In the medium term, prioritising value chain integration, such as integrating local transport with tourism services, may also promote domestic tourism. For instance, various government ministries (transport, finance, tourism, culture) launching multi-stakeholder initiatives and partnering with municipal authorities, destination management organisations, and tourism suppliers to (1) improve identified tourism-oriented infrastructure, (2) develop, innovate or adapt tourism products, (3) promote domestic marketing initiatives that improve the visibility of and access to domestic tourism products, and (4) form strategic alliances across the domestic tourism value chain such as travel packages inclusive of transport, accommodation and activities as special offers for local travel. Lessons can be drawn from initiatives in the following countries (UNWTO, 2020a):

- Peru: various government ministries (Foreign Trade and Tourism, Culture and the National Service of Protected Natural Areas) collaborated to provide public servants and their families, children, adolescents, and older adults free access to archaeological sites, museums, historic places, and natural areas of the country.
- France: Atout France, in conjunction with regional tourism entities, launched
 a digital marketing campaign with influencers to promote visiting French
 tourism locations.
- Hungary: the Hungarian Tourism Agency (HTA) collaborates with various local transport companies (rail, bus) and service providers such as petrol stations on critical routes in a joint campaign promoting safe domestic travel to rediscover the country through tourism.

2. Product innovation and direct incentivisation of domestic travel spending

Tourism suppliers in SSA must balance between pricing strategies that maintain market share, increase tourism demand during and post the crisis, and catalyse business resilience in the face of significant losses due to COVID-19. Evidence from other countries such as a Cyprus and China shows that price differentiation within the tourism value chain is a conventionally viable but often contentious post-crisis recovery strategy, especially in price increases (Boukas & Ziakas, 2013; Koetse, 2020; McKinsey & Company, 2020). However, pricing strategies such as dual pricing may be detrimental to post-crisis tourism recovery, constrain tourism demand in the short term, and impinge destination competitiveness in the medium to long-term due to perceived price inequality. In crises and post-crisis situations, tourism suppliers must be extremely prudent and cautious regarding the conflation between tourists' ability to pay versus their willingness to pay when considering the implementation of dual pricing. SSA countries may not need to engage in pricing strategies to promote domestic tourism. As a direct result of the COVID-19 pandemic, research (Houge-Mackenzie & Goodnow, 2021; Spalding et al., 2021) shows that tourists, especially those in urban areas, are increasingly seeking nature-based tourism activities to counter the effects of lockdowns and assuage their perceived health risk by engaging in socially distanced tourist activity. SSA countries, as primarily nature-based tourism regions, can focus on wellness-oriented tourism related to nature, adventure, eco-tourism, and rural tourism via weekend excursions, road trips, and national tourism routes. Thus, as an alternative to pricing strategies that may compromise the perceived value for money of domestic tourism products and promote a more direct and micro approach to pro-poor tourism, SSA countries may focus on product innovation and direct spending incentivisation. Concerning product innovation, lessons can be drawn (UNWTO, 2021e) from the experiences of.

- Benin: the country has developed new tourism package tours to promote local interest in and tourism to the Pendjari Biosphere Reserve in the northwest country. By offering considerable discounts to citizens to encourage the uptake of the new tours, the Tatas Route has enhanced tourism sites in the surrounding communities, further innovating tourism products in the areas.
- Costa Rica: the Costa Rican Tourism Institute (ICT) launched a free online 'Wellness Pura Vida' course to train tourism suppliers to generate new business ideas, including products that will allow locals (as domestic tourists) to reconnect with nature by mixing wellness and adventure tourism with unique Costa Rican experiences.
- Paraguay: the country launched a digital tourism product to promote domestic tourism, including virtual tours through 22 national routes, including cultural, historical, natural, eco-adventure, and gastronomic tourism attractions, and offers to provide domestic tourists access to their local tourism market.

Incentives can stimulate tourism demand, linking it directly with specific tourism suppliers. Concerning direct incentivisation of domestic travel spending, lessons can be drawn for the experiences of,

- Denmark: the Danish government made ferry journeys on 53 routes in a particular month free to domestic tourists as part of a broader domestic tourism package.
- Italy: through its Bonus Vacanze program, the Italian government offers citizens earning up to 40,000 euro (USD 45,444) a 500 euro (USD 568) incentive to spend on accommodation during local travel.
- Malaysia: the Malaysian government allocated USD 113 million to travel discount vouchers for domestic tourists and personal tax rebates for domestic tourism-related spending of up to USD 227.
- Thailand: the Thai government subsidised 40 % of the cost for 5 million nights' worth of hotel accommodation for locals (max. five nights).
- Costa Rica: as a non-financial incentive to travel domestically, the government of Costa Rica moved all holidays of 2020 and 2021 to Mondays to create long weekends to encourage locals to engage in domestic tourism activity.

3. Tourism marketing promotion

Domestic tourism-oriented marketing promotion in SSA may take a multidimensional approach to trigger demand and promote domestic tourism amongst locals. Domestic tourism marketing serves the dual purpose of (1) reigniting the local tourism economy and (2) restoring tourist confidence in travel and tourism activity by initiating socially responsible health and safetyoriented marketing. As it emerged, pre-COVID-19, the challenge for SSA tourism destination countries has been their focus on international tourism at the expense of promoting domestic tourism. However, this may be remedied by following best practices as illustrated by the experiences of some of the following countries (WTO, 2020b),

- France: the French government launched a domestic tourism campaign #Cet-ÉtéJeVisiteLaFrance ('This Summer, I visit France'), aimed at instilling national pride and prompting French citizens to prioritise domestic tourism locations across France.
- Spain: the Spanish government, launched its first-ever domestic tourism marketing campaign: '#DescubreLoIncreible (Discover the Unbelievable)', as an online marketing program.
- Mexico: using big data and social listening, the Mexican government utilises various information technology platforms to promote domestic tourism across its 32 States and multiple municipalities.

6 Domestic Tourism: Towards more Sustainable Tourism Futures

Sustainable tourism is an intuitive multi-stakeholder process involving equitable and future-oriented exploitation of natural tourism resources for tourists and the host community (UNWTO, 2021f). Within the context of the present chapter, the value of post-COVID-19 domestic tourism-driven sustainable tourism accrues to SSA country economies and local communities more pertinently. Sustainable tourism is predicated on an equilibrium of a triad of pillars: economic, environmental, and socio-cultural.

6.1 The Fconomic Dimension

The long-term economic viability of tourism is critical to the SSA development due to tourism's multiplier effect and value chain integration within local economies (WTTC, 2018a). The propensity of tourism to provide stable employment opportunities, create income, finance social and public resources, and alleviate poverty offers the impetus for sustainable tourism in SSA (Morupisi & Mokgalo, 2017). The economic sustainability of tourism in SSA is predicated on SSA governments providing policy and institutional stability (Ghalia et al., 2019) that stimulates domestic tourism activity, but more importantly, addresses the structural factors that alleviate poverty via strong political and developmental leadership (Massida & Etzo 2012), particularly considering the COVID-19 pandemic. Domestic tourism is critical to SSA tourism's economic resilience and sustainability in the short-to-medium term. Thus, a hybrid PPT

strategy that promotes domestic tourism based on ethnocentric public diplomacy and the concerted post-crisis re-integration of the local communities into the local tourism value-chain will contribute to the domestic tourism-driven economic sustainability of tourism in the region (Beegle, 2019; Christie et al., 2013; Morupisi & Mokgalo, 2017; Rogerson, 2006). Moreover, an institutionalist hybrid PPT approach ensures that tourism's economic sustainability will finance the development and implementation of ecological processes such as natural heritage (socio-cultural pillar) and biodiversity (environmental pillar) conservation.

6.2 The Environmental Dimension

There is a noticeable COVID-19 crisis-induced increase in tourist demand for nature-based tourism experiences (Houge-Mackenzie & Goodnow, 2021; Spalding et al., 2021). As a result, in promoting domestic tourism, due consideration must be made for the environmental impact of increased tourist activity. Within the SSA context, the environmental dimension of tourism sustainability is inextricably linked to the willingness and ability of domestic tourists to pay for tourism. Due to the pandemic, the constraints on international tourism demand imply that domestic tourism has become the catalyst for the resilience and sustainability of tourism in the near future (OECD, 2020). As previously discussed, pricing as a critical economic dimension in tourism is vital for the environmental sustainability of tourist areas (Morupisi & Mokgalo, 2017). Moreover, pricing correlates to domestic tourism demand and consumption (Gogoski, 2017; Tan, 2016). As a result, the WTTC (2018a) propagates discretionary pricing to buoy the mainstreaming of domestic tourism. For instance, high price/low volume pricing (attracting high-value quality tourists over quantity) for domestic tourism in ecologically sensitive tourism areas will contribute to the sustainability of tourism while being exposed to both the demand for nature-based tourism experiences and the carbon footprint of tourists.

6.3 The Socio-cultural Dimension

Domestic tourism in post-COVID-19 SSA represents a socio-cultural paradigm shift in the psyche of tourists, whereby African tourists with the propensity for international tourism must consider local travel as an alternative tourism activity. Moreover, both tourists and residents have become more circumspect of the risk associated with travel and tourism activity (Nguyen, 2020; Spalding et al., 2021). Therefore, to ensure that local communities in tourism areas are protected from COVID-19 infection spread and are more tolerant of increased domestic tourism, the vaccination of citizens who would like to engage in domestic tourism should be prioritised in the short term (UNCTAD, 2021). Beyond the psychological effects of the pandemic, the socio-cultural sustainability of tourism in SSA is also concerned with demystifying misnomers associated with tourism activity, such as wildlife tourism being the preserve of international tourists (Butler & Richardson, 2013). Other barriers to domestic tourism, such as language (cultural barrier), are vital in promoting domestic

tourism in SSA (Butler & Richardson, 2013; Ghalia et al., 2019). Implying that information symmetry through appropriate reflexive social marketing will be critical to a sustainable tourism future in SSA to promote domestic tourism, create awareness about and promote sustainable domestic tourism behaviour (Mbaiwa et al., 2007; UNWTO, 2020a; UNWTO, 2021f).

7 Conclusion

This chapter has interrogated the COVID-19 pandemic and its impact on domestic tourism in the SSA region. By taking a retrospective approach to explain the region's current domestic tourism-related paradox, the chapter presents the inherent constraints of the region. Moreover, these constraints explore the source of SSA's fundamental challenges in promoting domestic tourism as a vector for the tourism sector and, ultimately, macro-economic recovery. Unless the inherent constraints are addressed, they will erode any initiatives national governments may attempt to initiate to reignite SSA's tourism industry postthe-pandemic. Recommendations are provided as to how the inherent constraints associated with domestic tourism in SSA may be moderated to catalyse the resilience of the region's tourism industry and the medium-to-long-term sustainability of tourism in the region for the benefit of local tourism-reliant communities and domestic tourists. Country-specific examples, albeit mostly non-African, are provided to support the recommendations. This chapter has referenced country experiences and initiatives to suggest practical and sustainable approaches to stimulating domestic tourism in SSA countries. The process of compiling this chapter has also shown the extent of the limitations of academic inquiry into domestic tourism in SSA, with evident limitations in literature and reporting on potential initiatives under-way in the region. It will be paramount for the development of domestic tourism in SSA that future studies obtain, analyse and interpret comparative data from all SSA countries to have a broad econometric overview of domestic tourism in the region. Furthermore, assessments and critiques of policies and strategies implemented in the region would benefit national governments to approach a peer-reviewed mechanism that supports sustainable domestic tourism in SSA.

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■ The competitiveness of tourism products and tourist destinations heavily relies on natural and social resources. At the same time, the tourism industry's environmental footprint and its contribution to social inequalities are incontestable. A transformation towards more sustainable tourism futures is needed to ensure a positive contribution to fulfilling the UN's Sustainable Development Goals.

Today's challenges, desirable pathways and solutions are portrayed in this book, which was co-authored by members of the International Competence Network of Tourism Research and Education (ICNT). In 12 chapters, the scholars from diverse cultural backgrounds discuss

- aspects of sustainable and resilient tourism futures with reference to the attitude and behaviour of selected tourist groups,
- management of wildlife protection and of sustainability aspects by industry stakeholders as well as
- strategies to overcome COVID-19 induced issues.

The different chapters take the reader on a **journey around the globe while discussing sustainability** along the triple bottom line.