



INTERNATIONAL  
HELLENIC  
UNIVERSITY

School of Economics & Business  
Department of Organisation Management,  
Marketing and Tourism

Volume 7, Issue 2, 2021

## Journal of Tourism, Heritage & Services Marketing

Editor-in-Chief:  
Evangelos Christou

Journal of Tourism, Heritage & Services Marketing (JTHSM) is an international, open-access, multi-disciplinary, refereed (double blind peer-reviewed) journal aiming to promote and enhance research in tourism, heritage and services marketing, both at macro-economic and at micro-economic level.

ISSN: 2529-1947

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# Journal of Tourism, Heritage & Services Marketing

## Volume 7, Issue 2, 2021

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Published by International Hellenic University

ISSN: 2529-1947

UDC: 658.8+338.48+339.1+640(05)

Published online: 18 October 2021

Free full-text access available at: [www.jthsm.gr](http://www.jthsm.gr)



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# Editorial

**Evangelos Christou**, Editor-in-Chief

International Hellenic University, Greece

**JEL Classification:** L83, M1, O1

**Biographical note:** Evangelos Christou is Professor of Tourism Marketing and Dean of the School of Economics & Business at the International Hellenic University, Greece (echristou@ihu.gr).

## 1 INTRODUCTION

I am pleased to announce that JTHSM has been recently accepted for indexing by Scopus; this is a major milestone for this journal and I wish to thank the entire Editorial Board for the continued efforts, and especially Prof. Anestis Fotiadis. I am also pleased to present the fourteenth publication of JTHSM (volume 7, issue 2), the last issue in its seventh year of publication. This issue focus on furthering the journal's scope and consolidating its position in both conceptual developments and practical applications in tourism, heritage, and services through publication of nine quality manuscripts: six full papers that underwent rigorous double-blind reviewing, a research note and two book reviews.

## 2 PRESENTATION OF THE LAST ISSUE FOR 2021

The present issue of JTHSM contains six full paperes written by twenty authors located in eight different countries and affiliated with fourteen different universities.

The first full paper is written by Hannes Thees, Elina Störmann and Natalie Olbrich from the Catholic University of Eichstätt-Ingolstadt in Germany and Franziska Thiele from Ostfalia University of Applied Sciences, also in Germany. This study addresses the digital transformation in tourism, accelerated due to the COVID-19 pandemic. By linking the front- and backstage activities, a model of the tourism value system is sketched with the aim to assist the shift toward digital value creation in the case of the German tourism sector by asking: what are the challenges for the digital transformation of tourism service providers, and how can it be promoted along with the tourism value system? Recognizing the processual challenges of digitalization, this contribution builds upon a mixed-methods approach. First, a quantitative online survey (n = 372) was conducted by the German Competence Center for Tourism at the beginning of the COVID-19 pandemic. The results were discussed in a workshop with 40 experts from the tourism industry in September 2020, where the COVID-19 pandemic was referred to. The focus of tourism service providers is predominantly the digitalization of guest communication, whereas corporate strategies on digitalization are widely not available. Key findings of the survey indicate that

competitiveness in digitalization will depend on the appropriate infrastructure, clear strategies, and organizational integration. The study affirms the increased speed of digital transformation against the backdrop of the COVID-19 pandemic and reveals the need for greater focus on internal processes. In addition, an orchestrated linking of the service providers in a digital ecosystem that is supported by national efforts is proposed.

Sentiment analysis is built from the information provided through text (reviews) to help understand the social sentiment toward their brand, product, or service. The main purpose of the second paper, written by Franciele Cristina Manosso and Thays Cristina Domareski Ruiz from the Federal University of Paraná in Brazil, is to draw an overview of the topics and the use of the sentiment analysis approach in tourism research. The study is a bibliometric analysis (VOSviewer), with a systematic and integrative review. The search occurred in March 2021 (Scopus) applying the search terms "sentiment analysis" and "tourism" in the title, abstract, or keywords, resulting in a final sample of 111 papers. This analysis pointed out that China (35) and the United States (24) are the leading countries studying sentiment analysis with tourism. The first paper using sentiment analysis was published in 2012; there is a growing interest in this topic, presenting qualitative and quantitative approaches. The main results present four clusters to understand this subject. Cluster 1 discusses sentiment analysis and its application in tourism research, searching how online reviews can impact decision-making. Cluster 2 examines the resources used to make sentiment analysis, such as social media. Cluster 3 argues about methodological approaches in sentiment analysis and tourism, such as deep learning and sentiment classification, to understand the user-generated content. Cluster 4 highlights questions relating to the internet and tourism. The use of sentiment analysis in tourism research shows that government and entrepreneurship can draw and enhance communication strategies, reduce cost, and time, and mainly contribute to the decision-making process and understand consumer behavior.

In the third full paper, Marco Scholtz and Kaat De Ridder from Thomas More University of Applied Sciences in Belgium, aim to determine the influence of COVID-19 and the first 2020 lockdown on Flemish people's initial travel behaviour perceptions, a hypothetical scenario was posed to



respondents where they were asked to keep in mind a situation where they might be able to travel again during the summer of 2020 (July/August). This research had two main aims: i) the pre-lockdown travel plans for summer 2020 were determined; ii) the extent to which respondents would adapt their travel behaviour if they were hypothetically allowed to travel again by summer 2020. This exploratory research was done by means of an online quantitative questionnaire of which 1803(n) complete responses were obtained through convenience and snowball sampling. The results revealed that respondents did have initial travel plans for the 2020 summer (July/August) period, but that they adjusted their planning to mostly travelling nationally/locally, potentially benefitting the local tourism industry. These findings (i) indicate the importance of directing marketing efforts towards the local travel market and (ii) contribute to literature regarding the resilience of the (local) tourism industry. Additionally, the research unveils how the industry should do long-term planning by taking the immediate travel behaviour changes of the Flemish travel consumers into account through regular intervals of consumer research so that it can pick up on possible behavioural trends and ready itself.

The fourth full paper is written by Collins Kankam-Kwarteng from Kumasi Technical University, Appiah Sarpong from Takoradi Technical University, Ofosu Amofah from Ho Technical University, and Stephen Acheampong from Ghana Baptist University, all based in Ghana. This study examines the effect of market sensing and interaction orientation capabilities on the marketing performance of service based firms in Ghana. The study particularly explored the moderation effect of interaction orientation capability on the relationship between market sensing and firm performance of the service firms. The study adopted the survey approach focusing on a convenient sample of 200 employees of service firms. The hierarchical multiple regression analysis was used to establish the relationship between the variables of interest. The study revealed that market sensing capability and interaction orientation significantly account for variations in the marketing performance of the service businesses. Furthermore, the findings showed that the interaction of market sensing and interaction orientation capabilities is vital for extracting a higher marketing.

The fifth paper comes from three authors: Nikolaos Misirlis and Marjon Elshof from HAN University of Applied Sciences at The Netherlands, and Maro Vlachopoulou from University of Macedonia in Greece. In this article the authors aim to model social media users' behavior in relation with the use of specified Facebook pages and groups, related to eHealth, specifically to healthy diet and sport activities. The study represents to the best of our knowledge the first region-focused on a specific geographical area research. The users' personality is measured through the well-known Big Five model and the behavior is predicted with the Theory of Planned Behavior (TPB). Structural Equation Modeling is used in order to statistically control the associations among the diverse observed and latent variables. The results suggest an extended theory of planned behavior in combination with personality traits, on eHealth field. Openness and Extraversion do not seem to have positive effect on Attitude. Users' attitude can be affected positively from Agreeableness and Subjective Norms, guiding to finally positive affection of

users' actual behavior. Agreeableness cannot influence behavior, directly, nor through SN, since the hypothesis path A-SN is not verified, but it can through Attitude. Neuroticism was negatively correlated to PBC but this hypothesis was not, also, confirmed in the proposed model.

The sixth paper is written by five authors: Ana Margarida Anjo and Bruno Sousa from Polytechnic Institute of Cávado and Ave, Vasco Santos from Instituto Superior de Gestão e Administração de Santarém, Álvaro Lopes Dias from Universidade Lusófona (all previous from Portugal), and Marco Valeri from Niccolò Cusano University in Italy. The purpose of this paper is to analyse the potential of literary tourism in Portugal and explore the advantages of creating a digital literary map about the places associated with the widely renowned Portuguese author Fernando Pessoa (hereafter Pessoa), as well as the places that he suggests in one of his works, a tourist guide of Lisbon: *What the Tourist Should See* (1925). Firstly, a study of the state of art of the key concepts was made in order to apply them in the second part, the methodology, in the case of studying Lisbon from Pessoa's perspective. Then, allying personal taste for the writer/author with interest in cultural promotion gave rise to a digital literary map of Pessoa's Lisbon. Methodologically, a questionnaire was applied covering a sample of 173 valid literary tourists.

Teitler Regev Sharon and Shosh Shahrabani from the Max Stern Yezreel Valley College in Israel, through a research note discuss Health precautions while traveling after COVID-19. The tourism industry needs to identify potential tourists' planned behavior after COVID-19 and prepare accordingly. This study was conducted in Israel during the initial outbreak of COVID-19. This research focused on different types of precautionary measures used by the tourists and how perceived risk of getting sick with COVID-19 while traveling abroad as well as risk perceptions and attitudes about travel abroad might affect tourists' intentions to adopt precautionary measures when planning future travel abroad. This research is based on an online survey questionnaire distributed in March 2020 among 406 Israeli participants. The analytical model show that people's with higher levels of attitudes toward traveling abroad and those that prefer to avoid destinations with higher levels of attitudes toward traveling abroad and those that prefer to avoid travel to destinations with various risks had higher intentions to take precautionary measures while traveling abroad.

Last, two interesting book reviews are presented: Karen Cripps from University of Winchester Business School at the United Kingdom present a review of the book titled "Tourism, terrorism and security: Tourism security-safety and post conflict destinations" by M. Korstanje and H. Séraphin (eds.), and Maite Echarri Chávez from the University of La Habana in Cuba present a critical review of the book titled "Turismo de Eventos e Incentivos [Event and incentive Travel]" by Ramirez Millares (ed.).

Based on the above, I trust that you will enjoy reading this new issue of JTHSM, the first indexed in Scopus!

Evangelos Christou  
International Hellenic University  
Editor-in-Chief



# Shaping digitalization among German tourism service providers: Processes and implications

Hannes Thees

Catholic University of Eichstätt-Ingolstadt, Germany

Elina Störmann

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Ostfalia University of Applied Sciences, Germany

Natalie Olbrich

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## Abstract:

**Purpose:** This study addresses the digital transformation in tourism, accelerated due to the COVID-19 pandemic. By linking the front- and backstage activities, a model of the tourism value system is sketched with the aim to assist the shift toward digital value creation in the case of the German tourism sector by asking, What are the challenges for the digital transformation of tourism service providers, and how can it be promoted along with the tourism value system?

**Methods:** Recognizing the processual challenges of digitalization, this contribution builds upon a mixed-methods approach. First, a quantitative online survey ( $n = 372$ ) was conducted by the German Competence Center for Tourism at the beginning of the COVID-19 pandemic. The results were discussed in a workshop with 40 experts from the tourism industry in September 2020, where the COVID-19 pandemic was referred to.

**Results:** The focus of tourism service providers is predominantly the digitalization of guest communication, whereas corporate strategies on digitalization are widely not available. Key findings of the survey indicate that competitiveness in digitalization will depend on the appropriate infrastructure, clear strategies, and organizational integration.

**Implications:** The study affirms the increased speed of digital transformation against the backdrop of the COVID-19 pandemic and reveals the need for greater focus on internal processes. In addition, an orchestrated linking of the service providers in a digital ecosystem that is supported by national efforts is proposed.

**Keywords:** Digital transformation, German tourism service providers, digital tools and value creation, digitalization of the tourism value system, knowledge gap

**JEL Classification:** L83, N7, Z30

**Biographical note:** Hannes Thees (hannes.thees@ku.de) is a PhD researcher at the Catholic University of Eichstätt-Ingolstadt, Chair of Tourism and Center for Entrepreneurship. He obtained a double master's degree in tourism and regional planning from the Catholic University of Eichstätt-Ingolstadt and the University of Oulu. Elina Störmann (elina.stoermann@ku.de) is a research associate and PhD researcher at the Catholic University of Eichstätt-Ingolstadt, Chair of Tourism and Center for Entrepreneurship. She completed her master's degree in tourism and regional planning at the Catholic University of Eichstätt-Ingolstadt. Franziska Thiele (f.thiele@ostfalia.de) is a lecturer and research assistant at the Institute for Tourism and Regional Research of Ostfalia University of Applied Sciences. She holds a PhD in tourism geography from the University of Trier. Her research interests are hiking tourism, service quality, and digitalization in tourism. Natalie Olbrich (natalie.olbrich@ku.de) is a research associate and PhD researcher at the Catholic University of Eichstätt-Ingolstadt, Chair of Tourism and Center for Entrepreneurship. She completed her master's degree in tourism and regional development at the Ernst Moritz Arndt University of Greifswald. Her research focuses on the areas of destination management, experience, and culinary tourism.

## 1 INTRODUCTION

The tourism sector is one of the industries worst affected by the COVID-19 pandemic. Destination shutdowns, restrictions, and mobility reduction have forced destinations

to find creative solutions (Hall & Seyfi, 2021). The pandemic has accelerated the digital adaptation of the whole tourism industry (Pencarelli, 2020). The need for new digital and interactive incentives in tourism is growing not only due to younger and more technological-savvy and trend-conscious target groups but also due to consumers' increasing



requirements for quality and service (Komodromos, 2019). Service providers already well-digitized before have had an advantage during the pandemic that has helped them to adapt to and overcome the situation (Almeida et al., 2020).

Digitalization is a paradigm shift in tourism, with the rapid emergence of digital tools and techniques (Buhalis & Amaranggana, 2015). Digital transformation has changed interaction with the consumer in the travel sector and has had an immense effect on the customer journey (Cuomo et al., 2021). On the one hand, this has enabled a change in consumer behavior and led to the need to implement new solutions at every step of the customer journey. On the other hand, technological adaptations can help service providers take advantage of digitalization to strengthen their competitiveness. Therefore, developing long-term digital strategies is crucial for realizing the most effective use of technology to foster digital value creation. Obstacles often occur in the form of lack of IT expertise, time constraints, financial risks, and the strategy itself (Styvén & Wallström, 2017). Practitioners recognize the value of digitalization in terms of efficiency and communication, and it is becoming urgent to use technological advancement for digital value creation (Pohjola et al., 2020). From an entrepreneurial perspective, digital transformation is a human-driven process, which brings a change first in corporate culture to create new experiences and later in processes and business models. Thus, digital value creation is a central objective of the digital transformation (Santarsiero et al., 2021).

The literature reveals a gap in the use of proactive strategies by service providers to meet and respond to consumers' digital requirements. This raises the need to analyze how technological adaptation can facilitate digital transformation in tourism to design the customer journey and strengthen the value impact (Opote et al., 2020). Therefore, digital transformation needs a multi-stakeholder approach, supported by service providers with a long-term digital strategy (Brunetti et al., 2020). Research is already available on the digitalization of the customer journey, in particular in the context of experiences and added value for the consumer (Bec et al., 2019). However, there are gaps in the internal processes of tourism service providers, which can be bridged by leveraging digital technologies to drive the benefits of consumer engagement (Opote et al., 2020).

This paper approaches the research gaps mentioned above and contributes to understanding the digital transformation toward digital value creation in the tourism sector by asking: *What are the challenges for the digital transformation of tourism service providers, and how can it be promoted along with the tourism value system?*

In this respect, a case study on the German tourism industry was conducted, focusing on inbound service providers. Service providers, in this study, comprised hospitality providers, tourism associations, and destination marketing organizations (DMOs). Building upon the generally high awareness for digital value creation, this study aimed to address various digitalization challenges observed in the recovery as well. In this regard, this study corresponds to the demand for empirically testing the digitalization impact in practice (Tanti & Buhalis, 2017) or multi-stakeholder involvement (Brunetti et al., 2020). To meet the complex requirements of digital transformation, a mixed-methods

approach (Pelletier & Cloutier, 2019) was implemented in 2020, during the COVID-19 pandemic. The strength of the study lies in the analysis and discussion of quantitative survey results in a negotiated process with a subsequent workshop (Ørngreen & Levinsen, 2017).

## 2 THEORETICAL BACKGROUND

To explore the implications of digital technology for tourism destinations, the tourism value system is used as a conceptual framework consisting of the concept of the customer journey and the model of value chains. Modeling the value system is a basis for linking the empirical results from the German case study with theoretical insights.

### 2.1 Digital transformation in the tourism value system

The tourism value system is considered a combination of the value chain and the customer journey. In addition, the model differentiates between front- and backstage (Thees et al., 2020). Value co-creation must be taken into account at both stages. Thus, the service providers should have the ability to align the digital offers with consumer needs (Fraginiere et al., 2020). However, the tourism value system is rather complex in function and scale. It comprises individual service providers, management organizations, cities and regions, and even national and international authorities when travel abroad is involved (Thees et al., 2020).

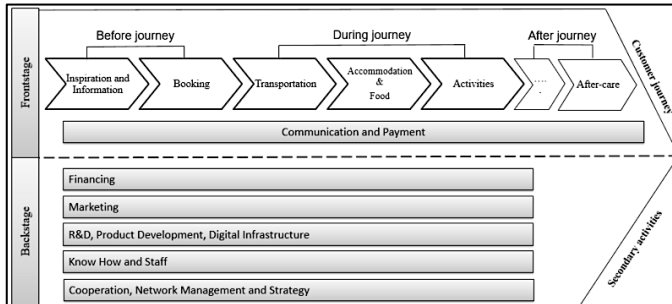
The frontstage includes all customer touchpoints and, specifically, the customer journey, with several steps of experience from the customer's point of view (Stickdorn & Zehrer, 2009). The journey is a result of numerous attractions and involves facilities and services. Thus, the customer journey is linked to different accommodations, mobility, and service providers. To address consumer needs as effectively as possible, digital value creation could occur at any stage: the planning stage, the journey itself, or the post-stage of travel (Lane, 2007; Wang et al., 2014). Consistent digitalization at each step illustrates how the level of immersion within tourism experiences can be increased for travelers along the journey (Bec et al., 2019). Technology adaption enables service providers to create and use new and diversified communications channels, making it easier for consumers to engage (Komodromos, 2019).

Supplementary to the customer journey, the model of value chains (secondary activities) helps analyze the company's value creation on the backstage (Thees, Erschbamer, & Pechlaner, 2020). Consequently, the classical model of Porter (2000) is adopted as a framework, where the value chain serves as an analytical tool to structure the activities and diversification of a company. Digitalization in tourism has changed the entire value chain in tourism creation, marketing, and distribution (Minghetti & Buhalis, 2010).

Figure 1 represents a complex chain, where bilateral communication and touchpoints between consumers (frontstage) and tourism service providers (backstage) can be guaranteed. The use of digital technologies may increase competitiveness when embedded early in a knowledge-creating strategy. Thus, a digitalization strategy should be more consumer oriented on the frontstage in the short term and less risky on the backstage in the long term (Brunetti et

al., 2020). According to this, digital transformation is not just about fulfilling consumers' requirements. E-Customer Relationship Management (CRM) becomes a strategy to increase consumer satisfaction (Sigala & Christou, 2006).

*Figure 1: Value System in Tourism. Source: Own elaboration, according to Thees, Erschbamer, and Pechlaner (2020)*



Digital technologies in tourism should not be merely a means to an end or even lead to over-digitalization (Nanchen et al., 2021). It is no longer sufficient to simply determine consumer requirements. The customer journey is exposed to significantly more influencing factors than in the past, and consumer touchpoints have changed (Prahalad & Ramaswamy, 2004). Consumer touchpoints refer to all points of contact between the traveler, the tourism products, the service providers, and tourism stakeholders (Stickdorn & Zehrer, 2009). Digitalization helps to better understand changing consumer requirements and provide more effective customer solutions (Rusu et al., 2020). Therefore, technology can fundamentally change the way to manage tourist flows and experiences (Hughes & Moscardo, 2019). Smart technologies and personal mobile devices provide new touchpoints. Consequently, touchpoints have a multidirectional influence on purchasing decisions and also enable direct interaction (Stare & Križaj, 2018). For interlinking digital and physical distribution channels efficiently, systematic and holistic customer touchpoint management is necessary (Straker et al., 2015).

The challenge in digital transformation is to create a digital ecosystem in which tourism service providers develop a holistic and valuable or smart tourism experience by strengthening personalization, context awareness, and real-time information (Shafiee et al., 2021). A successful digital transformation in companies will depend on the adaptability of tourism service providers, their collaboration partners, and the consumers (Almeida et al., 2020). Therefore, a targeted analysis of the frontstage is critical. This helps to plan budgets and financing on the backstage and to control them on specific distribution channels (Reichstein & Härting, 2018). The more complex the journey, the more potential an analysis offers for identifying interdependencies and optimizing budgets. The findings lead to an increase in effectiveness and efficiency as well as the optimization of budgets (Buhalis & Amaranggana, 2015). Ultimately, this leads to the fact that information and communication technology continuously reconfigure and reorient competitive structures (Pencarelli, 2020). Against the backdrop of the experience society and digitalization, those tourism providers that can be competitive and innovative also

co-create authentic, personalized, and technology-supported experiences in conjunction with consumers (Neuburger et al., 2019; Krakover & Corsale, 2021).

## 2.2 Technological readiness in the tourism value system

Current research shows great diversity in technological readiness, maturity, and technical tools (Ivanov et al., 2021). A multitude of new technological possibilities and applications, but also changes in consumer expectations and behavior, open up new opportunities and challenges (Pencarelli, 2020). On the one hand, digitalization enables the optimization of processes and, thus, more efficient and cost-effective service performance on the frontstage (Reichstein & Härting, 2018). On the other hand, technological adaptation in the company also requires investments, creates new costs, and changes processes and structures on the backstage (Hughes & Moscardo, 2019).

The widespread use of ICT enhances value co-creation within multi-stakeholder ecosystems, increases value for visitors, and facilitates decision making for service providers (Matarazzo et al., 2021). To accelerate digital transformation, several studies have explored value creation in tourism in a digital context (Neuhofer et al., 2014; Opute et al., 2020; Schmidt-Rauch & Schwabe, 2014). To sum up those studies, there is a need to strengthen companies' internal processes, reduce the complexity in managing digital solutions (Opute et al., 2020), and provide communication between consumer and tourism service providers (Reichstein & Härting, 2018). Several constraints and obstacles can occur on digitizing the frontstage. There is a lack of within-budget digitalized products for which a particular technology level is sufficient (Dredge et al., 2019). In addition, computer-based solutions to management issues need to consider the importance of functional benefits and also address privacy and security issues (Hughes & Moscardo, 2019). Digital hubs, community platforms, interactive maps, and further smart solutions in accommodation and transportation could be useful tools in the digitalization of the customer journey (Fragniere et al., 2020). Visitor management and guidance have gained new significance due to the COVID-19 pandemic and call for renewal. Thus, visitor management has become a proactive, sustainable, and holistic instrument, where digitalization can have a supporting function (Høegh-Guldberg et al., 2021). On the backstage, there are complementary obstacles and constraints. Entrenched in everyday work routines, especially small and medium-sized tourism companies (SME) tend to lack time, digitally trained employees, and the necessary financial resources to dedicate themselves to technological adaption (Dredge et al., 2019). Networks of regional, national, and international open data initiatives will be a critical success factor in maximizing the synergies, relevance, and innovation of an open digital data infrastructure. To realize this vision, coordinated cooperation and trust are essential. Technological adaption requires digital expertise and know-how, relevant information, and a culture of innovation (Fragniere et al., 2020). However, there is often a lack of finance and insufficient technological knowledge (Dredge et al., 2019).

For destinations and their service providers, it is, therefore, necessary to examine the benefits of company-specific digitalization measures and related implications. Destinations need to create a trustworthy, authentic, and



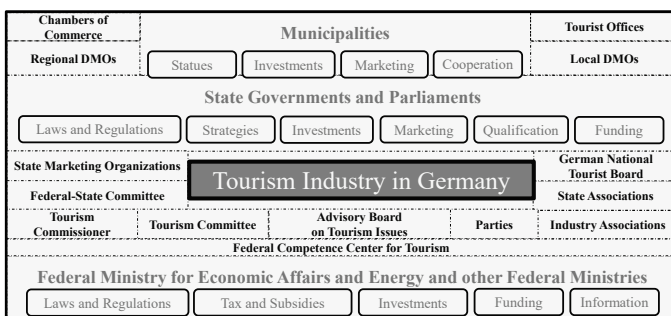
insightful environment to answer any questions digital consumer audiences might have (Buhalis & Amaranggana, 2015). One of the greatest challenges in establishing a shared vision for an open digital data infrastructure relates to leadership issues. With the understanding that a coordinated path for building an open digital data infrastructure will create a common baseline for innovation, service providers can leverage digital opportunities in the future (Pesonen, 2020). This study provides an outlook on where service providers in Germany stand in mastering the digital transformation, which front- and backstage activities in the tourism value system must be considered, and which prerequisites must be implemented.

### 3 DIGITALIZATION OF GERMAN TOURISM

The tourism industry in Germany is characterized by diverse and extensive offerings: cities and culture, nature and activities, castles and palaces, and experiences and pleasure (German National Tourist Board, 2021). The organization of the tourism industry in Germany is quite complex, with various political actors, policy instruments, and objectives at the federal, state, and municipal levels (Figure 2) (German Tourism Association, 2021b). Thiele and Dembowski (2019) show that tourism in Germany is a cross-sectional task, and discussions include departments such as economy, transport, and environment.

In addition to the funding program "enhancing performance & promoting innovation in the tourism sector" (LIFT) and the so-called Advisory Board on Tourism Issues, a federal competence center for tourism was established in 2018, with the primary goal to support tourism policy of the federal government by generating knowledge and data (Competence Center for Tourism of the German Federal Ministry for Economic Affairs and Energy, 2021a). The federal cabinet initiated a dialogue process for the development of a national tourism strategy in 2019, which includes strengthening digital infrastructure as an operational goal.

Figure 2: Tourism Policy Framework in Germany. Source: Own illustration



Germany is a popular destination, and both foreign and domestic travelers enjoy its offerings. For example, the number of overnight stays has increased in a 10-year comparison from 370 million in 2009 to just under 500 million overnight stays in 2019 (Federal Statistical Office of Germany, 2021). However, in 2020, the COVID-19 pandemic caused a decline, with about 40% fewer overnight

stays than in 2019. Commercial sales also fell by around 40%, and there were around 75% fewer passengers at German airports (Federal Association of the German Tourism Industry (BTW) 2021). It is especially due to the COVID-19 pandemic that digitalization has been accelerated, e.g., in technological adaptation, the digitalization of business areas, tourist information as well as leisure activities, visitor guidance, artificial intelligence, open data, online distribution, and mobile payment (German Tourism Association, 2021a). However, only the first steps toward a smart destination have been taken so far (German Tourism Association, 2021a), and the German National Tourist Board, which markets Germany as a tourist destination on an international level, calls for the expansion of a high-performance data infrastructure, increasing the data competence of German tourism since "Germany's online travel market has grown more slowly than some other European countries due to the popularity of offline distribution and the leading role of tour operators" (Phocuswright 2018, p. 7).

The previous challenges illustrate that the SME-dominated tourism industry in Germany is struggling with the digital transformation so far and digital transformation has become more urgent during the COVID-19 pandemic, which will be highlighted next.

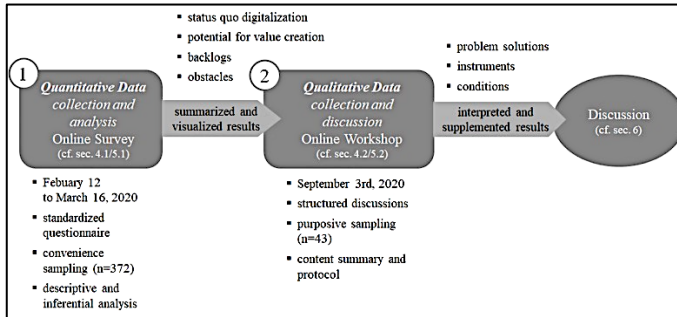
### 4 RESEARCH METHODOLOGY: MIXED-METHODS APPROACH

Combining the theoretical background and the case-specific challenges, five main hypotheses were developed (Table 1), on the following issues: digital maturity (H1), functional integration of digitalization (H2), digitalization of business divisions (H3), digitalization strategy (H4), and employees' acceptance (H5). This study is based on two data sources as part of the market and trend radar of the Competence Center for Tourism. The center works on behalf of the German Federal Ministry for Economic Affairs and Energy and was established by Project M GmbH. Its primary objective is to facilitate the process of knowledge transfer between politicians, scientists, and travel companies.

The quantitative analyses are based on an online panel of nearly 400 stakeholders from the tourism industry in Germany who have been regularly surveyed on various industry topics since 2018. The stakeholders belong to tourism companies and organizations, the goal being to gather a differentiated view of the German tourism industry. Subjects were acquired from various industry segments with the aim of quota sampling. Since participation was voluntary and thus inconsistent, no quota procedure could be applied. Nevertheless, the nonprobability sample aimed to get the first impression of different perspectives on relevant topics. Results of the online surveys were presented to and discussed with different industry experts in workshops in order to jointly develop options and solutions for designing political framework conditions. This triangulation design was also used for this study to complement and supplement the results of quantitative and qualitative data so that it can be assigned to mixed-methods approaches (Kelle, 2005). This paper illustrates the results of the combination of a quantitative

online survey and its discussion in a qualitative and structured workshop (Figure 3).

Figure 3: Mixed-Methods procedure. Source: Own illustration



#### 4.1 Online survey and recruitment of a nonprobability sample

The online survey covered the areas of digital maturity in order to record the current state of digitalization in German service providers and their value creation; the aim was to shed light on the added value of digital technologies and their application in value creation processes. The digital and analog value creation components were compared and areas in need of support identified. The questionnaire contained 27 predominantly closed questions and was sent to nearly 400 registered panel participants, and an open survey link was also distributed via the Competence Center for Tourism and different multipliers from the tourism industry (e.g., industry associations). This study was based on convenience sampling to reach as many representatives of the industry sector as possible and to get the first insight into the status quo of digitalization from different perspectives. Online surveys have proven their worth for this objective (Evans & Mathur, 2005). In this study, 372 completed and valid questionnaires were collected. The majority of the participants belonged to the segments of hospitality (accommodation and gastronomy) (60%) as well as local, regional, and state destination management organizations (40%). In addition, service providers of leisure and cultural facilities, tour guides, tour operators and travel agencies, mobility services, and consultants were surveyed. The statistical measurement followed a descriptive analysis at first as the frequencies were discussed in the workshops (Section 4.2). Furthermore, hypotheses were developed to uncover differences and peculiarities within the data (Table 1). Inferential analyses were carried out to test selected hypotheses, such as Pearson correlation coefficient. Additional cross-tab statistics were used to interpret the results. The statistical analyses were all performed with the help of IBM SPSS Statistics.

#### 4.2 Structured workshops with Industry Experts

At the online workshop "Digital design: Digital operations and digital paths to the customer" in September 2020, the results of the online survey were presented and discussed in detail to verify key aspects from the experts' perspective. Invitations were sent to association representatives, selected industry experts, and the tourism department of the federal government (purposive sampling, 43 participants). Accordingly, a workshop is understood as a dialogical method that aims to structure a discussion and to share

knowledge from different stakeholders (McDonald et al., 2009). Ørngreen and Levinson (2017) found out that use of workshops as a research method in combination with other empirical approaches is less represented in literature. It is mainly used as a participation tool in local governance and policymaking processes (Bramwell & Sharman, 1999; Thees et al., 2020). In addition to the research function, the Competence Center enables stakeholders in the tourism industry to get indirectly involved in the tourism policy of the federal government by creating a collaborative environment in which interests and needs for action are negotiated. A pre-structured customer journey map was used to facilitate a discussion about digital problem solutions, instruments, and the operational requirements concerning the different stages of the customer journey. The results were presented to all workshop participants in a plenary session. The summarized discussion results of the online workshops were documented and presented to all participants.

## 5 FINDINGS: DIGITAL MATURITY AND PATHS FOR DIGITALIZATION

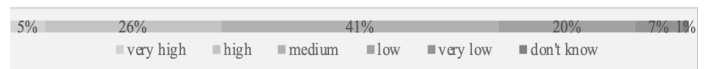
Subsequent findings illustrate the digitalization of service providers in German tourism, with particular reference to five selected hypotheses on digital maturity (Section 5.1) and the tourism value system (Section 5.2). The results were vital to discussing future development in an open workshop (Section 5.3).

### 5.1 Quantitative survey: Hypotheses on digital maturity

First, the survey participants were asked to assess the degree of digitalization (digital maturity) of their company or organization (Figure 4). The given answers show a Gaussian distribution around an average of 2,99. Only 31% perceived their own degree of digitalization as "high" or "very high" (H1, Table 1), and the rather indecisive answer of "medium" of 41% of the respondents reflects a possible uncertainty regarding coping with digitalization.

Figure 4: Degree of digitalization, How high do you rate the degree of digitalization in your company? n = 372.

Source: Own illustration



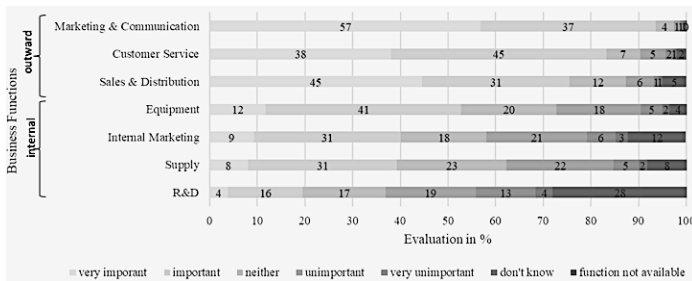
Second, looking at how the service providers organize digitalization, there is a comparatively low integration into the organizational structure. Only a quarter of the companies surveyed had a separate task/functional area for digitalization. It is conspicuous that one in two DMOs had some kind of digital officer, compared to 13% of hospitality providers (accommodation and gastronomy), which confirms significant differences (H2, Table 1).

Third, respondents evaluated the importance of digitalization in relation to particular functional divisions (Figure 5). In this regard, the most important divisions for digitalization were outward-directed (backstage), such as marketing and communication (57% "very important"). Above this, there was a significant difference between DMOs and hospitality providers (H3, Table 1). On the one hand, hospitality

providers rated outward-directed functions even stronger than DMOs, and on the other hand, they did not focus much on internal processes.

Fourth, the quantitative study asked for different measures and directions in the digitalization of the business models. The availability of a digitalization strategy provides a starting point for this discussion, as the respondents were undecided in defining appropriate strategies. However, there are significant positive correlations between a digitalization strategy and the degree of digitalization or integrating technology into the company (H4, Table 1). Beyond the business model perspective, a digitalization strategy correlates with available digital competencies (.507 significance,  $p < 0.01$ ) or receiving and analyzing customer feedback (.462 significance).

Figure 5: Importance of digitalization, What is the importance of digitalization in the following areas of your business?  $n = 372$ . Source: Own illustration



Fifth, a positive correlation between the employees' acceptance of digitalization and the integration of technology in the company was confirmed (H5, Table 1). Moving beyond this hypothesis, digital know-how and competencies have a wide-ranging influence, e.g., sufficient digital competence correlates with high acceptance for digital processes (.600 significance) and digital decision and approval processes correlate with the qualification of employees (.548 significance).

There are additional significant correlations above the described hypotheses, for example, between:

- The use of collaboration software for the digitalization of customer contact (.510 significance)
- The use of collaboration software for the use of data management systems (.538 significance)
- The usage of collaboration software for digital decision and approval processes (.522 significance)
- B2B information portals for the digitalization of products and services (.519 significance)
- The renewal of IT structure/software for the optimization of data protection/security (.710 significance)
- The development of a digitalization strategy for online coaching (.513 significance)
- The development of know-how for the optimization of data protection (.713 significance)

## 5.2 Quantitative survey: Descriptive analysis of the tourism value system

While tourism services follow a detailed customer journey (Section 2), Figure 6 displays key variables from the questionnaire and assigns items to the customer journey and the secondary activities. The majority of the service providers in our study (63% of the respondents) were concerned with the digitalization of customer contact and the introduction of new digital marketing and sales concepts (51%), which reveal activities on the frontstage. Objectives of digitalization projects, similar to the integration of digitalization in businesses, predominantly focus on customers. In our study, 78% pursued the goal of increasing customer satisfaction and customer loyalty, while 76% aimed to ensure competitiveness. Internal objectives, such as renewal of IT structures and software (59%) or making jobs more flexible (29%), were pursued less frequently. Concrete projects were mainly data related but also related to the digitalization of processes, broadband expansion, or introduction of new digital products. Overall, it can be stated that the integration of digitalization follows a predominantly customer- and product-oriented picture, while internal processes provide further potential for digitalization and value creation. Analyzing details of every step of the value system uncovers further findings, e.g., the need to introduce new digital marketing and sales concepts (information). It is important to structure and provide open data or data protection (data management) and accumulate expertise to achieve digital objectives and implement projects (know-how) or develop digitalization strategies (strategy).

Table 1: Main hypotheses and variables

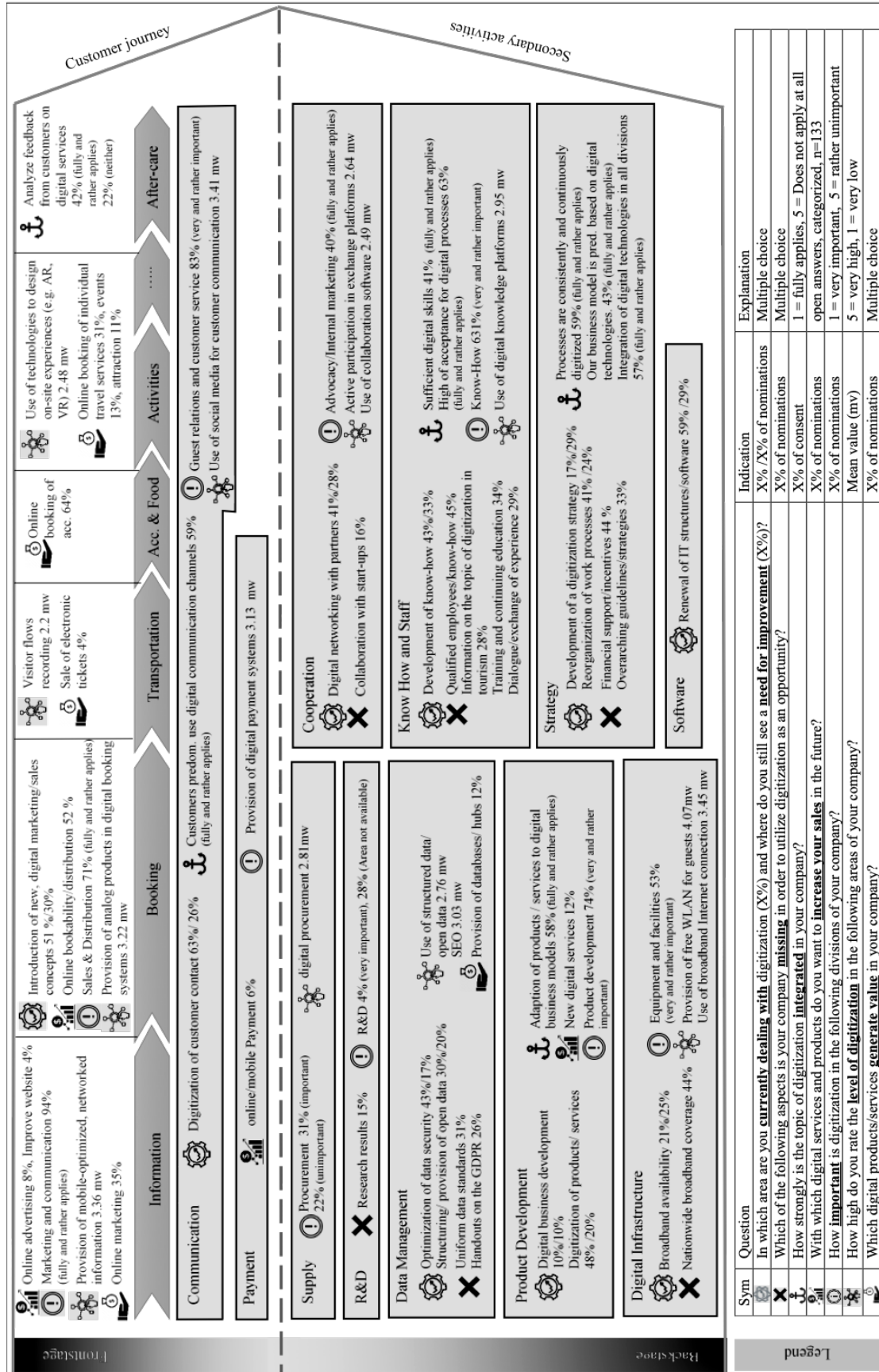
Hypothesis, $H_0$	Independent Variable	Dependent Variable	Hypothesis Tests
$H1a$ : The majority of the surveyed service providers perceived their degree of digitalization as "high" or even "very high."	50% consent	Degree of digitalization	binomial = sig.  $H_0$ retained
$H2a$ : The functional integration of digitalization depends on the type of organization.	Organization type Hospitality, $n = 142$ DMO, $n = 170$	Functional integration of digitalization	chi-quadrant = sig.  $H_0$ rejected $H_a$ accepted
$H3a$ : Between DMOs and hospitality providers are significant differences in performing outward-facing digitalization and digitalization of internal processes.	Organization type Hospitality, $n = 134$ DMO, $n = 166$	Outward digitalization (marketing and communication, sales and distribution, customer service)  Digitalization of internal processes (equipment, product development, internal marketing, supply, R&D)	Hosp.: 1.72 DMO: 1.96 $MU$ -test = sig.  $H_0$ rejected $H_a$ accepted  Hosp.: 3.37 DMO: 2.93 $MU$ -test = sig.  $H_0$ rejected $H_a$ accepted
$H4a$ : The implementation of a digitalization strategy correlates positively with the digitalization of the business model.	My company has a clearly defined digitalization strategy.	Degree of digitization Business model is predominantly based on digital technologies. Business models are continuously digitized. Integration of technology in all areas of the company Adaptation of products/services to digital business models	.534 sig. .568 sig. .614 sig. .510 sig. .499 sig.  $H_0$ rejected $H_a$ accepted
$H5a$ : A high acceptance of the employees for digitalization assists in the integration of technology.	High acceptance for digital processes	Continuously digitalized Integration of technology in all areas of the company	.507 sig. .517 sig.  $H_0$ rejected $H_a$ accepted

Source: Own illustration, significance level –  $p < 0.01$

To sum up the survey results, service providers in German tourism are well aware of the future importance of digital value creation. Nevertheless, there is insufficient understanding and know-how of the potential applications and added value of digital technologies, which are predominantly understood as customer- and sales-oriented instruments, while internal applications and requirements are considered to be low in importance (H3). The level of digitalization within companies (H1) is often unclear due to

a lack of expertise in many areas. Concerning future plans of the companies surveyed for 2030 in a post-COVID era, there is a clear trend: the current ratio of digital-to-analog sales of 30% to 70% is to be turned around by 2030, with digital sales then accounting for 70%. This would correspond to an almost

Figure 6: Customer Journey with selected findings from the quantitative survey. Source: Own illustration





133% increase in the digital share of sales. However, it is often uncertain which technologies and applications can be used to achieve this, as the focus is almost exclusively on online bookability.

### 5.3 Workshops: Problems and solutions for digitalization

These quantitative results built the basis for a workshop with service providers with the aim to discuss problems and solutions in digitalization (Section 3.2). According to various inputs from the workshop sessions, major problems occur in terms of (1) adequate selection of tools and channels, (2) transition and integration of analog and digital data, and (3) further optimization of bookability across the customer journey. During this workshop, these challenges were discussed against the background of the COVID-19 pandemic, as well as existing and future instruments. The COVID-19 pandemic may have emphasized the development of these internal processes. A central instrument that bridges all customer journey stages is the platform in its various settings, especially by linking service providers and communicating with customers efficiently and transparently. In addition, a couple of impulses relate to background processes according to the provided framework in Table 2. The most critical challenges are the provision of know-how, data management, and the need for strategic impulses.

Table 2: Workshop: Design of Digitalization, problems and solutions

Customer Journey					
Communication/ Information	Distribution/ Booking	Transportation	Accommodation	Activities	Aftercare
<ul style="list-style-type: none"> <li>• Timeliness of data across all channels</li> <li>• Data availability and security as a basic service</li> <li>• Fit of channel and target group</li> <li>• Integration of new content: VR, 3D hotel, etc.</li> <li>• Providing information frequently</li> <li>• Information overload</li> <li>• Knowledge about information needs</li> <li>• Potential of chatbots</li> <li>• Need for joint platforms</li> </ul>	<ul style="list-style-type: none"> <li>• Occupancy management on different scales and channels</li> <li>• Insufficient customer-centric booking engines, increased individualization</li> <li>• Service providers' tendency to quite DMO booking tools -&gt; growth in booking.com -&gt; loss of contact, know-how transfer more difficult</li> <li>• Technical infrastructure for dynamic booking</li> <li>• Cross-provider cooperation</li> </ul>	<ul style="list-style-type: none"> <li>• Existing guidance systems based on motorists only</li> <li>• Need for flexible systems in excursions</li> <li>• Need for integration of alternative transportation</li> <li>• Support of reliability by digitalization</li> <li>• Need for real-time information on mobility streams</li> </ul>	<ul style="list-style-type: none"> <li>• Stringent implementation of electronic registration forms</li> <li>• Self-check-in/check-out available only in a couple of hotels</li> </ul>	<ul style="list-style-type: none"> <li>• Increased bookability</li> <li>• Realtime information on opening hours and cuning</li> <li>• Monetization of services, which makes data complex</li> <li>• Fulfillment of spontaneous needs/customer satisfaction</li> </ul>	<ul style="list-style-type: none"> <li>• Definition of channels and responsibilities</li> <li>• Already high interaction via other business models: FB, Google, etc.</li> <li>• Lack of customer data</li> <li>• Unclear dealing with customer ratings</li> <li>• Reviews, complaints, and loyalty, for which data and management are needed</li> </ul>
Data Management			Know-How		
<ul style="list-style-type: none"> <li>• Multi-channel/interfaces, connectivity analog (digital)</li> <li>• Data availability, visibility of offers</li> <li>• Networking of the data pools, also at the organizational level</li> <li>• Digitization of paper data</li> <li>• Different data qualities</li> <li>• Storage of customer data</li> <li>• The need of a platform for each DMO level</li> <li>• Broadband connectivity across the customer journey</li> </ul>			<ul style="list-style-type: none"> <li>• Qualification of small service providers</li> <li>• Interaction between DMO and service providers</li> <li>• Professionalization of DMOs</li> <li>• DMO as a supporter for all SMEs</li> </ul>		
Cooperation			Strategy		
<ul style="list-style-type: none"> <li>• Distribution of tasks between the different levels of DMOs</li> <li>• Federal DMO: Interfaces and technical prerequisite, knowledge provider</li> <li>• Local DMO relationship management, knowledge diffuser</li> <li>• Startups: Stronger cooperation on a project basis</li> <li>• Networking of tourism professionals, new collaboration, away from parochial thinking</li> </ul>			<ul style="list-style-type: none"> <li>• Agile structures</li> <li>• Analysis of international best practices and definition of own position and aims in a transparent way</li> <li>• Digital maturity, which also includes leadership, knowledge management, and developing products</li> <li>• Lack of a decision support platform</li> </ul>		
Secondary Activities			R&D		
			<ul style="list-style-type: none"> <li>• Combining big data and own market research to get the big picture</li> </ul>		

Source: Own illustration

One important finding of the quantitative survey and the conducted workshop is that digitalization in the tourism industry is accompanied by hopes regarding increased efficiency, better networking, etc. At the same time, a large number of participants are unsettled. The reasons for this include the complexity of legal provisions and regulations

(e.g., on data protection) and a lack of know-how. There is a consensus that more collaboration is needed within the industry as a whole. The availability and networking of up-to-date data and reliable information are crucial for the industry's recovery. Comparing the survey and the workshop results, increased awareness of internal processes on the backstage can be observed.

## 6 DISCUSSION: DIGITAL TRANSFORMATION ON MULTIPLE LEVELS

This discussion builds upon the research question on the digital transformation of service providers in German tourism during the COVID-19 pandemic. The related problem statement (Section 1) can be structured at multiple levels. This discussion approaches research gaps at the service provider level (Section 6.1), in the development of a digital ecosystem at the destination level (Section 6.2), and in the design of context conditions at the national level (Section 6.3). The combination of these three levels corresponds to research recommendations made by Santarsiero et al. (2021).

### 6.1 Service providers: System integration

Reflecting on the theoretical background (Section 2), digital value creation in tourism is embedded in a complex value system that requires digital transformation at multiple levels across destinations along the customer journey. Digitalization at company levels means digitizing customer interactions or touchpoints on the frontstage and the supporting activities on the backstage (Thees, Erschbamer, & Pechlaner, 2020). However, theory reveals that systemic integration of front- and backstage activities provides further potential for developing digital business models and increasing customer value (Opote et al., 2020).

Against this background, the conducted case study with German tourism service providers (Section 5) uncovers several challenges that prevent digital transformation at the company level. Challenges exist in terms of vague digital maturity or inconsequent organizational integration by a digitalization officer, but more importantly, service providers acknowledge a lack of know-how on implementing digital offers and tools across company divisions. Finally, a strong focus on the digitalization of outward functions can be identified, e.g., customer service, which visualizes positive progress among a significant share of service providers, but the appropriate digitalization of background processes is a challenge for the consequent linking of front- and backstage, e.g., by a system integration through a digital platform.

Commonalities can be identified on linking the theoretical background with case study results. For example, there is strong customer focus in digitalization (Reichstein and Härting 2018) and knowledge gaps (especially for SMEs) (Dredge et al., 2019; Minghetti & Buhalis, 2010). Proceeding with these visible differences, scholars frequently indicate opportunities for digitalization, especially digitalization of business models (Brunetti et al., 2020), while German service providers still seem to struggle with rather general context conditions. These operational challenges are confirmed by the workshop, which stressed not only data availability, connectivity, and quality but also the qualification of DMOs

and service providers as well as the availability of technical infrastructure. However, the awareness that digitalization increases the companies' success requires a new mentality to shape the business model (Brunetti et al., 2020). Further potential lies in a business model development that increases the tourist experience by value co-creation along the customer journey (Cuomo et al., 2021).

This study shows that the courage, speed, and freedom of choice of service providers to deal with the issue of digitalization has reached a new level. Decisions are made significantly faster and have helped to boost technological transformation (Cuomo et al., 2021). However, the digital gaps have become even more visible due to the COVID-19 pandemic and should be minimized. A significant amount of work has been done in the direction of digital communication and product development so far, but internal processes have been neglected. As a result, the link between front- and backstage is often insufficiently developed or, in some cases, completely absent. The frontstage has not been fully digitized either, so digital bookability is often unavailable along the entire service chain, and many processes are still at the beginning of their development. Visitor management and guidance will assume a significant role in the context of digitization and will remain a strategic tool after the COVID-19 pandemic (Høegh-Guldberg et al., 2021). With regard to the possibilities and measures related to visitor management, an increased acceptance on the guests' side can be observed. Guests are looking for digitalization, and service providers are required to address this desire satisfactorily, especially on the frontstage. It is also an opportunity for destinations to make more conscious decisions and to act in a target-group-oriented manner.

Summarizing the discussion at the level of service providers, the case study of Germany contributes to understanding the current pain points from an operational level (including technical infrastructure or access to knowledge) and identifying appropriate solutions that assist in digitalization, including training, information about target groups' digital needs, multi-channel occupancy management, and digital aftercare engagement. A digital mindset is required (Shafiee et al., 2021), which should be balanced with a particular provider's objectives or strengths (e.g., personal contact). Looking ahead, the digitalization of daily processes and provision of data might soon become a basis for the next steps in digitalization, which include tools such as chatbots, assistance robots, and real-time visitor flow management, to name just a few (Gretzel et al., 2021; Ivanov et al., 2021).

## 6.2 Destination: Digital ecosystem development

The cooperative nature of tourism requires the management of relevant stakeholders across the customer journey (Section 2). This means that the digital maturity of each involved service provider determines and affects the digitalization of the customer journey (Cuomo et al., 2021). A couple of scholars indicate the need for information systems and destination management in digital transformation (Pencarelli, 2020). Here, destinations, especially DMOs, play a strategic leadership role in supporting digital transformation. DMOs are often responsible for disseminating technologies, but collaborative strategies to compete in new value ecosystems are inevitable (Jaziri 2019). Therefore, concepts such as smart destination (Gretzel et al. 2015) and digital ecosystems

(Buhalis & Amaranggana, 2015) underline the embeddedness of service providers. These concepts comprise various driving factors, such as the intention to promote cooperation in the sector, to comprise tourism and non-tourism companies, to shape context conditions for digitalization and entrepreneurship, and to provide a joint platform for exchange. Such platforms could visualize inter-systemic or cross-sectoral relationships and assist in knowledge diffusion or innovation development. Digital information systems are still under development in tourism (Baggio & Chiappa, 2013), even if authors from other fields (Brunetti et al., 2020) claim to be tackling digital transformation from a systemic perspective. This systemic perspective includes a corporate culture (Section 6.1) and developing digital culture and skills at the network level (Chatzigeorgiou & Christou, 2020; Brunetti et al., 2020). This study on the German tourism sector shows first approaches to engage in digital ecosystems. For example, digital networking with partners and internal marketing are assigned moderate importance. The use of collaborative platforms proves significant correlations with the digitalization of customer contact or use of data management systems. In line with theoretical gaps, there is only limited active participation in exchange platforms (Neuburger et al., 2019).

Contributing to the theoretical discussion, this case study uncovers that the preconditions and the digital maturity at the service provider level are often too weak to allow engagement in an exchange on digital issues actively. Improvements are also perceived in collaboration with start-ups (Baggio & Chiappa, 2013) or the provision of uniform data standards. The workshop highlights the need for collaborative platforms at the destination level and consistent data usage. As digitalization is still challenged by knowledge gaps and organization (Neuhofer et al., 2014), the workshop participants declared a consistent distribution of tasks between the different levels of DMOs (local, federal). In sum, progress is highly valued through smaller projects that develop in a bottom-up process. It is a central task of the digital ecosystem to accompany digitalization by the implementation of tools specifically on the backstage. Upcoming applications, e.g., with the use of artificial intelligence, could further simplify deep learning and knowledge diffusion in the ecosystem (Tussyadiah, 2020). Besides the speed of the digital transformation, discussions around the creation of a "level playing field" (Bramwell & Lane, 2010) are increasing. Aligned with the needs of technological progress, fair cooperation and appropriate distribution of value creation will be more than ever essential in the course of the recovery (Fotiadis & Sigala, 2015; Mombeuil & Fotiadis, 2017; Vassiliadis et al., 2013).

Even if the technological capabilities are promising, there is often a lack of human resources and know-how on dealing with digital technologies, e.g., specialized skills in data management and machine-learning-based analytics. Further research needs to address digital (leadership) skills in tourism and the way these skills can affect the digital maturity of service providers (Pesonen 2020). In this regard, a digital ecosystem needs to be built upon the cooperative handling of such challenges. DMOs can provide leadership, but associations and independent consultancies are important entities in this process, which then diversifies the governance

of digitalization in German tourism. A digital ecosystem may change the governance of tourism, as it empowers service providers in self-organization and multi-lateral cooperation besides the focal DMO. Further challenges of a digital ecosystem in practice concern the activity of service providers in this environment and the definition of scope and content. A digital ecosystem is not only dominated by a central platform but also includes various public-available platforms and platforms across different spatial levels and company types, which then require digital culture plus technological knowledge.

### 6.3 National: Governance of digital context conditions

At the macro level, nationwide associations and governmental agencies have the power to support digital transformation. Brunetti et al. (2020) analyzed the role of public administration at the macroregional level and claimed that public administration should focus on providing digital education, innovative partnerships, and financial resources. In this regard, public administration should serve citizens, businesses, and relevant stakeholders as a partner in digitalization. Especially a detailed national digitalization policy is required to assist in digitalization across spatial and functional levels (Hasenzahl et al., 2019). If successful, this would fill the gap between human-driven digitalization at the level of service providers and the provision of digital ecosystems that require public support policies on infrastructure, data standards, and supply systems (Pencarelli, 2020; Mugobi & Mlozi, 2021).

Although this case study of Germany focused on service providers, implications can be derived from respondents of the national associates and related studies carried out by the National Competence Center. Digitalization in German tourism is certainly affected by the complex organizational structure across spatial scales with partially diverging interests and distribution of tasks. Key development areas in digitalization are innovative and responsible data usage and expansion of a high-performance data infrastructure, which will increase data competence of German tourism (Section 3). The quantitative results illustrate that there is still a lack of context conditions, e.g., in digital infrastructure, education, and financial support. In this regard, this case study highlights the need for governance across multiple levels and thus gives guidance in a coordinated way. Referring to similar cases, governance requires (Pesonen, 2020; Nechoud et al., 2021):

- Structure (digitalization strategy, digital officers)
- Framework conditions (broadband availability, data standards, joint platforms)
- Flexible financing (project oriented)
- Knowledge (information and knowledge platforms, digital competence)
- Inspiration and leadership (providing a role model, underlining chances of digitalization, providing innovation).

## 7 CONCLUSIONS

In light of the research question "What are the challenges for the digital transformation of tourism service providers, and

how can it be promoted along with the tourism value system?" this study investigated the digital maturity of German tourism service providers, as well as processes of digital transformation, using a participative mixed-methods approach. Against this background, four major contributions of this paper can be stated:

1. Underscoring the importance of the holistic digitalization of services by digitizing internal processes in the value system.
2. Identifying the potential of joint digital ecosystems to overcome service providers' obstacles (such as data management and know-how).
3. Identifying the prerequisites for the national governance of digitalization, with special consideration of a digitalization strategy, linking several spatial levels.
4. Defining the effects of the COVID-19 pandemic on digitalization at the service provider level.

It can be concluded that the expansion of time, financial, and human resources for the development of an internal digital environment is particularly important. In addition, workflows and work processes must be reorganized; digital marketing and sales concepts, as well as operational measures, must be developed and expanded; and data analysis (big data, smart data, etc.) must be improved. The expansion of infrastructure (e.g., broadband), the adaptation of data protection, or the further development of funding lines can be further practical implications. The development of a digitalization strategy that follows the corporate strategy and spans various levels (internal and external) is necessary. Overall, a high degree of innovation and cooperation on different levels is required to increase digital value creation in tourism.

Nevertheless, three main limitations need to be addressed for the case study. First, survey results, as well as workshop results, are difficult to generalize for digitalizing all German tourism service providers, as the participants were volunteers probably interested and engaged in digitalization. Second, the survey sample overrepresented the hospitality sector and DMOs, while tourist attractions, tour operators, and travel agencies were hardly represented. In future research, a quota process to capture the status of the entire industry is required, as well as representative comparisons between different segments. Third, this study was subjected to rapid changes during the COVID-19 pandemic. While the online survey was conducted in the early days of the pandemic, the online workshop took place during the pandemic and under an acute need for digital transformation. These dynamics are also illustrated by the result of a recent survey that revives the level of digitalization in a similar setting with a mean value of 3.47. So the current level increased from medium to relatively high during the pandemic (Competence Center for Tourism of the German Federal Ministry for Economic Affairs and Energy, 2021b). Nevertheless, the results offer a first impression of how the tourism industry in Germany deals with challenges of digitalization and where policymakers can take action to provide greater support and to overcome the backlog, especially that revealed during the pandemic. Overall, a high degree of innovation and cooperation on different levels is required to increase digital value creation in tourism. Building upon these limitations, future research may focus on linking service providers in a

digital ecosystem in a systemic approach, defining measures to promote competencies and infrastructure in specific stages of the customer journey, and analyzing the role of national initiatives to shape the important context conditions for digitalization across the tourism industry.

## REFERENCES

- Almeida, F., Duarte Santos, J., & Augusto Monteiro, J. (2020). The Challenges and Opportunities in the Digitalization of Companies in a Post-COVID-19 World. *IEEE Engineering Management Review*, 48(3), 97–103.
- Baggio, R., & Chiappa, G. D. (2013). Tourism Destinations as Digital Business Ecosystems. In L. Cantoni & Z. Xiang (Eds.), *Information and communication technologies in tourism 2013: Proceedings of the International Conference in Innsbruck, Austria, January 22-25, 2013* (pp. 183–194). Springer Berlin Heidelberg: Imprint; Springer.
- Bec, A., Moyle, B., Timms, K., Schaffer, V., Skavronskaya, L., & Little, C. (2019). Management of immersive heritage tourism experiences: A conceptual model. *Tourism Management*, 72, 117–120.
- Bramwell, B., & Lane, B. (2010). Sustainable tourism and the evolving roles of government planning. *Journal of Sustainable Tourism*, 18(1), 1–5.
- Bramwell, B., & Sharman, A. (1999). Collaboration in local tourism policymaking. *Annals of Tourism Research*, 26(2), 392–415.
- Brunetti, F., Matt, D. T., Bonfanti, A., Longhi, A. de, Pedrini, G., & Orzes, G. (2020). Digital transformation challenges: strategies emerging from a multi-stakeholder approach. *The TQM Journal*, 32(4), 697–724.
- Buhalis, D., & Amaranggana, A. (2015). Smart Tourism Destinations Enhancing Tourism Experience Through Personalisation of Services. In I. Tussyadiah & A. Inversini (Eds.), *Information and Communication Technologies in Tourism 2015* (pp. 377–389). Springer International Publishing.
- Chatzigeorgiou, C., & Christou, E. (2020). Adoption of social media as distribution channels in tourism marketing: A qualitative analysis of consumers' experiences. *Journal of Tourism, Heritage & Services Marketing*, 6(1), 25–32.
- Christou, E. (2010). Investigating attitudes towards mobile commerce for travel products. *Tourism: An International Interdisciplinary Journal*, 58(1), 7–18.
- Competence Center for Tourism of the German Federal Ministry for Economic Affairs and Energy [Kompetenzzentrum Tourismus des Bundes]. (2021a). *Unsere Arbeit*. <https://www.kompetenzzentrum-tourismus.de/ueber-uns/unsere-arbeit> [Accessed the 29th of May 2021]
- Competence Center for Tourism of the German Federal Ministry for Economic Affairs and Energy [Kompetenzzentrum Tourismus des Bundes]. (2021b). *Welche Voraussetzungen braucht die Revitalisierung des Tourismus?*, <https://www.kompetenzzentrum-tourismus.de/wissen/online-panel/463-welche-voraussetzungen-braucht-die-revitalisierung-des-tourismus> [Accessed the 29th of May 2021]
- Cuomo, M. T., Tortora, D., Foroudi, P., Giordano, A., Festa, G., & Metallo, G. (2021). Digital transformation and tourist experience co-design: Big social data for planning cultural tourism. *Technological Forecasting and Social Change*, 162, 120345.
- Dredge, D., Phi, G. T. L., Mahadevan, R., Meehan, E., & Popescu, E. (2019). Digitalisation in Tourism: In-depth analysis of challenges and opportunities. <https://ec.europa.eu/docsroom/documents/33163/attachments/1/translations/en/renditions/native> [Accessed the 29th of May 2021]
- Evans, J. R., & Mathur, A. (2005). The value of online surveys. *Internet Research*, 15(2), 195–219.
- Federal Association of the German Tourism Industry [Bundesverband der Deutschen Tourismuswirtschaft (BTW) e.V.]. (2021). *Das Tourismusjahr 2020 - ein Überblick*. <http://www.btw.de/tourismus-in-zahlen/das-tourismusjahr-2020-ein-ueberblick.html> [Accessed the 29th of May 2021]
- Federal Statistical Office of Germany [Statistisches Bundesamt]. (2021). Number of overnight stays at travel accommodation in Germany from 1992 to 2020. *Statistisches Bundesamt*. <https://www.statista.com/statistics/560792/overnight-stays-german-accommodation/> [Accessed the 29th of May 2021]
- Fragniere, E., Fumeaux, D., Fux, M., Grezes, S., & Imboden, A. (2020). How Smart is your Tourism? Designing a Maturity Model for Lesser-Known Mountain Resorts. *Proceedings of the 27th FRUCT Conference*, 27, 307–313.
- Fotiadis, A. K., & Sigala, M. (2015). Developing a framework for designing an Events Management Training Simulation (EMTS). *Journal of Hospitality, Leisure, Sport & Tourism Education*, 16, 59–71.
- German National Tourist Board [Deutsche Zentrale für Tourismus e. V.]. (2021). *Jahresbericht 2020*. [https://www.germany.travel/media/redaktion/pdf/ueber-uns/2021/DZT\\_Jahresbericht2020\\_DE\\_RZ\\_WEB.pdf](https://www.germany.travel/media/redaktion/pdf/ueber-uns/2021/DZT_Jahresbericht2020_DE_RZ_WEB.pdf) [Accessed the 29th of May 2021]
- German Tourism Association [Deutscher Tourismusverband e.V.]. (2021a). *Digitalisierung*. <https://www.deutschertourismusverband.de/impulse/digitalisierung-im-tourismus.html> [Accessed the 29th of May 2021]
- German Tourism Association [Deutscher Tourismusverband e.V.]. (2021b). *Struktur im Deutschlandtourismus*. *Deutscher Tourismusverband e.V.* <https://www.deutschertourismusverband.de/verband/aufgaben-strukturen/struktur-im-deutschlandtourismus.html> [Accessed the 29th of May 2021]
- Gretzel, U., Sigala, M., & Christou, E. (2012). Social Media Change the Name of the Game in the Tourism and Hospitality Industries, *The European Financial Review*, 20 October, available at: <http://www.europeanfinancialreview.com/?p=1340>. [Accessed the 29th of May 2021]
- Gretzel, U., Sigala, M., Xiang, Z., & Koo, C. (2015). Smart tourism: foundations and developments. *Electronic Markets*, 25(3), 179–188.
- Hall, C. M., & Seyfi, S. (2021). COVID-19 pandemic, tourism and degrowth. In C. M. Hall, L. Lundmark, & J. J. Zhang (Eds.), *Contemporary geographies of leisure, tourism and mobility. Degrowth and tourism: New perspectives on tourism entrepreneurship, destinations and policy* (pp. 220–238). Routledge.
- Hasenzahl, L., Kalbaska, N., & Cantoni, L. (2019). Digital transformation in the national tourism policies. In Y.-C. Chen (Ed.), *ACM Digital Library, Proceedings of the 20th Annual International Conference on Digital Government Research* (pp. 417–424). Association for Computing Machinery.
- Høegh-Guldberg, O., Seeler, S., & Eide, D. (2021). Sustainable Visitor Management to Mitigate Overtourism: What, Who and How. In A. Sharma & A. Hassan (Eds.), *Overtourism as Destination Risk* (pp. 167–186). Emerald Publishing Limited.
- Hughes, K., & Moscardo, G. (2019). ICT and the future of tourist management. *Journal of Tourism Futures*, 5(3), 228–240.
- Ivanov, D., Tang, C. S., Dolgui, A., Battini, D., & Das, A. (2021). Researchers' perspectives on Industry 4.0: multi-disciplinary analysis and opportunities for operations management. *International Journal of Production Research*, 59(7), 2055–2078.
- Jaziri, D. (2019). The advent of customer experiential knowledge management approach (CEKM): The integration of offline &



- online experiential knowledge. *Journal of Business Research*, 94, 241–256.
- Kelle, U. (2005). Sociological Explanations between Micro and Macro and the Integration of Qualitative and Quantitative Methods. *Historical Social Research/Historische Sozialforschung*, 95–117.
- Komodromos, I. (2019). New generation of consumers in the tourism industry: Secondary Research. *International Journal of Entrepreneurship and Innovative Competitiveness – IJEIC*, 1(1).
- Krakover, S., & Corsale, A. (2021). Sieving tourism destinations: Decision-making processes and destination choice implications. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 33–43.
- Lane, M. (2007). The Visitor Journey: the new road to success. *International Journal of Contemporary Hospitality Management*, 19(3), 248–254.
- Matarazzo, M., Penco, L., Profumo, G., & Quaglia, R. (2021). Digital transformation and customer value creation in Made in Italy SMEs: A dynamic capabilities perspective. *Journal of Business Research*, 123, 642–656.
- McDonald, D., Bammer, G., & Deane, P. (2009). *Research Integration Using Dialogue Methods*. ANU Press.
- Minghetti, V., & Buhalis, D. (2010). Digital Divide in Tourism. *Journal of Travel Research*, 49(3), 267–281.
- Mombeuil, C., & Fotiadis, A. K. (2017). Assessing the effect of customer perceptions of corporate social responsibility on customer trust within a low cultural trust context. *Social Responsibility Journal*, 13(4), 698–713.
- Mugobi, T., & Mlozi, S. (2021). The impact of external factors on ICT usage practices at UNESCO World Heritage Sites. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 3–12.
- Nanchen, B., Bovier, A., Golay, B., Salamin, J., & Fragnière, E. (2021). Improving the Orchestration Resilience of a Smart Integrated Tourism Destination – A Case Study in the Swiss Alps. *Die Unternehmung*, 75(1), 24–42.
- Nechoud, L., Ghidouche, F., & Seraphin, H. (2021). The influence of eWOM credibility on visit intention: An integrative moderated mediation model. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 54–63.
- Neuburger, L., Beck, J., & Egger, R. (2019). The ‘Phygital’ tourist experience: The use of augmented and virtual reality in destination marketing. In M. A. Camilleri (Ed.), *Tourism planning and destination marketing* (pp. 183–202). Emerald Publishing.
- Neuhöfer, B., Buhalis, D., & Ladkin, A. (2014). A Typology of Technology-Enhanced Tourism Experiences. *International Journal of Tourism Research*, 16(4), 340–350.
- Opute, A. P., Irene, B. O., & Iwu, C. G. (2020). Tourism Service and Digital Technologies: A Value Creation Perspective. *African Journal of Hospitality, Tourism and Leisure*, 9(2), 1–18.
- Ørngreen, R., & Levinsen, K. (2017). Workshops as a Research Methodology. *The Electronic Journal of E-Learning*, 15(1), 70–81.
- Pelletier, C., & Cloutier, L. M. (2019). Conceptualising digital transformation in SMEs: an ecosystemic perspective. *Journal of Small Business and Enterprise Development*, 26(6/7), 855–876.
- Pencarelli, T. (2020). The digital revolution in the travel and tourism industry. *Information Technology & Tourism*, 22(3), 455–476.
- Pesonen, J. (2020). Management and Leadership for Digital Transformation in Tourism. In Z. Xiang, M. Fuchs, U. Gretzel, & W. Höpken (Eds.), *Handbook of e-Tourism* (pp. 1–34). Springer International Publishing.
- Phocuswright (2018). *Tourism in Germany 2030 - Executive Summary*.
- Pohjola, T., Lemmetyinen, A., & Dimitrovski, D. (2020). Value Co-creation in Dynamic Networks and E-Tourism. In Z. Xiang, M. Fuchs, U. Gretzel, & W. Höpken (Eds.), *Handbook of e-Tourism* (pp. 1–23). Springer International Publishing.
- Porter, M. E. (2000). Location, Competition, and Economic Development: Local Clusters in a Global Economy. *Economic Development Quarterly*, 14(1), 15–34.
- Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, 18(3), 5–14.
- Reichstein, C., & Härting, R.-C. (2018). Potentials of changing customer needs in a digital world – a conceptual model and recommendations for action in tourism. *Procedia Computer Science*, 126, 1484–1494.
- Rusu, V., Rusu, C., Botella, F., Quiñones, D., Bascur, C., & Rusu, V. Z. (2020). Customer eXperience: A Bridge Between Service Science and Human-Computer Interaction. In T. Ahram, W. Karwowski, S. Pickl, & R. Taiar (Eds.), *Advances in Intelligent Systems and Computing. Human Systems Engineering and Design II* (Vol. 1026, pp. 385–390). Springer International Publishing.
- Santarsiero, F., Lerro, A., Carlucci, D., & Schiuma, G. (2021). Modelling and managing innovation lab as catalyst of digital transformation: theoretical and empirical evidence. *Measuring Business Excellence*, Article ahead-of-print. Advance online publication.
- Schmidt-Rauch, S., & Schwabe, G. (2014). Designing for mobile value co-creation—the case of travel counselling. *Electronic Markets*, 24(1), 5–17.
- Shafiee, S., Rajabzadeh Ghatari, A., Hasanzadeh, A., & Jahanyan, S. (2021). Smart tourism destinations: A systematic review. *Tourism Review*, 76(3), 505–528.
- Sigala, M., & Christou, E. (2006). Investigating the impact of e-customer relationship management on hotels’ website service quality. *ECIS 2006 Proceedings*, 118, 1–13.
- Stamboulis, Y., & Skayannis, P. (2003). Innovation strategies and technology for experience-based tourism. *Tourism Management*, 24(1), 35–43.
- Stare, M., & Križaj, D. (2018). Crossing the frontiers between touch points, innovation and experience design in tourism. In A. Scupola & L. Fuglsang (Eds.), *Services, economy and innovation: 2018: 1. Services, experiences and innovation: Integrating and extending research* (pp. 81–106). Edward Elgar Publishing.
- Stickdorn, M., & Zehrer, A. (2009). *Service Design in Tourism : Customer Experience Driven Destination Management*. Proceedings of the First Nordic Conference on Service Design and Service Innovation.
- Straker, K., Wrigley, C., & Rosemann, M. (2015). Typologies and touchpoints: designing multi-channel digital strategies. *Journal of Research in Interactive Marketing*, 9(2), 110–128.
- Styvén, M. E., & Wallström, Å. (2017). Benefits and barriers for the use of digital channels among small tourism companies. *Scandinavian Journal of Hospitality and Tourism*, 19(1), 27–46.
- Tanti, A., & Buhalis, D. (2017). The influences and consequences of being digitally connected and/or disconnected to travellers. *Information Technology & Tourism*, 17(1), 121–141.
- Thees, H., Erschbamer, G., & Pechlaner, H. (2020). The application of blockchain in tourism: use cases in the tourism value system. *European Journal of Tourism Research*, 26, 2602.
- Thees, H., Pechlaner, H., Olbrich, N., & Schuhbert, A. (2020). The Living Lab as a Tool to Promote Residents’ Participation in Destination Governance. *Sustainability*, 12(3), 1120.
- Thiele, F., & Dembowski, N. M. (2019). Der tourismuspolitische Handlungsrahmen urbaner Transformationsprozesse. In T. Freytag & A. Kagermeier (Eds.), *Studien zur Freizeit- und*

- Tourismusforschung: Band 15. Touristifizierung urbaner Räume (pp. 87–104). Verlag MetaGIS-Systems.
- Tussyadiah, I. (2020). A review of research into automation in tourism: Launching the Annals of Tourism Research Curated Collection on Artificial Intelligence and Robotics in Tourism. *Annals of Tourism Research*, 81, 102883.
- Vassiliadis, C., Fotiadis, A., & Piper, L. (2013). Analysis of rural tourism websites: the case of Central Macedonia. *TOURISMOS: An International Multidisciplinary Refereed Journal of Tourism*, 8(1).
- Wang, D., Xiang, Z., & Fesenmaier, D. R. (2014). Adapting to the mobile world: A model of smartphone use. *Annals of Tourism Research*, 48, 11–26.
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*SUBMITTED: MAR 2021*

*REVISION SUBMITTED: JUL 2021*

*ACCEPTED: AUG 2021*

*REFEREED ANONYMOUSLY*

*PUBLISHED ONLINE: 18 OCT 2021*



# Using sentiment analysis in tourism research: A systematic, bibliometric, and integrative review

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## Abstract:

**Purpose:** Sentiment analysis is built from the information provided through text (reviews) to help understand the social sentiment toward their brand, product, or service. The main purpose of this paper is to draw an overview of the topics and the use of the sentiment analysis approach in tourism research.

**Methods:** The study is a bibliometric analysis (VOSviewer), with a systematic and integrative review. The search occurred in March 2021 (Scopus) applying the search terms "sentiment analysis" and "tourism" in the title, abstract, or keywords, resulting in a final sample of 111 papers.

**Results:** This analysis pointed out that China (35) and the United States (24) are the leading countries studying sentiment analysis with tourism. The first paper using sentiment analysis was published in 2012; there is a growing interest in this topic, presenting qualitative and quantitative approaches. The main results present four clusters to understand this subject. Cluster 1 discusses sentiment analysis and its application in tourism research, searching how online reviews can impact decision-making. Cluster 2 examines the resources used to make sentiment analysis, such as social media. Cluster 3 argues about methodological approaches in sentiment analysis and tourism, such as deep learning and sentiment classification, to understand the user-generated content. Cluster 4 highlights questions relating to the internet and tourism.

**Implications:** The use of sentiment analysis in tourism research shows that government and entrepreneurship can draw and enhance communication strategies, reduce cost, and time, and mainly contribute to the decision-making process and understand consumer behavior.

**Keywords:** Sentiment analysis, tourism, bibliometrics, systematic review, integrative review, Vosviewer

**JEL Classification:** L83, C38, Z30

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## 1 INTRODUCTION

In recent years, consumers have changed the way they use social media, which means that the purpose of visiting and using these websites became more interactive with people sharing information about their daily lives' experiences and the products and services they consume (Cambria, Schuller, Xia & Havasi, 2013; Kim, Park, Yun & Yun, 2017). This context emerges because digital technology and social media have a substantial impact on the way people share information and opinions (Sheth, 2020), so it can be considered as an important tool to understand public expression about a relevant event or an experience that has been lived in a hotel, for example (Deng, Gao, Wang & Zhang, 2020).

Social media and a large amount of information shared in these platforms impacts, directly, the hospitality domain

(García-Pablos, Cuadros & Linaza, 2016) as a result of the necessity that tourists have to seek facts about a destination and the experiences other people lived there (Yan, Zhou & Wu., 2018). The tourists became aware of the thoughts and emotions that other consumers have, and this happens because users can create posts in real-time on business pages that can be monitored and turned into actionable knowledge (Nechoud, Ghidouche & Seraphin 2021; Amanatidis, Mylona, Mamalis & Kamenidou, 2020; Maio, Fenza, Loia & Orciuoli, 2017).

It is important to highlight those travelers, as mentioned, go beyond hotel and airline tickets reservation but also exchange information and detailed descriptions of their pleasant and unpleasant travel experiences through social media and online review websites (Halkiopoulou, Antonopoulou, Papadopoulos, Giannoukou & Gkintoni, 2020; Kim et al., 2017). In this case, online reviews help consumers make more informed decisions and help them to choose the product



or service that better fits their necessity or desire (Cheung & Thadani, 2012; Liu & Park, 2015).

With the advent of social networks and web communities, a large amount of information is more attractive as a source of data for opinion mining and sentiment analysis (SA) (Cambria et al., 2013). Therefore, SA and text mining have been used as a way to get insights from online reviews in the hospitality sector (Hu & Chen, 2016). SA involves the deciphering of the opinions contained in the written or spoken word, through IT processes, to extract subjective information; opinions and feelings in regard to analytical sources are observed (Pang & Lee, 2008).

There has been growing interest in SA in detecting valence and emotions in the texts obtained from social media platforms (Mohammad, 2017). Several authors have used this technique to comprehend and measure sentiment level on airline services (Liau & Tan, 2014), hotels (Mankad, Han, Goh & Gavirneni, 2016; García-Pablos et al., 2016; Hu & Chen, 2016; Moro, Ramos, Esmerado & Jalali, 2019; Valdivia, Hrabova, Chaturvedi, Luzón, Troiano, Cambria & Herrera, 2019) and destination experiences (Kim et al., 2017; Zheng, Luo, Sun, Zhang & Chen, 2018; Marine-Roig, 2019), where the sentiment is located on the positive-negative scale equated with the evaluation-potency-activity model (EPA) (Pang & Lee, 2008; Liu, 2017).

Besides this context, sentiment has been discussed as a relevant variable in marketing, because it can be used as a critical indicator regarding consumer behavior and their feelings about a purchase and an experience that was lived before (Mishkin, 1978; Gaski & Etzel, 1986; Thropp, 1992; Carroll, Fuhrer & Wilcox, 1994; Kim et al., 2017). Hence, it is important to mention that online reviews have become an instrument for consumers to make better and conscious decisions (Yan et al., 2018), and it's a way to help both businesses and consumers because one can draw more relevant experiences.

In this case, applying SA and opinion mining in studies that have the objective to understand the consumers' feelings and opinions is important to deliver better and competitive experiences, products, and services (Hussain & Cambria, 2018). The main purpose of this paper is to draw an overview of the topics and the use of the SA approach in tourism research, which raises the following question: how has tourism research used the SA approach to understand the information shared by the consumer in social media?

The paper is structured as follows. First, a literature review is provided on SA in tourism research. Second, the research method employed for this study is explained. Next, the research findings are presented and discussed. Finally, the study conclusions. This article provides an overview of the SA and highlights future directions for tourism research.

## 2 BACKGROUND LITERATURE

In the last decades, researchers and even entrepreneurs have seen an explosion of text data generated by consumers in many ways, such as text messages, reviews, tweets, emails, posts, and blogs (Humphreys & Wang, 2018). People nowadays share, use, and search for information online regularly (Hemmatian & Sohrabi, 2019); more importantly, social media has become a tool that can be used for those

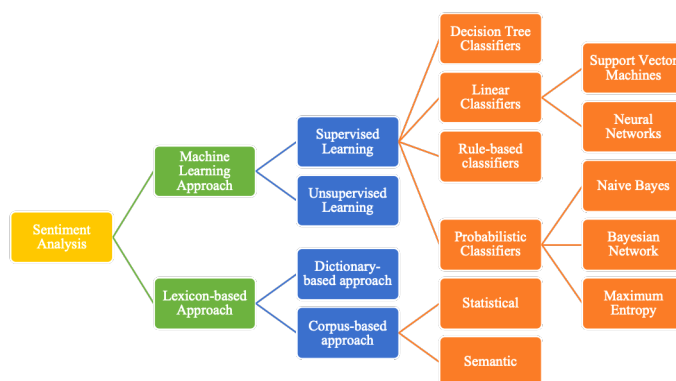
purposes. In this case, it is possible to read different opinions, and, inside this context, many sentiments, evaluations, emotions, appraisals, and attitudes emerge from this content (Liu, 2017). So, the internet and social media have transformed our communication; web text is becoming one of the most important channels for people to express their opinions, mental state and communicate with each other (Batrınca & Treleaven, 2015).

Hence, to understand consumer opinions, a new research field called SA emerges (Serrano-Guerrero, Olivas, Romero & Herrera-Viedma, 2015), which is the computational study of people's opinions, appraisals, attitudes, and emotions toward entities, individuals, issues, events, topics, and their attributes (Prabowo & Thewall, 2009; Liu & Zhang, 2012; Kirilenko et al., 2018). It is important to point out that the focus of SA is to extract a sentiment expressed in a document toward a certain aspect based on the subjectivity and the linguistic characteristics of the words within an unstructured text (García, Gaines & Linaza, 2012).

The foundation of SA is based on the assumption that the arrangement of the theoretical and methodological approach of social networks is the recognition that the causal mechanism is what the consumers do, think, or feel, lies in the patterns of relationships between the actors themselves, caught in a given context and reference to an identifiable temporal frame (Micera & Crispino, 2017).

As mentioned, SA searches to comprehend the emotions and sentiments in the opinions shared by different consumers; thus, it is important to differentiate these constructs. First, emotion is an intuitive feeling that is triggered by situational cues. Meanwhile, sentiment is an organized feeling or accumulated emotions, and it is highly socialized and developed from thought rather than being instinctive emotions (Liu et al., 2019).

Figure 1: Sentiment classification techniques



Source: Authors (2021) based on Serrano-Guerrero et al. (2015, p. 21).

These sentiments can be categorized into positive and negative; or into an n-point scale, e.g., very good, good, satisfactory, bad, very bad (Prabowo & Thewall, 2009). Several emotions and affective states can be assigned positive or negative valence as well; for example, joy is considered as carrying positive valence and, thus, indicates positive sentiment while anger is indicative of negative sentiment. The intensity of the sentiment can be measured by how far from a neutral point on the positive-negative dimension a

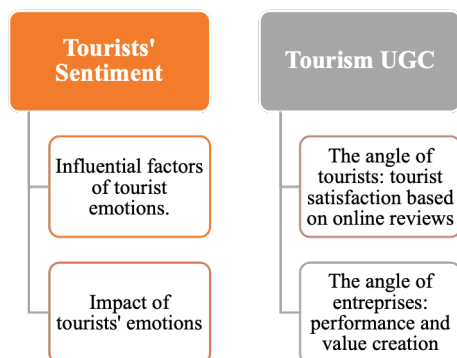
concept is located (Kirilenko et al., 2018). Consequently, Serrano-Guerrero et al. (2015) present two approaches to perform SA, see Figure 1.

Hence, there is the Machine Learning Approach that is divided into supervised and unsupervised techniques, the first one is relevant when there is a defined corpus to classify, and it is possible to use Support Vector Machine (SVM); Naive Bayes among others. However, in the unsupervised technique, there is no possibility of classification, but it is possible to make a hybrid approach and use both together to broadly understand sentiments, feelings, and emotions in several texts (Ye, Zhang & Law, 2009; Ganesan, Zhai & Viegas, 2012). In addition, the Lexicon-based Approach employs, mainly, the sentiment lexicon, which means that dictionaries and other structures can be used to classify the emotions that appeared in the analyzed text (i.e., reviews) (Wilson, Hoffmann, Somasundaran, Kessler, Wiebe, Choi, Cardie, Riloff & Patwardhan, 2005; Serrano-Guerrero et al., 2015).

According to Drus and Khalid (2019), papers that discuss SA on social media employ either Lexicon-based approach, Machine Learning, and, also, a mix of both methods. Further discussions about how SA can be useful and, even, which techniques are indispensable to run several kinds of research have been gained a lot of prominences, which means that it is possible to apply several resources to analyze SA, such as General Inquirer Lexicon; Sentiment Lexicon; MPQA Subjectivity Lexicon; SentiWordNet; Emotion Lexicon; Financial Sentiment Lexicons, among others (Cambria, Das, Badyopadhyay & Feraco, 2017), qualitative and quantitative alternatives.

In the tourism context, it is possible to mention that, nowadays, people use the internet to search for different kinds of information, which means that opinions and sentiments expressed in a review became an important tool for the tourist decision-making process (Yan, Zhou & Wu, 2018). Consequently, tourism user-generated content (UGC) became an important instrument for comprehending consumer behavior, drawing new services based on previous experiences, and delineating marketing campaigns (Alamoudi & Alghamdi, 2021). In sum, Figure 02 highlights the main characteristics of tourists' sentiments and Tourism UGC.

Figure 2: Tourists' sentiments and tourism UGC



Source: Authors (2021) based on Liu et al. (2019)

Thus, SA seeks to deliver a broad comprehension of the elements presented in Figure 02, which means that the

techniques search for ways to deliver answers about emotions, and opinions that consumers have on services, products, and past experiences. In this case, besides the debate about what is SA and these applications, the present research highlights that some tourism scholars have placed tourist sentiment into two major categories, positive and negative emotions, and further divided them into several basic types of emotions, such as happiness, love, fear, anger, sadness, and regret, and thus investigated tourist sentiment factors in addition to their possible implications (Mitas, Yarnal, & Chick, 2012).

In this case, it is essential to highlight that tourism researchers have been using SA to understand the activity from new perspectives. Some themes are relevant in the tourism and SA research, such as tourism recommendation (Luo, He, Mou, Wang & Liu, 2021a; Liang, Pan, Gu, Guan & Tsai, 2021); COVID-19 (Sontayasara, Jariyapongpaiboon, Promjun, Seelipat, Saengtabtim, Tang & Leelawat, 2021); geolocation (Paolanti, Mancini, Frontoni, Felicetti, Marinelli, Marcheggioni & Perdicca, 2021); gastronomy (Yu & Zhang, 2020); cruise (Wu, Dong & Xiong, 2020); cultural tourism (Liang et al., 2021); hotels (Ray, Garain & Sokar, 2021; Hu & Chen, 2016); Airbnb (Serrano, Ariza-Montes, Nader, Sianes & Law, 2020; Cheng & Jin, 2019); and others that will be discussed in the main findings in the present research.

### 3 RESEARCH METHODOLOGY

The present research employs a bibliometric analysis with the support of the software VOSviewer version 1.6.16 (Van Eck & Waltman, 2010). Bibliometric studies are represented by their use of statistics to analyze the content of academic literature in a specific field over a given period. They have become an increasingly significant issue in tourism studies (Hall, 2011).

Bibliometric analysis is a quantitative research methodology that uses data from publications, sources, years, countries, and citations by providing indicators of research production in a determined area over time, allowing scholars to map this data. Scholars can identify patterns through the databases, choosing single journals or multiple publication sources or specific keywords (Ellegard & Wallin, 2015). Consequently, there are some benefits for the researchers that use this type of methodology to construe their theoretical backgrounds, such as the systematization of specific information (i.e. articles, journals, researchers, institutions, and countries); comprehension about a particular field and the networks created around the subject; and impact the research rankings among others benefits that make the bibliometric analysis a reliable methodology in different research areas (Osareh, 1996; Sigala & Christou, 2006; Ellegard & Wallin, 2015).

Additionally, a systematic review was made to discuss how researchers are employing the SA methodological approach. According to Clarke and Horton (2001), a systematic review is a type of investigation focused on the reunion, critical evaluation, and synthesis of the primary research results. It aims to extract information from the articles based on the needs of the research, such as locations in which the studies were conducted, the authors, and the methods used (Cheng; Edwards; Darcy; Redfern, 2016). It is a type of review in which there is a search for relevant studies on a specific topic,

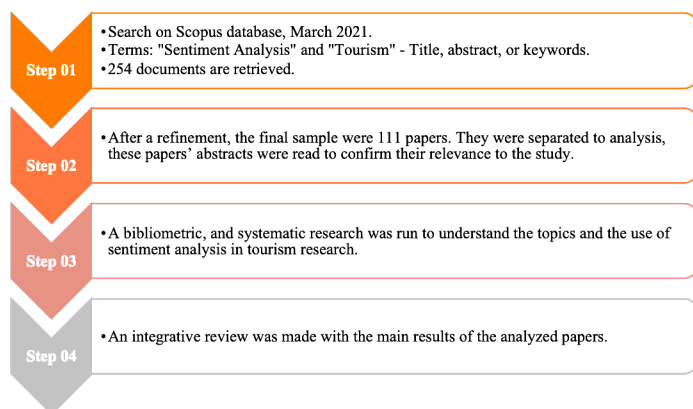


and those identified are then examined and synthesized. Its benefits become salient when a researcher wants to present general knowledge, historical perspective, identifying what is missing in a particular topic, and justify the subject relevance for future studies (Aromataris & Pearson, 2014).

Finally, an integrative review was engendered to discuss the main results of the reunited papers (Broome, 2000). This kind of methodological approach helps the researchers comprehend how the topic has been debated in different areas. According to Souza, Silva, and Carvalho (2010), an integrative review has as a main purpose to provide a knowledge synthesis, and also a broad comprehension about the applicability of the results in the studies compiled for the research. Thus, an integrative review search to comprehend the results of different studies, which means that a lot of methodologies can be evaluated, and their results can be analyzed and discussed from an integrative perspective because the main core of this methodological approach is to investigate the research results and conclusions (Whittemore & Knafl, 2005; Nella & Christou, 2021).

Therefore, the present research utilizes these three approaches, mainly because it is relevant to understand a topic in a broad manner, which means that every methodological tool has an important role in the discussion about SA and its use in the tourism context. Additionally, for better comprehension, Figure 3 presents a flowchart with the research steps to help the readers and other researchers to understand the research process.

Figure 3: Research flowchart



Source: Authors (2021)

In summary, the search occurred in March 2021 in the Scopus database by applying the search terms "sentiment analysis" and "tourism" in the title, abstract, or keywords. This search returned a total of 254 documents, resulting in a final sample of 111 papers.

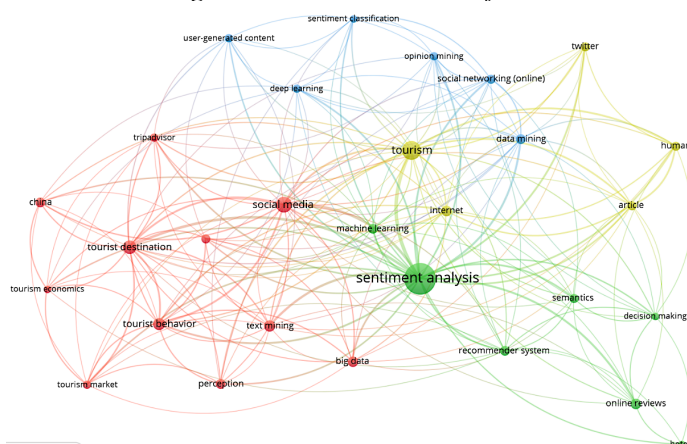
#### 4 FINDINGS AND ANALYSIS

The leading research found 111 articles. The sample revealed papers published from 2012 – 2021, and it is possible to observe that until 2015 there were few publications per year, and from 2016 to 2021, a growing interest in research on the subject can be observed. Highlights the year 2019 and 2020 with 32 articles published each year.

The journals that have given more attention to these topics are Sustainability Switzerland (9), Tourism Management (8), Information Technology and Tourism (5), International Journal of Hospitality Management, and Journal of Travel Research with (4) publications. It is also possible to observe the countries that are publishing more studies concerning this topic: China (35), the United States of America (24), Spain (15), and Australia (11) articles.

An analysis of the keywords was performed to investigate the sample. In total, 111 articles and 720 keywords were found, and only 29 of had repetition frequency of at least five times.

Figure 4: Main clusters identified



Source: VosViewer (2021)

As expected, the two words the most repeated are sentiment analysis (81) and tourism (30). Hence, as observed in Figure 4, four main clusters emerged from the results, and they include a range of papers that discuss relevant subjects for each cluster.

Cluster 1 discuss, in many ways, how SA can be used to draw recommendations systems that helps consumers and entrepreneurs make better decisions (Santamaria-Granado, Mendoza-Moreno & Ramirez-Gonzalez, 2021; Abassi-Moud, Vahdat-Nejad & Sadri, 2021; Visuwasan, Gladis, Kalaiselvi, Ananya & Krithika, 2020; Guerreiro & Rita, 2020; Shao, Tang & Bao, 2019); how hotels and restaurants have been used SA (Kim, Lee, Choi & Kim, 2021; Marcolin et al., 2021; Ray et al., 2021; An, Ma, Du, Xiang & Fan, 2020; Fuentes-Moraleda, Díaz-Pérez, Orea-Giner, Muñoz-Mazón & Villacé-Molinero, 2020; Yu & Zhang, 2020; Park, Kang, Choi & Han, 2020; Zapata, Murga, Raymundo, Dominguez, Moguerza & Alavarez, 2019; Moro et al., 2019), and at last the papers discuss SA and the role of online reviews to build up news perspectives to understand consumer behavior, for example (Sontayasara et al., 2021; Gour, Aggarwall & Erdem, 2021; Luo et al., 2021a; Hao, Fu, Hsu, Li & Chen, 2020; Ainin, Feizollah, Anuar & Addullah, 2020; Alosaimi, Alharthi, Alghamdi, Alsubait & Alqurashi, 2020).

Table 1: Main topic and authors - Cluster 01

Cluster 01	Discuss how SA has been used as a tool for entrepreneurs and consumers to make more conscious and better decisions.	Kim et al., 2021; Santamaria-Granado et al., 2021; Abassi-Moud et al., 2021; Marcolin et al., 2021; Ray et al., 2021; Sontayasara et al., 2021; Gour et al., 2021; Luo et al., 2021a; Hao et al., 2020; Ainin et al., 2020; Alosaimi et al., 2020; An et al., 2020; Fuentes-Moraleda et al., 2020; Yu & Zhang, 2020; Park et al., 2020; Visuwasan et al., 2020; Guerreiro & Rita, 2020; Shao et al., 2019; Zapata et al., 2019; Moro et al., 2019.
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Source: Authors (2021)

Cluster 2 also includes debates about how tourism management can use social media, big data, and text mining to understand tourist behavior and presents more competitive and relevant strategies in front of the new market. So, some articles discuss the management perspective in the national parks (Mangachena & Pickering, 2021); cultural tourism (Liang et al., 2021), and, also, in a general manner, which means that the articles include debates about destination image (Jiang, Chan, Eichelberger, Ma & Pikkemaat, 2021; Nowacki & Niezgodna, 2020; Marine-Roig, 2019); tourism management itself (Paolanti et al., 2021; De Maio, Fersini, Messina, Santoro & Violi, 2020; Milwood & Crick, 2021). Besides this perspective, this cluster presents arguments about tourist behavior and how SA is a way to understand this context (Aggarwal & Gour, 2020; Sun et al., 2020; Becken et al., 2019) and also how satisfaction (Chen et al., 2020) and perception (Vallone & Veglio, 2019) impacts tourist behavior and how SA is relevant. In Cluster 2, some papers make reference to Tripadvisor as a way to comprehend consumer behavior through online reviews and big data (Lee et al., 2020; Sangkaew & Zhu, 2020; Valdivia et al., 2020).

Table 2: Main topic and authors - Cluster 02

Cluster 02	Discuss ways tourism management can employ SA and big data to understand consumer behavior and draw new products, services, and experiences.	Paolanti et al., 2021; Mangachena & Pickering, 2021; Liang et al., 2021; Jiang et al., 2021; Nowacki & Niezgodna, 2020; Chen et al., 2020; Lee et al., 2020; Sangkaew & Zhu, 2020; Valdivia et al., 2020; Marine-Roig, 2019; De Maio et al., 2020; Aggarwal & Gour, 2020; Sun et al., 2020; Becken et al., 2019; Vallone & Veglio, 2019.
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Source: Authors (2021)

Cluster 3 refers to several tools and methodologies that are being used on the internet related to SA. First, it is important to highlight that different authors search to comprehend the employ of SA and how this methodology impacts tourism research (Li, Zhu, Shi, Guo & Cambria., 2020a; Moreno-Ortiz; Salles-Bernal & Orrequia-Barea, 2019; Vázquez Loaiza, Pérez-Torres & Contreras, 2019; Fu, Hao, Li & Hsu, 2019; Li, Guo, Shi, Zhu & Zheng, 2018a; Li, Zhu, Guo, Shi & Zheng, 2018b; Kirilenko et al., 2018; Liu, Tian, Feng & Zhuang, 2018; González, Cámara, Valdivia & Zafra, 2015; García et al, 2012); on hotel management (Liang, Liu & Wang, 2019; García-Pablos et al., 2016) and on management (Angskun & Angskun, 2019; Wang, Chiang & Sun, 2019; Yang & Chao, 2018; Marrese-Taylor et al., 2018).

Table 3: Main topic and authors - Cluster 03

Cluster 3	Articles in this cluster discuss the several tools and methodologies that can be used to run the corpus used to make SA.	Li et al., 2020a; Moreno-Ortiz et al., 2019; Vázquez Loaiza et al., 2019; Fu et al., 2019; Angskun & Angskun, 2019; Wang et al., 2019; Yang & Chao, 2018; Marrese-Taylor et al., 2018; Li et al., 2018a; Li et al., 2018b; Kirilenko et al., 2018; Liu et al., 2018; González et al., 2015; García et al., 2012.
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Source: Authors (2021)

Finally, Cluster 4 complements the discussions in Cluster 2, bringing news perspectives to the investigation about tourism and SA. Here, the articles investigate destination knowledge (Antonio, Correia & Ribeiro, 2020); destination branding (Otay Demir, Yavuz Gökem & Rafferty, 2021; Chen, Liu, Wang & Chen, 2019); racism in online reviews (Li, Li, Law & Paradies, 2020b); cruise and destination image (Wu et al., 2020); destination crises (Gkritzali, Mavragani & Gritzalis, 2019); and the role of Twitter to understand sentiments and

consumer behavior (Papapicco & Mininni, 2020; Bolici, Acciarini, Marchegiani & Pirolo, 2020; Feizollah, Ainin, Anuar, Abdullah & Hazim., 2019).

Table 4: Main topic and authors - Cluster 04

Cluster 04	It is a complementation of Cluster 02 and brings news perspectives to the investigation about the relation between SA and tourism research.	Otay Demir et al., 2021; Papapicco & Mininni, 2020; Bolici et al., 2020; Antonio et al., 2020; Li et al., 2020b; Wu et al., 2020; Chen et al., 2019; Gkritzali et al., 2019; Feizollah et al., 2019.
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Source: Authors (2021)

It is possible to observe that clusters 1, 2, and 4 are more related to tourism practice than cluster 3, which emphasizes the application of different methodologies that can be used. In Table 5, we present the four clusters and their keywords. Therefore, it is highlighted that the articles discussed in one cluster may be part of another, as the discussion about SA and tourism covers different perspectives of the four clusters.

Table 5: Clusters and keywords

Clusters Name	Keywords
Cluster 1	Sentiment Analysis (81) Online Reviews (10) Machine Learning (8) Recommender System (8) Semantics (7) Decision Making (5) Hotels (5)
Cluster 2	Social Media (21) Tourist Destination (15) Tourist Behavior (12) Text Mining (11) Big Data (9) Perception (8) China (8) Tourism Management (7) Tripadvisor (6) Tourism Economics (5) Tourism Market (6)
Cluster 3	Data Mining (8) Social Networking (7) Opinion Mining (6) Deep Learning (6) Sentiment Classification (5) User-generated Content (6)
Cluster 4	Tourism (30) Twitter (7) Internet (7) Article (7) Human (7)

Source: Authors (2021) based on Vosviewer data

In addition, it is relevant to present the most cited articles that are considered empirical and theoretical studies related to tourism research that employ SA. In Table 2, for instance, the methodological approach of the top-cited articles mixed quantitative and qualitative tools, which means that when the researchers use SA as a way to understand what emotions arise from a tourist experience, it is possible to congregate or, even, choose the methodological approach that is most convenient for the study.

Table 6: Profile of Typical Travel and Tourism Research

Title	Authors	Year	Methodological Approach	Citations
What do Airbnb users care about? An analysis of online review comments	Cheng & Jin	2019	Qualitative	116
A novel deterministic approach for aspect-based opinion mining in tourism products reviews	Marrese-Taylor	2014	Quantitative Performance Evaluation Module (PEM)	99
Semi-supervised learning for big social data analysis	Hussain & Cambria	2018	Quantitative bSVM and bRLS	92
Predicting hotel review helpfulness: The impact of review visibility, and interaction between hotel stars and review ratings	Hu & Chen	2016	Quantitative Model tree (MSP)	78
Automated Sentiment Analysis in Tourism: Comparison of Approaches	Kirilenko et al.	2018	Quantitative SentiStrength	50
What makes tourists feel negatively about tourism destinations? Application of hybrid text mining methodology to smart destination management	Kim et al.	2017	Quantitative Stanford NLP Tool Kit Co-occurrence analysis - Python	46
The influence of tourists' emotions on the selection of electronic word of mouth platforms	Yan et al.	2018	Quantitative Correlation analysis	36
Monitoring the environment and human sentiment on the Great Barrier Reef: Assessing the potential of collective sensing	Becken et al.	2017	Qualitative	34
"I will never go to Hong Kong! " How the secondary crisis communication of "Occupy Central" on Weibo shifted to a tourism boycott	Luo & Zhai	2017	Qualitative and Quantitative ROST Content Mining System 6.0 j	34
Listen to the voices from home: An analysis of Chinese tourists' sentiments regarding Australian destinations	Liu et al.	2019	Qualitative Techniques of lexicon filtering; Co-occurrence analysis and semantic clustering; The model analyses online reviews; Sentiment-image analysis.	31

Source: Authors (2021) based on Scopus database

These studies are considered innovative, by presenting several techniques of qualitative and quantitative methodologies. In this case, tourism appears to be an ideal application field of social media analytics with tremendous growth and potential (Xiang; Du; Ma; Fan, 2017; Gretzel et al., 2012) where SA can provide some interesting insights related to destination management, consumer behavior, past experiences, satisfaction, quality of services. All these topics can be discussed and analyzed by a SA approach and further empirical investigations can use this tool to comprehend them and in consequence provide structuralized information not only to academics but also to entrepreneurs and who are responsible for public policies.

It is possible to observe that the most cited articles present qualitative (3), quantitative (6), and qualitative and quantitative analysis (1). This type of analysis allows an integrated approach, able to detect qualitative and/or quantitative factors. To exploit the data, it is necessary to adopt rigorous methodologies consistent with ICTs and big data. SA can rely on the application of established techniques, advanced by the diffusion of software for data processing and analysis.

The application of algorithms and procedures in an increasing number of fields has favored diverse and specialized contributions and studies, thanks only to their application to a wide range of phenomena and processes, essentially within social networks (Micera & Crispino, 2017). All the papers are using SA with online reviews, analyzing accommodation, marketing, consumer behavior, or experience.

## 5 DISCUSSION

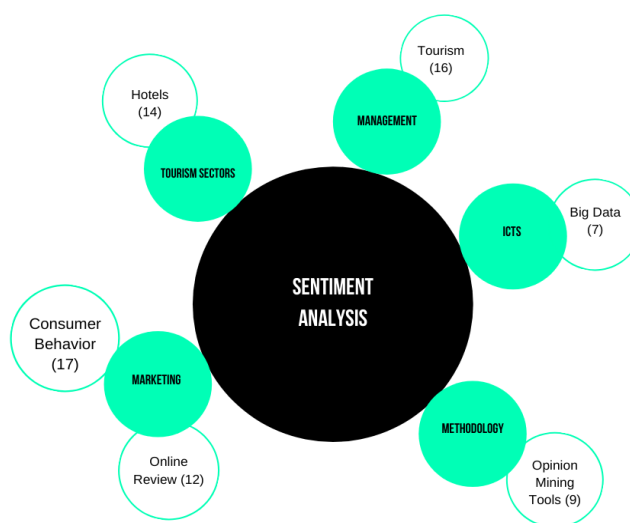
SA has as the object of research a review or commentary about a product or service that has been made public on the Internet domain (Mäntylä et al., 2018). As the current research shows, there is a growing interest in comprehending consumer behavior through their opinions on the different social networks, mainly, on the tourism domain. In this topic, an integrative discussion is made, which means that subsequent to the bibliometric analysis in the Vosviewer software, an analysis of the main subjects was engendered and discussed more profoundly.

First, it is relevant to highlight that, according to Alaei, Becken, and Stantic (2017), tourism is an industry where the customer experience is essential for its growth and reputation, using big data and new data sources became a necessity to understand the customer needs, feelings, and desires. Consequently, SA was transformed into a new methodology to decode the online user-generated content available and to understand perceptions and characteristics of different market groups (Sigala et al., 2002; Ribeiro et al., 2016; Christou et al., 2021).

In tourism research, the discussion about SA has become more prominent in recent years. Hence, the present study seeks to discern which themes have been linked with SA as a method to understand consumer behavior in the tourism domain. Here, it is important to highlight that some research discusses how to use SA as a tool and not the topics that have been discussed in tourism research. Consequently, the discussion proposed in this topic debates this gap. Figure 5 shows the themes that are relevant to the debate that is

divided into five areas, such as management, information, and communication technologies (ICT); methodology; marketing, and tourism sectors.

Figure 5: Discussion Areas in Tourism Research and Sentiment



Source: Authors (2021)

Management is an area that has been used SA to understand the consumer necessities, desires and, in consequence, draw new products and services for them. In this topic, it is possible to observe that tourism, in general, has 16 papers that discuss SA and its use from the management perspective. For instance, Antonio et al. (2020) present topics that could be used by different destination management organizations to promote these cities and even have better destination knowledge from the content that tourists have been sharing in the social networks. Also, De Maio et al. (2020) presents a project that uses social data to draw a tour planner with optimized itineraries based on the user's profile; in turn, Zapata et al. (2019) describe how to use SA to design new business information architecture to allow touristic enterprises make better decisions. Micera and Crispino (2017) and Kim et al. (2017) uses SA as a methodology with the context of smart destinations to analyze the perceptions of the tourists; this analysis suggests the use of this information in the marketing and management planning process of the destinations.

Becken et al. (2019), in the context of tourism management, apply SA to understand through Twitter posts the emotions that arise from a visit to a destination and how this could be used to deliver better experiences to the tourist. In complementation to this perspective, Liu et al. (2019) discuss the sentiments that emerge from a visit to different Australian destinations, using the Chinese tourists for this matter and, Starosta, Budz, and Krutwig (2019) utilize the german speakers to comprehend the experiences in European destinations. Another issue discussed in the management concern is the fake reviews and their impacts on the tourism business (Reyes-Menendez, Saura & Filipe, 2019).

Besides the tourism perspective, some research discusses the management angle in the context of national parks and geoparks (02 papers), with Mangachena and Pickering (2021) talking about how social media can be employed in a new



way to manage national parks through SA and Twitter posts. Finally, the cultural perspective also has been considered in the management context (04 papers) with the halal tourism discussion (Ainin et al., 2020; Feizollah et al., 2019) and the cultural perceptions in the tourist travel notes to the destination management (Liang et al., 2021).

Information and communication technology (ICT) is another perspective that has been discussed in tourism research, big data, for example, has 07 published papers and bring out the following considerations: an extensive data analysis to comprehend the impact of cruise tourism image and how its impacts their satisfaction and purchase intentions (Wu et al., 2020); Önder, Gunder, and Scharl (2019) debates about forecasting tourist arrivals with web sentiment, which means using big data and new media to understand the consumer behavior; Imane and Abdelouahab (2019) employs social big data to comprehend the guest's experiences in a Five Stars hotel; in turn, Hussain and Cambria (2018) highlights the insertion of big social data in the tourism research and how it could be done in different approaches. In addition to this perspective, Bolici et al. (2020) argue about innovation diffusion in tourism, analyzing how information about blockchain is spread in Twitter posts. It is possible to highlight, in this case, that ICT has been used SA as a way to understand consumer behavior from big data analytics and the impacts of innovation diffusion in the context.

The methodological approach, named SA and its derivatives were also presented in several analyzed articles, such as Luo, Zhang, Qin, Yang & Liang (2021b), which discusses the Probabilistic Linguistic Term and IDOCRIW-COCOSO Model; Li et al. (2020a) highlight the employment of lexicon integrated two-channel CNN-LSTM family models to verified SA in the user reviews; Shi, Zhu, Li, Guo & Zhang (2019) argues about classic and the latest textual SA approach and its use in different sectors, as tourism; Wang et al. (2019) brings out the multi-lexicons use in the context of touring reviews. In this study area it is relevant to highlight that each article analyzed brings a new perspective to SA and opinion mining approach, which means that each author presents a different perspective inside this methodology, but as mentioned, some of them discuss more profoundly the method and its impact in the tourism industry.

Marketing has been used SA as a way to understand consumer behavior and also draws news products, services, and experiences. Hence, in the tourism context, it is not different because the articles analyzed discuss consumer behavior (17), online reviews (12), destination image (5), storytelling (3), and branding (2). Applying SA in marketing destinations could reduce research costs and time (Kim et al., 2017).

SA has as its objective to understand the consumers' feelings and emotions and, in some cases, develop new experiences that make the tourist, in the case of the present research, more satisfied and with the intent to recommend and return in the hotel, restaurant and, even, in the destination. Thus, it is possible to discuss the consumer behavior and online reviews perspective jointly because both searches to comprehend how products and services impact the overall experience. Marcolin et al. (2021) and Nave, Rita, and Guerreiro (2018) present a new perspective using online reviews to improve decision-making processes, mainly in the context of managers and the necessity to draw experiences that are

positive to their customers. Aggarwal and Gour (2020) debate the relevance to peek inside the consumers' minds, searching their opinions and debating about how it can be employed. For its parts, Li et al. (2020b) highlights the racism in the online reviews and discussions about racial discrimination on tourist's experience, an important question to comprehend this context in the destination management and, even, in the consumer behavior perspective.

Online reviews and their relevance in the construction of new experiences for tourists is discussed by Sun et al. (2020); Lee et al. (2020); Sangkaew and Zhu (2020), Vallone and Veglio (2019), and others that use the construct satisfaction and search in the online reviews how it can be used to manage the creation of new services that are related to the needs and consumers' desires. Therefore, the consumers' perspective is discussed in those papers with the consumer engagement and the role of online reviews (Kesgin & Murthy, 2019; Chatzigeorgiou & Christou, 2020), and the relevance of the SA to build qualified information (Yang and Chao, 2018).

Besides this context, the discussion about destination image is made by Marine-Roig (2019); Gkritzali et al. (2018); Micera and Crispino (2017), and others that apply SA as a way to manage the destination image. At least, storytelling, mainly the digital perspective, has been using the SA approach to improve their content and tell better stories for the consumer (Zhang, Kim, Kim & Feseinmaier, 2019; Zhang, Choe & Fesenmaier, 2019; Zhang & Fesenmaier, 2018).

The tourism sector in the analyzed papers brings up debates about hotels (14), food and beverage (01), transportation (01), among others. For the present discussion, it is important to highlight how SA has been used in the hotel's perspective, the highest theme in the discussion. For instance, Kim et al. (2021) points out that visual information impacts the consumer responses in online reviews and needs to be better understood to influence the design experience positively. In addition, An et al. (2020) discusses user-generated photos as a new way to comprehend consumer and tourist behavior.

Ray et al. (2021) debated a way to categorize the hotel reviews and draw a recommender system with this content; Zhu, Lin, and Cheng (2020) and Park et al. (2020) discuss the construct satisfaction and trust in online reviews and how its impact the way the consumer sees the hotel and if it is a key to make him revisit.

Moreover, the papers reflect about SA and other questions, like the environmental issue with the discussion about air pollution (Zhang, Yang, Zhang & Zhang, 2020; Tao, Zhang, Shi & Chen, 2019); COVID-19 (Sontasayara et al., 2021) and other relevant questions that can be better understood, because there are only a few numbers of articles about those issues. In this case, it is meaningful to assimilate the main topics that the SA approach has been utilized.

In the last decades, society has been faced a technological revolution, which means that the consumer (i.e., the tourist) use the content and the information shared online to draw their own experience and also, present to the entrepreneurs their necessities, desires, dissatisfactions, and other information that can be considered as essential for the market development (Inversini et al., 2015). Thus, SA became one of the several tools to comprehend consumer behavior, employed as a way to look at the feelings (i.e., positive,

negative, or neutral), emotions, and opinions about certain products, services, and experiences (Kirilenko et al., 2018). Consequently, our findings make a studies' compilation that discusses SA, and it is relevant, because not only researchers can use this data, but also people who are in the market. The papers presented discuss several implications for the debate about SA and tourism, which means that when we observe the research corpus, it is possible to comprehend the uses and benefits of this tool. As mentioned, previous research did not compile the subjects and analyzed more profoundly the themes and concerns around SA and tourism. So, the present research looks to fill this gap and construe a broad vision on the subject.

When we analyze the academic implications of our findings, it is important to highlight that a bibliometric, systematic, and integrative review helps the researchers to understand the field that they propose to study. In the case of SA and tourism, the main findings suggest the major topics that have been used this methodology as a way to understand the massive information provided by the new technologies and the content shared by the consumer on several platforms (Micera and Crispino, 2017). Besides, researchers can use this data to justify the SA approach in a specific field, because the results help them to observe what are the gaps and the discussions that need more attention and discussions.

In addition, it is essential to debate the management implication of our study. First, when an entrepreneur reads this kind of research, they can have a broad perspective about a subject, in this case, SA and tourism. Also, it is possible to observe how this method has been used in several domains. It enables the application of the tool in the organizational context, which means that the results present for the entrepreneurs and managers new paths within that field. Further, demonstrate the importance of using certain instruments (e.g., SA) to build increasingly competitive and relevant businesses in the market.

Digital communication has been used to reach many people in a short time, which means that when a destination, hotel, restaurant, and other tourist facilities employ this kind of mechanism to create a bond with their consumers. Much information can be produced in this relationship. It happens because a new way of interaction emerges, and every consumer can share their opinions online, leading to a necessity for a major comprehension of what has been disseminated on different platforms (Todisco et al., 2020).

As seen in the results, it is possible to demonstrate that SA is a methodology that has gained prominence in the last years (Christou, 2010; Kim et al., 2017; Bonarou, 2021). It happens because understanding the sentiments, emotions, and feelings expressed by consumers in their opinions and stories shared on social media became relevant content to draw products, services, and experiences that make tourists more satisfied with their past purchases and experiences.

Finally, SA and opinion mining became tools to gather the information and show the managers how their consumers feel about what has been offered in the actual market and if changes are necessary to deliver better experiences. In this case, from an academic perspective, researchers can use this information to discuss the subject in a scientific and theoretical context, in other words, sentiment analysis is used as a methodological tool for several projects in the tourism

field and as a way to put together people that are related to businesses and academics.

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## 6 CONCLUSIONS

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The rapid diffusion of the use of the internet has dramatically changed the habits of people who spend more time online, creating interconnected networks impacting the tourism sector (Micera & Crispino, 2017). Lately, with the impact of ITCs, the demand for big data analysis has increased in the hospitality field. This study analyses how SA has been used in tourism research.

This bibliometric study is beneficial not only for researchers but also for decision-makers in public and private organizations because the findings are relevant. It is possible to show the government and entrepreneurship how to draw communication and marketing strategies, contributing to the decision-making process, and comprehend consumer behavior. Literature reviews help to consolidate and advance theory providing insights to address scholars in their efforts (Del Chiappa et al., 2021; Fotiadis, 2018; Fotiadis & Williams, 2018).

As the main results, it is possible to analyze four clusters that appear in the context of SA and tourism, and each one discusses a different perspective to the use of this technique in tourism studies. It reveals the article characteristics, top citations and geographical distribution, the journals that publish the topic, and the co-occurrence of author keywords, highlighting 4 clusters that are related. The main topics that are using SA in tourism are marketing (consumer behavior and online reviews), methodology (opinion mining tools), ICTs (big data), management (tourism), tourism sector (hotels).

SA can represent the degree of positivity or negativity of the data but has little prescriptive and practical implications. However, using SA, we can find out how tourists perceive negatively or positively about certain destination services but cannot discover why they feel like that.

As a theoretical implication, both hospitality and tourism management cases based on online reviews, big data analysis, SA were successfully combined to derive more meaningful research outcomes that can provide interesting insight to be applied in the tourism sector.

The limitations of this study should be recognized. The findings could be extended by using other well-known databases such as Web of Science and considering other sources of information, such as articles in different languages other than English. As suggestions for future studies, other areas in the tourism sector could be more explored as food and beverage, transportation, and communication crisis that have been identified in this research. The use of other software that could run more extensive samples is also an alternative to enhance the studies with SA.

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## REFERENCES

- Abbasi-Moud, Z., Vahdat-Nejad, H., & Sadri, J. (2021). Tourism recommendation system based on semantic clustering and sentiment analysis. *Expert Systems with Applications*, 167, 114324.

- Aggarwal, S., & Gour, A. (2020). Peeking inside the minds of tourists using a novel web analytics approach. *Journal of Hospitality and Tourism Management*, 45, 580-591.
- Ainin, S., Feizollah, A., Anuar, N. B., & Abdullah, N. A. (2020). Sentiment analyses of multilingual tweets on halal tourism. *Tourism Management Perspectives*, 34, 100658.
- Alaei, A. R., Becken, S., & Stantic, B. (2019). Sentiment analysis in tourism: capitalizing on big data. *Journal of Travel Research*, 58(2), 175-191.
- Alamoudi, E. S., & Alghamdi, N. S. (2021). Sentiment classification and aspect-based sentiment analysis on yelp reviews using deep learning and word embeddings. *Journal of Decision Systems*, 1-23.
- Alosaimi, S., Alharthi, M., Alghamdi, K., Alsubait, T., & Alqurashi, T. (2020). Sentiment analysis of arabic reviews for Saudi hotels using unsupervised machine learning. *Journal of Computer Science*, 16(9): 1258-1267.
- Amanatidis, D., Mylonas, I., Mamalis, S., & Kamenidou, I. E. (2020). Social media for cultural communication: A critical investigation of museums' Instagram practices. *Journal of Tourism, Heritage & Services Marketing (JTHSM)*, 6(2), 38-44.
- An, Q., Ma, Y., Du, Q., Xiang, Z., & Fan, W. (2020). Role of user-generated photos in online hotel reviews: An analytical approach. *Journal of Hospitality and Tourism Management*, 45, 633-640.
- Angskun, T., & Angskun, J. (2019). FLORA: a hierarchical fuzzy system for online accommodation review analysis. *Journal of Systems and Information Technology*, 21(3): 347-367.
- Antonio, N., Correia, M. B., & Ribeiro, F. P. (2020). Exploring User-Generated Content for Improving Destination Knowledge: The Case of Two World Heritage Cities. *Sustainability*, 12(22), 9654, 1-19.
- Aromataris, E., & Pearson, A. (2014). The systematic review: an overview. *AJN The American Journal of Nursing*, 114(3), 53-58.
- Batrinca, B., & Treleaven, P. C. (2015). Social media analytics: a survey of techniques, tools and platforms. *Ai & Society*, 30(1), 89-116.
- Becken, S., Alaei, A. R., & Wang, Y. (2019). Benefits and pitfalls of using tweets to assess destination sentiment. *Journal of Hospitality and Tourism Technology*, 11(1): 19-34.
- Becken, S., Stantic, B., Chen, J., Alaei, A. R., & Connolly, R. M. (2017). Monitoring the environment and human sentiment on the Great Barrier Reef: assessing the potential of collective sensing. *Journal of environmental management*, 203, 87-97.
- Bolici, F., Acciarini, C., Marchegiani, L., & Pirolo, L. (2020). Innovation diffusion in tourism: how information about blockchain is exchanged and characterized on twitter. *The TQM Journal*, 1754-2731, DOI 10.1108/TQM-01-2020-0016.
- Bonarou, C. (2021). The poetics of travel through unravelling visual representations on postcards: A critical semiotics analysis. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 44-53.
- Broome, M. E. (2000). Integrative literature reviews for the development of concepts. In B. L. Rodgers, & K. A. Knafl (Eds.), *Concept development in nursing: foundations, techniques, and applications*, 231-250. Philadelphia, PA: W. B. Saunders.
- Cambria, E., Das, D., Bandyopadhyay, S., & Feraco, A. (Eds.). (2017). *A practical guide to sentiment analysis*. Cham, Switzerland: Springer International Publishing.
- Cambria, E., Schuller, B., Xia, Y., Havasi, C. (2013). New avenues in opinion mining and sentiment analysis. *IEEE Intell. Syst.* 1.
- Carroll, C. D., Fuhrer, J. C., & Wilcox, D. W. (1994). Does consumer sentiment forecast household spending? If so, why? *The American Economic Review*, 84(5), 1397-1408.
- Chen, Y., Liu, Y., Wang, C., & Chen, K. (2019). Is hosting tourism events a sustainable way of destination branding: Evidences from Sanya, China. *Cogent Social Sciences*, 5(1), 1692456.
- Chen, W., Xu, Z., Zheng, X., Yu, Q., & Luo, Y. (2020). Research on Sentiment Classification of Online Travel Review Text. *Applied Sciences*, 10(15), 5275.
- Cheng, M., Edwards, D., Darcy, S., & Redfern, K. (2018). A tri-method approach to a review of adventure tourism literature: Bibliometric analysis, content analysis, and a quantitative systematic literature review. *Journal of Hospitality & Tourism Research*, 42(6), 997-1020.
- Cheng, M., & Jin, X. (2019). What do Airbnb users care about? An analysis of online review comments. *International Journal of Hospitality Management*, 76, 58-70.
- Cheung, C. M., & Thadani, D. R. (2012). The impact of electronic word-of-mouth communication: A literature analysis and integrative model. *Decision support systems*, 54(1), 461-470.
- Christou, E. (2010). Investigating attitudes towards mobile commerce for travel products. *Tourism: An International Interdisciplinary Journal*, 58(1), 7-18.
- Christou, E., Fotiadis, A., & Alexandris, K. (2021). Restarting tourism, travel and hospitality: The day after. Thessaloniki, Greece: International Hellenic University, ISBN: 978-618-84798-9-0. <https://doi.org/10.5281/zenodo.5159065>.
- Christou, E., & Sigala, M. (2003). Adoption of online shopping for holiday packages: A qualitative investigation. In Chon, K.S. (Ed.). *The Asian Waves*. Seoul, Korea: APac-CHRIE.
- Chatzigeorgiou, C., & Christou, E. (2020). Adoption of social media as distribution channels in tourism marketing: A qualitative analysis of consumers' experiences. *Journal of Tourism, Heritage & Services Marketing*, 6(1), 25-32.
- Clarke M., & Horton R. (2001). Bringing it all together: Lancet-Cochrane collaborates on systematic reviews. *Lancet*, 357(9270), 1728.
- Deng, Q., Gao, Y., Wang, C., & Zhang, H. (2020). Detecting information requirements for crisis communication from social media data: An interactive topic modeling approach. *International Journal of Disaster Risk Reduction*, 101692.
- De Maio, A., Fersini, E., Messina, E., Santoro, F., & Violi, A. (2020). Exploiting social data for tourism management: the SMARTCAL project. *Quality & Quantity*, 1-13.
- Del Chiappa, G., Bregoli, I., & Fotiadis, A. (2021). The impact of COVID-19 on the Italian accommodation sector and related response actions: A supply-perspective using a mixed method approach. *Journal of Tourism, Heritage & Services Marketing*, 7(1), pp.13-22.
- Drus, Z., & Khalid, H. (2019). Sentiment analysis in social media and its application: Systematic literature review. *Procedia Computer Science*, 161, 707-714.
- Ellegaard, O., & Wallin, J. A. (2015). The bibliometric analysis of scholarly production: How great is the impact? *Scientometrics*, 105(3), 1809-1831.
- Feizollah, A., Ainin, S., Anuar, N. B., Abdullah, N. A. B., & Hazim, M. (2019). Halal products on Twitter: Data extraction and sentiment analysis using stack of deep learning algorithms. *IEEE Access*, 7, 83354-83362.
- Fotiadis, A. (2018). Modelling wedding marketing strategies: An fsQCA Analysis. *Journal of Tourism, Heritage & Services Marketing*, 4(1), 23-26.
- Fotiadis, A., & Williams, R. (2018). "TiCoSa" a 3d matrix conceptual model to investigate visitors' perceptions in an athletic event. *Journal of Tourism, Heritage & Services Marketing*, 4(2), 32-36.
- Fu, Y., Hao, J. X., Li, X., & Hsu, C. H. (2019). Predictive accuracy of sentiment analytics for tourism: A metalearning perspective on Chinese travel news. *Journal of Travel Research*, 58(4), 666-679.

- Fuentes-Moraleda, L., Díaz-Pérez, P., Orea-Giner, A., Muñoz-Mazón, A., & Villacé-Molinero, T. (2020). Interaction between hotel service robots and humans: A hotel-specific Service Robot Acceptance Model (sRAM). *Tourism Management Perspectives*, 36, 100751.
- Ganesan, K., Zhai, C., & Viegas, E. (2012, April). Micropinion generation: an unsupervised approach to generating ultra-concise summaries of opinions. In *Proceedings of the 21st international conference on World Wide Web* (pp. 869-878).
- García, A., Gaines, S., & Linaza, M. T. (2012). A lexicon-based sentiment analysis retrieval system for tourism domain. *Expert Syst Appl Int J*, 39(10), 9166-9180.
- García-Pablos, A., Cuadros, M., & Linaza, M. T. (2016). Automatic analysis of textual hotel reviews. *Information Technology & Tourism*, 16(1), 45-69.
- Gaski, J. F., & Etzel, M. J. (1986). The index of consumer sentiment toward marketing. *Journal of Marketing*, 50(3), 71-81.
- Gkritzali, A., Mavragani, E., & Gritzalis, D. (2019). Negative MWOM and value co-destruction during destination crises. *Business Process Management Journal*, 26 (4), 839-856.
- Gonzalez, M., Camara, E., Valdivia, M., & Zafra, S. M. (2015). eSOLHotel: Building an Spanish opinion lexicon adapted to the tourism domain. *Procesamiento Del Lenguaje Natural*, (54), 21-28.
- Gour, A., Aggarwal, S., & Erdem, M. (2021). Reading between the lines: analyzing online reviews by using a multi-method Web-analytics approach. *International Journal of Contemporary Hospitality Management*.
- Gretzel, U., Sigala, M., & Christou, E. (2012). Social Media Change the Name of the Game in the Tourism and Hospitality Industries, *The European Financial Review*, 20 October, available at: <http://www.europeanfinancialreview.com/?p=1340>.
- Guerreiro, J., & Rita, P. (2020). How to predict explicit recommendations in online reviews using text mining and sentiment analysis. *Journal of Hospitality and Tourism Management*, 43, 269-272.
- Halkiopoulou, C., Antonopoulou, H., Papadopoulos, D., Giannoukou, I., & Gkintoni, E. (2020). Online reservation systems in e-Business: Analyzing decision making in e-Tourism. *Journal of Tourism, Heritage & Services Marketing (JTHSM)*, 6(1), 9-16.
- Hall, C. M. (2011). Publish and perish? Bibliometric analysis, journal ranking and the assessment of research quality in tourism. *Tourism Management*, 32(1), 16-27.
- Hao, J. X., Fu, Y., Hsu, C., Li, X., & Chen, N. (2020). Introducing news media sentiment analytics to residents' attitudes research. *Journal of Travel Research*, 59(8), 1353-1369.
- Hemmatian, F., & Sohrabi, M.K. (2019). A survey on classification techniques for opinion mining and sentiment analysis. *Artificial Intelligence Review*, 52(3), 1495-1545.
- Hu, Y. H., & Chen, K. (2016). Predicting hotel review helpfulness: The impact of review visibility, and interaction between hotel stars and review ratings. *International Journal of Information Management*, 36(6), 929-944.
- Humphreys, A., & Wang, R. J. H. (2018). Automated text analysis for consumer research. *Journal of Consumer Research*, 44(6), 1274-1306.
- Hussain, A., & Cambria, E. (2018). Semi-supervised learning for big social data analysis. *Neurocomputing*, 275, 1662-1673.
- Imane, E.H., & Abdelouahab, I. (2019). Social big data analysis of Five Star hotels: A case study of hotel guest experience and satisfaction in Marrakech. *African Journal of Hospitality, Tourism and Leisure*, 8 (3), 20 p.
- Inversini, A. et al. (2015). The Rise of eTourism for Development. In: Tussyadiah, I.; Inversini, A. *Information and Communication Technologies in Tourism*.
- Jiang, Q., Chan, C. S., Eichelberger, S., Ma, H., & Pikkemaat, B. (2021). Sentiment analysis of online destination image of Hong Kong held by mainland Chinese tourists. *Current Issues in Tourism*, 1-22.
- Kesgin, M., & Murthy, R. S. (2019). Consumer engagement: The role of social currency in online reviews. *The Service Industries Journal*, 39(7-8), 609-636.
- Kim, K., Park, O. J., Yun, S., & Yun, H. (2017). What makes tourists feel negatively about tourism destinations? Application of hybrid text mining methodology to smart destination management. *Technological Forecasting and Social Change*, 123, 362-369.
- Kim, M., Lee, S. M., Choi, S., & Kim, S. Y. (2021). Impact of visual information on online consumer review behavior: Evidence from a hotel booking website. *Journal of Retailing and Consumer Services*, 60, 102494.
- Kirilenko, A. P., Stepchenkova, S. O., Kim, H., & Li, X. (2018). Automated sentiment analysis in tourism: Comparison of approaches. *Journal of Travel Research*, 57(8), 1012-1025.
- Lee, J., Benjamin, S., & Childs, M. (2020). Unpacking the emotions behind TripAdvisor travel reviews: The case study of Gatlinburg, Tennessee. *International Journal of Hospitality & Tourism Administration*, 1-18.
- Liang, F., Pan, Y., Gu, M., Guan, W., & Tsai, F. (2021). Cultural Tourism Resource Perceptions: Analyses Based on Tourists' Online Travel Notes. *Sustainability*, 13(2), 519.
- Liang, X., Liu, P., & Wang, Z. (2019). Hotel selection utilizing online reviews: A novel decision support model based on sentiment analysis and DL-VIKOR method. *Technological and Economic Development of Economy*, 25(6), 1139-1161.
- Liau, B. Y., & Tan, P. P. (2014). Gaining customer knowledge in low-cost airlines through text mining. *Industrial Management & Data Systems*.
- Li, S., Li, G., Law, R., & Paradies, Y. (2020b). Racism in tourism reviews. *Tourism Management*, 80, 104100.
- Li, W., Guo, K., Shi, Y., Zhu, L., & Zheng, Y. (2018a). DWWP: Domain-specific new words detection and word propagation system for sentiment analysis in the tourism domain. *Knowledge-Based Systems*, 146, 203-214.
- Li, W., Zhu, L., Guo, K., Shi, Y., & Zheng, Y. (2018b). Build a tourism-specific sentiment lexicon via word2vec. *Annals of Data Science*, 5(1), 1-7.
- Li, W., Zhu, L., Shi, Y., Guo, K., & Cambria, E. (2020a). User reviews: Sentiment analysis using lexicon integrated two-channel CNN-LSTM family models. *Applied Soft Computing*, 94, 106435.
- Liu, B. (2017). Many facets of sentiment analysis. In *A practical guide to sentiment analysis* (pp. 11-39). Springer, Cham.
- Liu, B., & Zhang, L. (2012). A survey of opinion mining and sentiment analysis. In *Mining text data* (pp. 415-463). Springer, Boston, MA.
- Liu, S., Tian, Y., Feng, Y., & Zhuang, Y. (2018). Comparison of Tourist Thematic Sentiment Analysis Methods Based on Weibo Data. *Beijing Da Xue Xue Bao*, 54(4), 687-692.
- Liu, Z., & Park, S. (2015). What makes a useful online review? Implication for travel product websites. *Tourism Management*, 47, 140-151.
- Liu, Y., Huang, K., Bao, J., & Chen, K. (2019). Listen to the voices from home: An analysis of Chinese tourists' sentiments regarding Australian destinations. *Tourism Management*, 71, 337-347.
- Luo, Q., & Zhai, X. (2017). "I will never go to Hong Kong again!" How the secondary crisis communication of "Occupy Central" on Weibo shifted to a tourism boycott. *Tourism Management*, 62, 159-172.
- Luo, Y., He, J., Mou, Y., Wang, J., & Liu, T. (2021a). Exploring China's 5A global geoparks through online tourism reviews: A

- mining model based on machine learning approach. *Tourism Management Perspectives*, 37, 100769.
- Luo, Y., Zhang, X., Qin, Y., Yang, Z., & Liang, Y. (2021b). Tourism Attraction Selection with Sentiment Analysis of Online Reviews Based on Probabilistic Linguistic Term Sets and the IDOCRIW-COCOSO Model. *International Journal of Fuzzy Systems*, 23(1), 295-308.
- Maio, C., Fenza, G., Loia, V., & Orciuoli, F. (2017). Unfolding social content evolution along time and semantics. *Future Generation Computer Systems*, 66, 146-159.
- Mangachena, J. R., & Pickering, C. M. (2021). Implications of social media discourse for managing national parks in South Africa. *Journal of Environmental Management*, 285, 112159.
- Mankad, S., Han, H. S., Goh, J., & Gavirmeni, S. (2016). Understanding online hotel reviews through automated text analysis. *Service Science*, 8(2), 124-138.
- Mäntylä, M. V., Graziotin, D., & Kuuttila, M. (2018). The evolution of sentiment analysis—A review of research topics, venues, and top-cited papers. *Computer Science Review*, 27, 16-32.
- Marcolin, C. B., Becker, J. L., Wild, F., Behr, A., & Schiavi, G. (2021). Listening to the voice of the guest: A framework to improve decision-making processes with text data. *International Journal of Hospitality Management*, 94, 102853.
- Marine-Roig, E. (2019). Destination image analytics through traveller-generated content. *Sustainability*, 11(12), 3392.
- Marrese-Taylor, E., Velásquez, J. D., & Bravo-Marquez, F. (2014). A novel deterministic approach for aspect-based opinion mining in tourism products reviews. *Expert Systems with Applications*, 41(17), 7764-7775.
- Micera, R., & Crispino, R. (2017). Destination web reputation as “smart tool” for image building: The case analysis of Naples city-destination. *International Journal of Tourism Cities*.
- Milwood, P. A., & Crick, A. P. (2021). Culinary tourism and post-pandemic travel: Ecosystem responses to an external shock. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 23-32.
- Mishkin, F.S. 1978. Consumer sentiment and spending on durables goods. *Brookings Papers on Economic Activity*, 1: 217-31.
- Mitas, O., Yarnal, C., & Chick, G. (2012). Jokes build community: Mature tourists’ positive emotions. *Annals of Tourism Research*, 39(4), 1884-1905.
- Mohammad, S. M. (2017). Challenges in sentiment analysis. In *A practical guide to sentiment analysis* (pp. 61-83). Springer, Cham.
- Moreno-Ortiz, A., Salles-Bernal, S., & Orrequia-Barea, A. (2019). Design and validation of annotation schemas for aspect-based sentiment analysis in the tourism sector. *Information Technology & Tourism*, 21(4), 535-557.
- Moro, S., Ramos, P., Esmerado, J., & Jalali, S. M. J. (2019). Can we trace back hotel online reviews’ characteristics using gamification features? *International Journal of Information Management*, 44, 88-95.
- Nave, M., Rita, P., & Guerreiro, J. (2018). A decision support system framework to track consumer sentiments in social media. *Journal of Hospitality Marketing & Management*, 27(6), 693-710.
- Nechoud, L., Ghidouche, F., & Seraphin, H. (2021). The influence of eWOM credibility on visit intention: An integrative moderated mediation model. *Journal of Tourism, Heritage & Services Marketing (JTHSM)*, 7(1), 54-63.
- Nella, A., & Christou, E. (2021). Market segmentation for wine tourism: Identifying sub-groups of winery visitors. *European Journal of Tourism Research*, 29, 2903.
- Nowacki, M., & Niezgoda, A. (2020). Identifying unique features of the image of selected cities based on reviews by TripAdvisor portal users. *Scandinavian Journal of Hospitality and Tourism*, 20(5), 503-519.
- Önder, I., Gunter, U., & Scharl, A. (2019). Forecasting tourist arrivals with the help of web sentiment: A mixed-frequency modeling approach for big data. *Tourism Analysis*, 24(4), 437-452.
- Osareh, F. (1996). Bibliometrics, Citation Analysis and Co-Citation Analysis: A Review of Literature. I. *Libri*, 46(3), 149-158.
- Otay Demir, F., Yavuz Gökem, Ş., & Rafferty, G. (2021). An inquiry on the potential of computational literary techniques towards successful destination branding and literary tourism. *Current Issues in Tourism*, 1-15.
- Pang, B., & L. Lee. (2008). Opinion mining and sentiment analysis. *Foundations and Trends in Information Retrieval* 2(1-2): 1-135.
- Paolanti, M., Mancini, A., Frontoni, E., Felicetti, A., Marinelli, L., Marcheggiani, E., & Pierdicca, R. (2021). Tourism destination management using sentiment analysis and geo-location information: a deep learning approach. *Information Technology & Tourism*, 1-24.
- Papapicco, C., & Mininni, G. (2020). Twitter culture: irony comes faster than tourist mobility. *Journal of Tourism and Cultural Change*, 18(5), 545-556.
- Park, E., Kang, J., Choi, D., & Han, J. (2020). Understanding customers’ hotel revisiting behaviour: a sentiment analysis of online feedback reviews. *Current Issues in Tourism*, 23(5), 605-611.
- Prabowo, R., & Thelwall, M. (2009). Sentiment analysis: A combined approach. *Journal of Informetrics*, 3(2), 143-157.
- Ray, B., Garain, A., & Sarkar, R. (2021). An ensemble-based hotel recommender system using sentiment analysis and aspect categorization of hotel reviews. *Applied Soft Computing*, 98, 106935.
- Reyes-Menendez, A., Saura, J. R., & Filipe, F. (2019). The importance of behavioral data to identify online fake reviews for tourism businesses: A systematic review. *Peer J Computer Science*, 5, e219.
- Ribeiro, F. N., Araújo, M., Gonçalves, P., Gonçalves, M. A., & Benevenuto, F. (2016). Sentibench-a benchmark comparison of state-of-the-practice sentiment analysis methods. *EPJ Data Science*, 5(1), 1-29.
- Sangkaew, N., & Zhu, H. (2020). Understanding Tourists’ Experiences at Local Markets in Phuket: An Analysis of TripAdvisor Reviews. *Journal of Quality Assurance in Hospitality & Tourism*, 1-26.
- Santamaria-Granados, L., Mendoza-Moreno, J. F., & Ramirez-Gonzalez, G. (2021). Tourist Recommender Systems Based on Emotion Recognition—A Scientometric Review. *Future Internet*, 13(1), 2.
- Serrano, L., Ariza-Montes, A., Nader, M., Sianes, A., & Law, R. (2020). Exploring preferences and sustainable attitudes of Airbnb green users in the review comments and ratings: A text mining approach. *Journal of Sustainable Tourism*, 1-19.
- Serrano-Guerrero, J., Olivas, J. A., Romero, F. P., & Herrera-Viedma, E. (2015). Sentiment analysis: A review and comparative analysis of web services. *Information Sciences*, 311, 18-38.
- Shao, X., Tang, G., & Bao, B. K. (2019). Personalized travel recommendation based on sentiment-aware multimodal topic model. *IEEE Access*, 7, 113043-113052.
- Sheth, J. (2020). Impact of Covid-19 on Consumer Behavior: Will the Old Habits Return or Die? *Journal of Business Research*.
- Shi, Y., Zhu, L., Li, W., Guo, K., & Zheng, Y. (2019). Survey on classic and latest textual sentiment analysis articles and techniques. *International Journal of Information Technology & Decision Making*, 18(04), 1243-1287.
- Sigala, M., & Christou, E. (2006). Investigating the impact of e-customer relationship management on hotels’ website service quality. *ECIS 2006 Proceedings*, 118, 1-13.

- Sigala, M., Christou, E., & Baum, T. (2002). The impact of low cost airlines on business travel. *Proceedings of Aiest Conference* (Vol. 44, pp. 313-334), Salvador-Bahia, Brazil.
- Sontayasara, T., Jariyapongpaiboon, S., Promjun, A., Seelipat, N., Saengtabtim, K., Tang, J., & Leelawat, N. (2021). Twitter Sentiment Analysis of Bangkok Tourism During COVID-19 Pandemic Using Support Vector Machine Algorithm. *Journal of Disaster Research*, 16(1), 24-30.
- Souza, M. T. D., Silva, M. D. D., & Carvalho, R. D. (2010). Integrative review: what is it? How to do it? *Einstein* (São Paulo), 8, 102-106.
- Starosta, K., Budz, S., & Krutwig, M. (2019). The impact of German-speaking online media on tourist arrivals in popular tourist destinations for Europeans. *Applied Economics*, 51(14), 1558-1573.
- Sun, B., Ao, C., Wang, J., Mao, B., & Xu, L. (2020). Listen to the voices from tourists: evaluation of wetland ecotourism satisfaction using an online reviews mining approach. *Wetlands*, 1-15.
- Tao, Y., Zhang, F., Shi, C., & Chen, Y. (2019). Social media data-based sentiment analysis of tourists' air quality perceptions. *Sustainability*, 11(18), 5070.
- Throop, A. W. (1992). Consumer sentiment: Its causes and effects. *Federal Reserve Bank of San Francisco Economic Review*, 1, 35-59.
- Todisco, L., Tomo, A., Canonico, P., Mangia, G., & Sarnacchiaro, P. (2020). Exploring social media usage in the public sector: Public employees' perceptions of ICT's usefulness in delivering value added. *Socio-Economic Planning Sciences*, 100858.
- Valdivia, A., Hrabova, E., Chaturvedi, I., Luzón, M. V., Troiano, L., Cambria, E., & Herrera, F. (2019). Inconsistencies on TripAdvisor reviews: A unified index between users and Sentiment Analysis Methods. *Neurocomputing*, 353, 3-16.
- Vallone, C., & Veglio, V. (2019). Customer Perceptions of the Albergo Diffuso Concept: What Makes the Difference in Terms of Service Excellence? *Tourism Analysis*, 24(3), 367-375.
- Van Eck, N.J. & Waltman, L. (2010) Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84, 523-538.
- Vázquez Loaiza, J. P., Pérez-Torres, A., & Díaz Contreras, K. M. (2019). Semantic icons: A sentiment analysis as a contribution to sustainable tourism. *Sustainability*, 11(17), 4655.
- Visuwasam, L., Gladis, D. V., Kalaiselvi, K., & Ananya, S. (2020). Personalized Recommendation System for Promotion of Tourists Places. *European Journal of Molecular & Clinical Medicine*, 7(4), 1793-1802.
- Wang, H. C., Chiang, Y. H., & Sun, Y. F. (2019). Use of multi-lexicons to analyse semantic features for summarization of touring reviews. *The Electronic Library*, 37 (1), pp. 185-206.
- Whittemore, R., & Knafl, K. (2005). The integrative review: updated methodology. *Journal of advanced nursing*, 52(5), 546-553.
- Wilson, T., Hoffmann, P., Somasundaran, S., Kessler, J., Wiebe, J., Choi, Y., Cardie, C., Riloff, E., & Patwardhan, S. (2005). Opinion Finder, In *Proceedings of HLT/EMNLP on Interactive Demonstrations*, Association for Computational Linguistics, pp. 34-35.
- Wu, L., Dong, C., & Xiong, G. (2020). A Big-Data-Based Analysis on the Impact of Cruise Tourism Image on Chinese Tourist Satisfaction and Behavioral Intentions. *Journal of Coastal Research*, 106(SI), 314-318.
- Xiang, Z., Du, Q., Ma, Y., & Fan, W. (2017). A comparative analysis of major online review platforms: Implications for social media analytics in hospitality and tourism. *Tourism Management*, 58, 51-65.
- Yan, Q., Zhou, S., & Wu, S. (2018). The influences of tourists' emotions on the selection of electronic word-of-mouth platforms. *Tourism Management*, 66, 348-363.
- Yang, H. L., & Chao, A. F. (2018). Sentiment annotations for reviews: an information quality perspective. *Online Information Review*, 42 (5), 579-594.
- Ye, Q., Zhang, Z., & Law, R. (2009). Sentiment classification of online reviews to travel destinations by supervised machine learning approaches. *Expert systems with applications*, 36(3), 6527-6535.
- Yu, C. E., & Zhang, X. (2020). The embedded feelings in local gastronomy: a sentiment analysis of online reviews. *Journal of Hospitality and Tourism Technology*.
- Zapata, G., Murga, J., Raymundo, C., Dominguez, F., Moguerza, J. M., & Alvarez, J. M. (2019). Business information architecture for successful project implementation based on sentiment analysis in the tourist sector. *Journal of Intelligent Information Systems*, 53(3), 563-585.
- Zhang, X., Yang, Y., Zhang, Y., & Zhang, Z. (2020). Designing tourist experiences amidst air pollution: A spatial analytical approach using social media. *Annals of Tourism Research*, 84, 102999.
- Zhang, W., Choe, Y., & Fesenmaier, D. R. (2019). The Defining Features of Emotions in Online Stories. *e-Review of Tourism Research*, 16(2/3).
- Zhang, W., & Fesenmaier, D. R. (2018). Assessing emotions in online stories: comparing self-report and text-based approaches. *Information Technology & Tourism*, 20(1), 83-95.
- Zhang, W., Kim, J. J., Kim, H., & Fesenmaier, D. R. (2019). The tourism story project: Developing the behavioral foundations for an AI supporting destination story design. *e-Review of Tourism Research*, 17(2).
- Zheng, X., Luo, Y., Sun, L., Zhang, J., & Chen, F. (2018). A tourism destination recommender system using users' sentiment and temporal dynamics. *Journal of Intelligent Information Systems*, 51(3), 557-578.
- Zhu, L., Lin, Y., & Cheng, M. (2020). Sentiment and guest satisfaction with peer-to-peer accommodation: When are online ratings more trustworthy? *International Journal of Hospitality Management*, 86, 102369.

SUBMITTED: FEB 2021

1<sup>st</sup> REVISION SUBMITTED: JUN 2021

2<sup>nd</sup> REVISION SUBMITTED: AUG 2021

ACCEPTED: SEP 2021

REFEREED ANONYMOUSLY

PUBLISHED ONLINE: 18 OCT 2021



# Brace for impact! COVID-19, lockdown and the initial reaction and adaptability of Flemish travel consumers

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## Abstract:

**Purpose:** To determine the influence of COVID-19 and the first 2020 lockdown on Flemish people's initial travel behaviour perceptions, a hypothetical scenario was posed to respondents where they were asked to keep in mind a situation where they might be able to travel again during the summer of 2020 (July/August). This research had two main aims: i) the pre-lockdown travel plans for summer 2020 were determined; ii) the extent to which respondents would adapt their travel behaviour if they were hypothetically allowed to travel again by summer 2020.

**Methods:** This exploratory research was done by means of an online quantitative questionnaire of which 1803(n) complete responses were obtained through convenience and snowball sampling.

**Results:** The results revealed that respondents did have initial travel plans for the 2020 summer (July/August) period, but that they adjusted their planning to mostly travelling nationally/locally, potentially benefitting the local tourism industry. These findings (i) indicate the importance of directing marketing efforts towards the local travel market and (ii) contribute to literature regarding the resilience of the (local) tourism industry. Additionally, the research unveils how the industry should do long-term planning by taking the immediate travel behaviour changes of the Flemish travel consumers into account through regular intervals of consumer research so that it can pick up on possible behavioural trends and ready itself.

**Implications:** Government, together with the industry, can work towards policies that act as a safety net during possible future industry disasters to minimize the negative impacts and foster a swift recovery.

**Keywords:** Coronavirus, epidemic, lockdown, travel behaviour, tourism

**JEL Classification:** L10, R41, D18

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## 1 INTRODUCTION

The 2020 COVID-19 pandemic has had an unprecedented impact on global economies (UNTWO, 2020) and caused an estimated job loss risk of 120 million in 2020 (UNWTO, 2020). 'Social distancing' is the primary reason for the impact on tourism (Wilder-Smith & Freedman, 2020) because people had to keep their distance and country borders had to close; which was also the case for Belgium (RTLNieuws, 2020). This was coupled with a ban on non-essential travels, closing tourism attractions, accommodation and restaurants (Clapson, 2020). These measures resulted in an extreme impact on the Flemish region (Flanders) of Belgium, where the tourism industry employs over 260 000 people (in 2018) and is responsible for over 14 million arrivals (of which 55% international and 33,1 million

overnight stays) (Toerisme Vlaanderen, 2019), contributing 4,2% to the Flemish GDP in 2013 (Visit Flanders, 2013).

Flanders (Dutch-speaking region) is popular with tourists due to its various attractions and well developed public transport system (Vlaanderen, 2020). As a result, during the March 2020 lockdown, tourism revenue losses were estimated at 1,4 billion euros per month (Kamer, 2020). It was thus important for the tourism industry to recover rapidly through specific recovery plans which are based on a firm analysis and full understanding of the situation. One important aspect to take into account is the possible consumers' travel behaviour changes that could have taken place (De Vos, 2020). With such knowledge, the tourism industry could strategically adapt its planning, management and marketing efforts to swiftly recover from the pandemic and become more resilient for possible future crises.





Various studies have been done on the impact of multiple factors on consumers' travel behaviour (Delbosc et al., 2019); however, a minimal amount of research can help with the understanding of the dramatic global impacts of the 2020 COVID-19 pandemic, social distancing and nationwide lockdowns, as these are mostly new, unique situation during modern times. Such research is especially needed seeing as health, and natural disasters are predicted to not only repeat but also increase in frequency (Sigala et al., 2002; Hall, 2010; Park & Reisinger, 2010). To better help the regional tourism industry prepare for 'life-after-COVID-19' or to cope better during the 2020 COVID-19 pandemic and future pandemics, it was decided that the main aim of this study was to conduct research on the impact of the 2020 COVID-19 pandemic and the subsequent lockdown on the intended travel behaviour of Flemish people during such times.

Seeing as this research had to take place during the lockdown, a hypothetical situation had to be devised where respondents were asked if and how they would adjust their travel behaviour if the regulations were to be relaxed or revoked by the time the 2020 summer holidays would arrive (July/August). The aim of the study was achieved by reaching the following main goals: determine if the Flemish respondents did have travel plans before the lockdown regulations were implemented; determine where the respondents were planning to travel initially and if their plans would be adjusted (according to the hypothetical scenario); To determine fundamental travel behaviour changes that would result after extreme safety measures such as a lockdown; To make recommendations towards fostering a more resilient tourism industry pertaining to such crises.

## 2 LITERATURE REVIEW

### 2.1. The dynamics of travel behaviour

Travel behaviour can be defined as tourists' behaviour according to their attitudes before, during and after travels (Bhattacharya & Kumar, 2017). In turn, tourists' attitudes, subject to internal (motives and income, for instance) (Van Wee, 2009), and external (environment and social attributes such as safety) factors (Whyte, 2017), influence their reasons for travel. Knowledge of consumer's travel behaviour allows for proper planning, management and marketing of tourism offerings. Furthermore, travel behaviour is dynamic and should be measured frequently or in response to certain environmental changes (Zhang et al., 2020). Various events take place that influence consumers' travel behaviour over time (Gössling, et al., 2020); these can be technological, demographical, economic or social in nature (Mansfeld & Pizam, 2006; Park & Reisinger, 2010; Senbeto & Hon, 2020). However, sometimes events take place that can cause more drastic disruptions in travel behaviour, meaning that faster reaction times are needed from the tourism industry. Examples of such events include the 2008/2009 global economic recession (Scholtz, Saayman, & Kruger, 2012), natural disasters such as tsunamis, floods, volcanic eruptions (Rosselló, Becken, & Santana-Gallego, 2020) and droughts (Rangongo, 2018), as well as health disasters such as the 2020 COVID-19 pandemic (UNTWO, 2020). If such disasters are not well managed and systems are not resilient, they can evolve into crises (Faulkner, 2001) which create

negative consequences in the tourism industry (OECD, 2014; Rosselló et al., 2020). Such consequences can have a particularly negative impact on perceptions regarding risk and safety at destinations, as well as on the destination image; and factors that strongly influence the decision-making process of travellers (Faulkner, 2001; Beirman, 2003; Mansfeld, 2006; Rittichainuwat & Chakraborty, 2009; Page et al., 2012; Becken et al., 2016; Bhati et al., 2016; Chatzigeorgiou & Christou, 2020).

Research that map and quantify the relationship between disasters, crises, and tourism is scarce, often highlighting the impact on a national level through case studies with a focus on the impact on visitor numbers and limited to isolated cases; however the COVID-19 crises is different (Hall, 2010; Park & Reisinger, 2010). Moreover, the effects of such an international event on the individual demand, tourist behaviour and recovery policies remain relatively uncharted grounds (Bronner & de Hoog, 2014; Okuyama, 2018; Senbeto & Hon, 2020), yet important to pursue. Due to the combination of urbanisation, industrialisation, technology, hypermobility and climate change, the number, size and impact of disasters and crises have increased (Hall, 2006; Hall, 2010; Park & Reisinger, 2010), resulting in a need for better comprehension of the various immediate consequences, its impact on consumers' travel behaviour as well as preparedness to cope with them (Fan, et al., 2019; Sinclair-Maragh & Simpson, 2021).

### 2.2. Previous research on the effect of negative events

The influence of mostly stratified negative events has been studied. Such negative events, in general, create a consumer shift towards destinations that are deemed 'risk-free' (Mansfeld, 2006). It can also cause consumers to cancel bookings and adjust expenditure and length of stay (Mansfeld, 2006; Page et al., 2012; Senbeto & Hon, 2020). Research on the risk of the 2003 SARS virus outbreak in Asia, for instance, showed how mass media led to a sharp decline in visitor numbers and expenditure (Wilder-Smith, 2006; Senbeto & Hon, 2020). The 2001 English foot-and-mouth disease outbreak created a long term negative impact on rural tourism (Miller & Ritchie, 2003; Page et al., 2012). Unlike natural disasters, pandemics have a long-lasting impact on the image of destinations, or at least until a vaccine is made available (Chien & Law, 2003).

Altered travel choices and behaviour may differ according to the nature of the event. In cases of terrorism and crises such as pandemics, travellers indicate that they prefer to avoid crowded attractions (Rittichainuwat & Chakraborty, 2009). Events and crises of financial and economic nature limit travellers' possibilities to travel to long-haul destinations as the decision-making process is highly influenced by job insecurity and a possible decrease in disposable income (Papatheodorou & Pappas, 2017; Senbeto & Hon, 2020). This has led to public sectors, for instance, promoting domestic tourism during the 2008-2009 economic crisis, as international tourists were more likely to economise on their travels in terms of time and budget (Page et al., 2012). However, it remains unclear to what extent crises influence domestic tourism and how increased domestic tourism activities may contribute or compensate for loss of revenue from incoming international tourism (Li et al., 2010; Milwood & Crick, 2021).



### 2.3. Tourism recovery after a crises

A full recovery of the tourism industry at a destination after a disaster or crisis can take long and can be complex (Cavlek, 2002; Sigala & Christou, 2006; Rittichainuwat & Chakraborty, 2009). Although the specific impacts of disasters and crises vary, there are certain common factors that need to be addressed in their aftermath. A central pillar in tourism recovery concerns meticulous disaster management steps that need to be taken to plan, prepare, protect and rebuild the destination image to ensure continuity and support of tourism organisations (Hystad & Keller, 2008; Okuyama, 2018). A vital first step in disaster management planning is to disseminate unambiguous and transparent information. Such messages should be underpinned by the already existing destination image in consultation with the sector's key stakeholders. It should attract the correct type of visitors at the right moment, considering possible limitations concerning the tourism supply, while isolating the potential problematic zones from other risk-free areas (Cavlek, 2002; Hystad & Keller, 2008; Hughey & Becken, 2016; Okuyama, 2018).

### 2.4. Influence of 2020 COVID-19 on tourism, predicted and observed travel behaviour

As tourism activities potentially facilitate the transmission of COVID-19 (Wesolowski et al., 2014), most destinations (wholly or partially) closed their borders and cancelled many incoming international flights in March 2020 (UNTWO, 2020). Several other measures were put in place to prevent people from gathering in specific areas (e.g. suspension of mass events and lockdowns) (Gretzel et al., 2012; Del Chiappa et al., 2021; Fotiadis, 2018; Fotiadis & Williams, 2018).

Furthermore, hotels, restaurants and tourist attractions were (partly or wholly) closed, and airline companies were requesting monetary assistance from governments (Gössling et al., 2020). Such restrictive actions, affecting 90% of the world's population (Gössling et al., 2020; Nella & Christou, 2021), had put the tourism industry on hold (Niewiadomski, 2020) and would drastically decrease the consistent growth of the travel industry for the first time in 10 years (UNWTO, 2020). Thus, tourism was one of the hardest hit industries (UNWTO, 2020), both in Flanders and globally (Lock, 2020). Possible significant threats to the international tourism industry consisted of economic recessions, increased unemployment and uncertainty concerning the length of the pandemic (UNWTO, 2020). Due to the crisis, destinations and communities that rely heavily on international arrivals as an economic source were most vulnerable to the effects of the regulations, while those with strong domestic markets were less vulnerable (Tsao & Ni, 2016; UNWTO, 2020; Bonarou, 2021).

Regardless of UNTWO's (2020) report, domestic tourism was expected to recover faster than international demand. Also, a fraction of travellers indicated that many international travel plans made before COVID-19 were cancelled, and newly planned international trips remain limited (Sequeda, 2020). Travellers who indicated that they were still planning to travel internationally would postpone their trips until autumn 2020 (northern hemisphere). An increased interest in spending the 2020 summertime (northern hemisphere) in one's own country and the vicinity of the place of residence

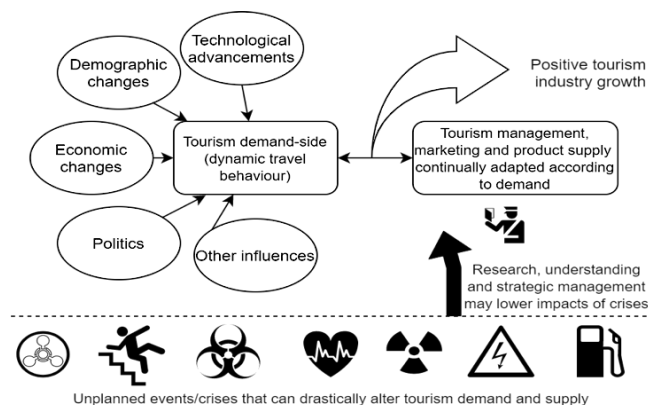
was already noticeable (Sequeda, 2020; Chen et al., 2020; Kiesnoski, 2020). In Flanders (Belgium), the regional Destination Management Organisation (DMO), Tourism Flanders, pointed all its promotional efforts towards the domestic market (Toerisme Vlaanderen, 2020a). From the information above, consumers appeared to be optimistic about the post-COVID-19 recovery and linked household spending (Jones, 2020). However, during the crises, consumers indicated that a possible decrease in savings/disposable income and a general sense of insecurity, and even danger concerning travel, would likely make them spend less on travel and recreational activities (Charm et al., 2020; Jones, 2020; Sequeda, 2020). As a result, the size of travelling groups with recreative motives was expected to also decrease compared to the size of groups pre-Corona, together with a general decrease in spending (Charm et al., 2020; Chen et al., 2020).

Huijbens (2020) reiterates the importance of safety in that there is an expectation of more self-centred travellers, social distancing demand and a search for alternatives to public transport (Chen et al., 2020; The Research Alliance, 2020), such as walking and biking activities (De Vos, 2020), and shorter travel distances (which corresponds well with domestic tourism campaigns launched by various DMOs) (Christou, 2010; Diskin, 2020; Page, 2020; Ron, 2020; The Nation Thailand, 2020; Toerisme Vlaanderen, 2020a; Visit Britain, 2020).

According to a McKinsey & Company study (Chen, et al. 2020), consumers would therefore prefer to visit open-air attractions and avoid crowded places. Also post-Corona, the potential threats include perceptions of safety risk and lower tourism demand. Therefore, innovative policies, practices and guidelines towards resilience and preparedness for future moments of crisis are needed (Novelli, 2020; Nechoud et al., 2021).

From the literature, the research framework (Figure 1) was created. It reveals interactions between tourism demand and supply, with supply continually adapting to the dynamic behaviour of the demand-side. Furthermore, crises might arise, which can catch this system off guard; however, through proper research and strategic management, the impacts of such crises could potentially be minimised.

Figure 1: Research framework – the influence of crises of tourism demand and supply



Source: Created literature findings

### 3 RESEARCH METHODOLOGY

This research was exploratory and made use of quantitative data collection using an online questionnaire (in Dutch); the rest of the method used is explained in this section.

#### 3.1. The questionnaire

The questionnaire consisted of four sections. The first section (Section A) determined the possible travel plans that Flemish respondents had made prior to the March 2020 regulations. Through closed-ended questions, it measured whether the respondents did have initial travel plans; whether they would adjust their travel plans; and where they were planning on travelling (nationally or internationally). With open-ended questions, their planned expenses for their trips as well as the travel group sizes were measured. Section B measured respondents' 2020 July/August summer travel perceptions regarding the possibility of travel.

Section C provided a hypothetical situation where respondents were asked to take into account a situation where the travel regulations could be relaxed or cancelled before the summer holidays (July/August 2020) to allow for travel – the importance of keeping the hypothetical situation in mind was stressed throughout the questionnaire. The respondents' newly envisaged travel plans or behavioural changes were explored. Questions such as where they would, in light of the hypothetical possible relaxation of the lockdown, plan on travelling to during the 2020 summer season (July/August) and why; as well as various other behavioural changes that they were planning to make such as changes to group sizes; planned spending; preferred attractions in Belgium (if not yet allowed to travel abroad); as well as their general travel preferences (detached from the lockdown). The question on the preferred attractions was asked in three separate rating scales – one for the Flanders region, one for Brussels, and one for the Wallonia region. Respondents could indicate their favourite type of attraction with a '1', while the least preferred was given a '10'. The question on the preferred general travel preferences were asked on a 5-point semantic differential scale where different travel preferences were placed on the polar parts of the scale, for example, preference for beach holiday or mountains holiday; city trip or somewhere in nature; rustic experience or luxurious, for instance. The last section (Section D), measured general socio-demographic information such as respondents' age; occupation; place of residence within Flanders; the sizes of their households; as well as the number of children per household.

The steps proposed by Field (2003) and Tustin et al. (2005) were used to design and validate the questionnaire. The process included an in-depth review of the literature to endorse the content; secondly, face validity was used where various professionals in the field of tourism and research, and two non-professionals, examined the questionnaire against the goals of this study, to ensure the correctness of language, questions, and question types which would contribute to the correct data being measured in such a way to allow for further analysis.

#### 3.2. Survey and method

The federal state of Belgium consists of Flemish, French and German-speaking communities within particular regions. Each region has individual economic autonomy, resulting in a Flemish, Brussels Capital and Walloon Region (Belgian Federal Government, 2020). This research was carried out at a Flemish educational institution, which is, in turn, a community matter – thus limiting the study to this region (Map1).

Map 1: The regions of Belgium used in the study



Source: [https://www.familysearch.org/wiki/en/Belgium\\_Languages](https://www.familysearch.org/wiki/en/Belgium_Languages) (free-to-use)

Due to the regulations, an online questionnaire was used as data collection tool – it was developed in Qualtrics (2020) which allowed a link to the questionnaire to be distributed to the people in Flanders. Both convenience and snowball sampling (non-probability) within stratified sampling (where the main cities of each province in Flanders formed a stratum) were used. Various official Facebook groups for official town/city groups in Flanders, Belgium; N=756 353; see Appendix A) were joined, where the questionnaire link was posted. Furthermore, various DMOs helped to distribute the questionnaire link (the DMOs' reach regarding distribution cannot be determined). Multiple forms of broadcast media also picked up on the survey and broadcasted it on radio and television news (such as RTV News) or in online newspapers such as vrtNWS. Data collection took place from 14 April 2020 to 22 April 2020 – data collection was halted after a good spread of the strata was achieved with 1803(n) responses.

Table 1: Breakdown of provinces, population sizes and spread of the sample

Aspects measured	Population (1 Jan 2020)	Percentage of population	Percentage in sample
Antwerp	1857986	23,8%	45%
Flemish-Brabant	1146175	14,7%	18%
West-Flanders	1195796	15,3%	14%
East Flanders	1515064	19,4%	16%
Limburg	874048	11,2%	5%
Brussels	1208542	15,5%	2%
Total	7797611	100%	100%

Source: (STATBEL, 2020) & own results

#### 3.3. Statistical analysis and results

According to Statistiek Vlaanderen (2019), the Flanders region had approximately 6,6 million (N) inhabitants in 2019.

Seeing as many Flemish-speaking people live in the Brussels Capital Region, this province was also incorporated, making the total population 7,8 million (N). For a 95% confidence level and 5% margin of error, the sample size for Flanders should be at least 385n for a statistically representative sample. Furthermore, a distribution of responses from all five provinces in Flanders and Brussels was achieved. As per the 2011 Belgium census, the average age of Flemish people was 41,74 years (STATBEL, 2020), which correlates with the sample's average age of 44,42 years (see Table 2). To examine the representativeness of the geographical distribution of the respondents, a comparison was drawn up in Table 1. A fair number of respondents from all provinces in Flanders, as well as Brussels, took part in the survey.

The data were exported from Qualtrics to Microsoft Excel, inspected for errors/inconsistencies and further analysed in SPSS Version 26 (SPSS, 2020). Firstly, frequency tables were used to determine the profile of the respondents, as well as their travel behaviour in general. Secondly, crosstabs and t-tests were used to identify possible changes in the respondents' travel behaviour. Statistically significant differences ( $p < 0,05$ ) are reported in this manuscript.

### 3.4. The profile of the respondents

The analysis of respondents' ages and household sizes (Table 2) reveals that the largest age groups were between 31 and 40 (24%) or between 41 and 50 years (23%) of age. Their households consisted of two (39%) or four persons (23%) (2,83 persons per households on average).

Table 2: Respondent profile

Aspects measured	Result(s)
Age	31 – 40 years (24%); 41 – 50 years (23%); 44,42 years average age
Size of household	Two persons (39%), four persons (23%); 2,83 persons per household on average

The next section contains the results of this research and the analyses.

## 4 FINDINGS AND ANALYSIS

### 4.1. Overview of initial travel plans and possible behaviour changes

The majority of respondents (85%) indicated that they had already planned their summer holiday (July 2020) before Belgium went into lockdown (Table 3). As a result of the crisis, 64% of the total respondents indicated that they would adapt their overall travel behaviour and 84% believed that international travel would still not be allowed by July/August 2020.

Table 3: Initial travel plans and behaviour changes

Aspects measured	Result(s)
Initial travel plans in place before the lockdown?	Yes (85%)
Adapt travel plans as a result of lockdown?	Yes (64%)
Do they think international travel will be possible by July/August 2020?	No (82%)

### 4.2. The differences in initial and possibly adapted travel behaviour

T-tests and crosstabulations were used to reveal differences between initial travel behaviour and adjusted behaviour

(based on the hypothetical lowering or elimination regulations).

#### i. Differences regarding intended and new destination types

Table 4 reveals the differences between respondents' initial destination types and their possibly adjusted plans. Initially, 73% of respondents planned only to travel internationally; however, 49% would change their plans to travel both locally and internationally, while 22% would rather stay in their own town/city.

Table 4: Types of travel

Behavioural aspects	Type of travel	Initial plans & behaviour	Adjusted plans & behaviour
Destination choice(s) (national or international)	Only national travel	13%	20%
	Only international travel	73%	9%
	Both: national and international travel	14%	49%
	Stay in own town/city	-	22%

Significant differences were observed between initial and adapted travel types ( $p > 0,05$ ) (Table 5). Of those who initially planned to only travel in Belgium, 62% would still do so, while 21% would rather remain home and 16% who would want to travel in Belgium and abroad (21%). For those who had initially planned only to travel abroad, only 28% would still do so, with 44% who would change their plans to travel in Belgium as well as internationally (44%), 10% who would only travel in Belgium and 18% who would rather stay home. When examining those who were planning to travel in both Belgium and abroad, 63% would still do so. However, 21% of this group indicated that they would rather travel in Belgium only, and 13% considered staying home. The main reasons why respondents would be willing to travel more in Belgium included 'local travel is safer' (44%), 'I want to support the local economy' (28%), and 'it is easier to simply travel in Belgium' (14%).

Table 5: Initial and adjusted travel plans compared

		Adjusted holiday plans				Total
		Only national travel	Only international travel	Both: national and international travel	Stay home/local	
Initial travel plans	Only national travel	Count	69	1	18	112
		%	62%	1%	16%	100%
	Only international travel	Count	69	194	299	683
		%	10%	28%	44%	100%
	Both: national and international travel	Count	107	16	312	499
		%	21%	3%	63%	100%

Phi (φ): 0,492\*\*\* df: 12 p-value: 0,00  
\* Indicates significance at 5% level; phi-value: \*\*small effect=0,1; \*\*\*medium effect=0,3; \*\*\*\*large effect=0,5; p<0,05 = significant

#### ii. Differences in spending per intended destination type (Initial vs New Plans)

A t-test revealed the difference between initial spending and newly planned spending (see Table 6) for the 2020 summer holiday (July/August 2020). The largest effect sizes were revealed in the categories where people prefer to travel both in Belgium ( $p = .000$ ; Cohen's  $d = 0,336$ ) and abroad ( $p = .000$ ; Cohen's  $d = 0,354$ ). In both it was found that the respondents were planning to spend significantly less when travelling both in Belgium (€38,07 or 6,6% decrease) and abroad (€665,86 or 30,33% decrease). Those who planned to still travel abroad only, will also spend significantly less ( $p = .007$ ) but with a small effect size (Cohen's  $d = 0,1$ ); from €3227,38 to €2906,15 (€321.23 or 9,95% decrease). Those

who plan to travel in Belgium only are planning to spend significantly more ( $p = .000$ ; Cohen's  $d = 0,16$ ); from €757,95 to €937,10 (€179.15 or 23,62% increase).

Table 6: Comparison of initial and newly planned spending (t-test)

Type of travel	Initial vs new	N	Spending (average)	Standard deviation	Sig.	Effect size
Only national travel	Initial	108	€757,95	824,684	,000	0,16**
	New	205	€937,10	1303,401		
Only international travel	Initial	126	€3227,38	3352,436	,007	0,1**
	New	126	€2906,15	3095,378		
Both: Belgium	Initial	512	€576,53	1079,614	,000	0,336***
	New	399	€538,46	1181,428		
Both: International	Initial	512	€2195,52	2215,418	,000	0,354***
	New	403	€1529,66	1473,09		

\* Indicates significance at 5% level; phi-value: \*\*small effect=0,1; \*\*\*medium effect=0,3; \*\*\*\*large effect=0,5;  $p < 0,05$  = significant

### iii. Changes in types of travels considered/planned

An initial t-test revealed significant differences ( $p > 0.005$ ) between the average number of people per travel group for both those who planned to only travel in Belgium and those who prefer to travel abroad (Table 7). For those who plan to travel in Belgium alone, the average group size showed a decrease (3,28 to 2,71 persons; 17% decrease) with a small effect size ( $p = .000$ ; Cohen's  $d = 0.287$ ) when comparing initial plans and adjusted plans. However, the decrease in group size is smaller (2,68 to 2,53 persons; 5,22% decrease) when examining those who prefer to only travel abroad ( $p = .000$ ; Cohen's  $d = 0.087$ ).

Table 7: Comparison of initial and newly planned group sizes (t-test)

Types of travel		N	Average travel group size (adults)	Std. Deviation	Sig.	Effect sizes
Only national travel	Initial	114	3,28	2,302	,000	0.287**
	New	214	2,71	1,612		
Only international travel	Initial	735	2,68	1,652	,000	0.087
	New	172	2,54	1,616		

\* Indicates significance at 5% level; phi-value: \*\*small effect=0,1; \*\*\*medium effect=0,3; \*\*\*\*large effect=0,5;  $p < 0,05$  = significant

### 4.3. Preferred attractions during lockdown

From the results in Table 8, it appears that the respondents would mostly prefer restaurants and cafes (67% and 55%, respectively) or nature areas (66% and 60%, respectively) in Flanders and Wallonia. When travelling to Brussels, respondents would mostly do so to visit restaurants and cafes (65%).

Table 8: Preferred attraction types

Type of attraction	Flanders region	Brussels region	Wallonia region
Restaurants & Cafes	67%	65%	55%
Nature areas (landscape, forests)	66%	-	60%
Cities	57%	-	48%
The coast	55%	-	-
Cultural and heritage areas (such as museums, castles etc.)	52%	57%	46%
Zoo's and theme parks	51%	-	46%
Recreation and water parks	50%	-	45%

## 5 DISCUSSION

When examining the respondents' initial travel plans and comparing it to the hypothetical situation where the lockdown regulations are relaxed or removed by the time of the 2020 summer holidays (July/August), various findings

become apparent regarding the impact of the pandemic on Flemish consumers' travel behaviour.

### 5.1. More will rather travel in their own country

Travel consumers would adjust their initial destination choices, in light of COVID-19, with a significant increase (+7%) in those who would rather travel locally (in Belgium) or stay within their own town or city limits (+22%), while those who were planning to only travel internationally drastically decreased by 64%. and those who would travel both internationally as well as nationally increased by 35%. When probed regarding their possible travel decision changes, the majority indicated that they did so because they perceive local travel as safer, easier and more convenient, and they saw it as a way to support the Flemish economy, and especially the tourism industry to which they felt a form of responsibility during such critical times. This finding reveals the Flemish people's sense of responsibility towards their local tourism industry which poses a golden opportunity for the local tourism industry to grow their local market segment by being aware of this behavioural change and by adapting its planning and marketing efforts towards it. The industry can potentially grow local consumer loyalty which will provide various benefits both in the short term (support during the lockdown) and in the long term (continued support post-COVID and increased resilience when faced with future crises). A push towards local travel was also supported by the Belgian government's decision to provide each resident of the country 12 free train tickets to travel to anywhere in the country in order to motivate people to travel locally and to promote the local tourism industry (Chini, 2020). Within Flanders, a clear adjustment towards the local travel market by DMOs was already observed later in 2020 (Toerisme Vlaanderen, 2020a) with a marketing campaign containing the slogan reis in eigen land or 'travel in your own country' where different locations and spaces were marketed as potential places the Flemish people still need to go see and discover. An added objective of this campaign was to create a sense of pride among the Flemish residents to the attractions their country has to offer.

This finding corroborates the findings of recent research (Chen et al., 2020; Kiesnoski, 2020; Sequeda, 2020), and supports studies that show how countries that rely too heavily on international arrivals and direct most of their resources towards it, are more vulnerable to the effects of such crises (Chen et al., 2020; Kiesnoski, 2020; Sequeda, 2020). The results contradict that of Sequeda (2020), who found that international travel will simply be postponed. An increase in local travels will also lead to an increase in local spending, to which the next finding comes to light.

### 5.2. People are willing to spend more disposable income on local travels

Consumers would spend significantly more of their disposable income on travel within Belgium (+€179,15; 19% more) than prior to the lockdown – a finding that was not yet supported in literature by the time this research was done. However, spending of those who would take part in international travel would only decrease (€321,23; 10% less), and similar results were found by other authors (Charm, et al., 2020; Jones, 2020; Sequeda, 2020). For those who would travel both nationally and internationally, if travel was

possible, their spending on travel within Belgium would decrease by €38,07 (or 7% less), while their spending on international travel would significantly decrease by €665.86 (or 30% less). The finding here is that respondents would be much more inclined to directing their spending towards national travel.

An increase in local spending can be attributed to the fact that their intended spending for international travel would be redirected back into Belgium. This finding, again, reiterates the importance of the tourism industry focussing its marketing efforts towards the local travel market as it could be its saving grace during the 2020/2021 lockdown, as well as post-COVID and during possible future epidemic and / or crises periods. The local market is a closer and more well-known market to direct tourism marketing efforts towards and by creating a sense of pride and importance of the Flemish region's attractions, a market will be developed which will provide sustainable financial benefits to the region. It is important to note that, according to Jones (2020), a general improvement in the COVID-19 infection rate led to more positive consumer outlooks and increased household spending, implying that the image of safety could contribute to higher levels of spending; this leads into the next finding.

### 5.3. Group sizes would decrease

Taking into account respondents safety concerns, most respondents did indicate that they would generally travel in smaller groups. For those who would only travel nationally, it was indicated that they would lower their group size by almost one person (17% smaller) while those who would travel internationally only would travel in groups that would be 5% smaller. These differences seem small, but they are significant. Similar decreases in group sizes were also observed by Charm et al. (2020) and Chen, et al. (2020), with some of the main reasons for smaller groups being safety concerns in terms of avoiding areas where crowds would congregate which would enhance the rate or possibility of further virus transmissions. As a result, consumers also indicated that they rather prefer open-air attractions (such as open-air restaurants and attractions), which will make social distancing measures easier to adhere to (Charm et al., 2020; Chen, et al., 2020) - this brings the fourth finding to light.

### 5.4. Respondents would prefer to visit places that appear safer

The final finding is that respondents would rather prefer to travel to and experience attractions that exhibit lower chances of infection where social distancing can be controlled or naturally achieved, such as respondents who indicated that they would rather visit restaurants and cafes (perhaps because strict health regulations are applied) or natural areas such as beautiful landscapes and forests in the three main regions of Belgium (Flanders, Brussels and Wallonia). Only around half of respondents would still prefer city trips or visits to cultural and heritage areas (such as some of the country's museums and castles, for instance). The move towards more open or controlled spaces for travel corroborates the findings of Chen, et al. (2020), and echoes the expectations by Huijbens (2020), who indicated that consumers would rather prefer less crowded open areas. From this finding, it is clear that attractions and events in Flanders should, where possible, be hosted in open air (not inside buildings) where social

distancing, air flow and other COVID-measures such as limiting the number of visitors, would make visitors feel safer. Attractions, restaurants and other tourism facilities should examine what measures they could possibly put in place and then explicitly market the measures that were taken to help potential tourists make informed decisions about where they may be able to have safe touristic experiences.

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## 5 CONCLUSIONS

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The purpose of this research was to explore the possible impacts of the COVID-19 pandemic on the travel behaviour of Flemish people by making use of a hypothetical situation where the lockdown regulations might be relaxed or cancelled before the Belgian summer holiday (July/August 2020). Similar to other studies where authors predicted and measured behavioural changes, this research revealed how such a pandemic could influence consumers' behaviour. From the results of this study and the discussion, it becomes clear that the Flemish respondents, with full knowledge of the virus threat, would still want to travel if allowed to do so. However, to enable them to do so, they would make certain sacrifices by adjusting their behaviour. They will increase local travel and spending and also be more mindful of the types of places they visit and their group sizes (smaller groups and safer areas).

Although the tourism industry took an extreme knock in 2020, it can increase its resilience by shifting its focus to local travellers, not only during crises but in the long-term (through strategic planning), by being aware that the local market's travel behaviour is dynamic and that the industry should adapt accordingly. The importance of the local travel market, which was also partially revealed in the studies on France and China, should be shown in marketing messages to foster consumers' loyalty to it. In conclusion, when crises, such as the 2020 COVID-19 pandemic, strike, the tourism industry should keep in mind that there are measures that they can take to make the industry more resilient and ensure a more rapid recovery by taking the local travel market into account.

The limitations of this research is acknowledged. Firstly, non-probability sampling methods (online survey), although applied within a stratum, do not provide optimal representativity. Secondly, this study depended on primarily descriptive statistics; however, it is argued that the results, irrespective of further analyses, provide a good indication of the change of the Flemish respondents' travel behaviour. For future research, it is important to follow up on possible long-term behavioural changes due to the pandemic – has the travel market changed

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## REFERENCES

- Becken, S., Jin, X., Zhang, C.J. and Gao, J. (2016). Urban air pollution in China: Destination image and risk perceptions. *Journal of Sustainable Tourism*, 25(5): 130-147.
- Beirman, D. (2003). United States: September 11, 2001 terrorist attack. The impact on American and global tourism. In D. Beirman (Ed.), *Restoring tourism destinations in crisis: A strategic marketing approach* (pp. 43-68). Crows Nest, NSW: Allen Unwin.

- Belgian Federal Government (2020). Belgium, a federal state. [https://www.belgium.be/en/about\\_belgium/government/federale\\_staat](https://www.belgium.be/en/about_belgium/government/federale_staat) [Accessed the 27th of May 2021, 10:15].
- Bhati, A., Upadhyaya, A.A. and Sharma, A. (2016). National disaster management in the ASEAN-5: an analysis of tourism resilience. *Tourism Review*, 71(2): 148-164.
- Bhattacharya, S. and Kumar, R.V. (2017). A RIDIT approach to evaluate factors influencing tourist destination brand selection behaviour pertaining to Indian tourism sector. *Journal of Modelling in Management*, 12(4): 583-602.
- Bonarou, C. (2021). The poetics of travel through unravelling visual representations on postcards: A critical semiotics analysis. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 44–53.
- Bronner, F. and De Hoog, R. (2014). Vacationers and the economic ‘double dip’ in Europe. *Tourism Management*, 40: 330-337.
- Cavlek, N. (2002). Tour operators and destination safety. *Annals of Tourism Research*, 29(2): 478-496.
- Charm, T., Bhargava, S., Das, R., Grimmelt, A., Kim, E., Robinson, K. and Tormo, S. (2020). Survey: US consumer sentiment during the Coronavirus crisis. <https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/survey-us-consumer-sentiment-during-the-coronavirus-crisis> [Accessed the 27th of May 2021, 10:15].
- Christou, E. (2010). Investigating attitudes towards mobile commerce for travel products. *Tourism: An International Interdisciplinary Journal*, 58(1): 7–18.
- Chatzigeorgiou, C., & Christou, E. (2020). Promoting agrotourism resorts online: an assessment of alternative advertising approaches. *International Journal of Technology Marketing*, 14(3): 249-266.
- Chen, K., Enger, W., Yu, J. and Zhang, C. (2020). Hitting the road again: How Chinese travelers are thinking about their first trip after COVID-19. <https://www.mckinsey.com/featured-insights/asia-pacific/hitting-the-road-again-how-chinese-travelers-are-thinking-about-their-first-trip-after-covid-19#> [Accessed the 27th of May 2021, 10:17].
- Chien, C. L. and Law, R. (2003). The impact of the Severe Acute Respiratory Syndrome on hotels: a case study of Hong Kong. *International Journal of Hospitality Management*, 22(3): 327-332.
- Chini, M. (2020). Belgium launches free rail pass scheme. *The Brussels Times*. <https://www.brusselstimes.com/news/belgium-all-news/129290/belgiums-free-rail-passes-available-from-today/> [Accessed the 27th of May 2021, 10:18].
- Clapson, C. (2020). Greater restrictions on movement in the offing. <https://www.vrt.be/vrtnws/en/2020/03/26/greater-restrictions-in-movement-in-the-offing/> [Accessed the 27th of May 2021, 10:19].
- De Vos, J. (2020). The effect of COVID-19 and subsequent social distancing on travel behavior. *Transportation Research Interdisciplinary Perspectives*, 5(2020): 1-3.
- Delbosc, A., McDonald, N., Stokes, G., Lucas, K., Circella, G. and Lee, Y. (2019). Millennials in cities: Comparing travel behaviour trends across six case study. *Cities*, 90(2019): 1-14.
- Del Chiappa, G., Bregoli, I., & Fotiadis, A. (2021). The impact of COVID-19 on the Italian accommodation sector and related response actions: A supply-perspective using a mixed method approach. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 13–22.
- Diskin, G. (2020). Domestic tourism in Spain is the source of hope after the coronavirus. <https://www.tourism-review.com/spain-to-focus-on-domestic-tourism-after-corona-news11485> [Accessed the 27th of May 2021, 10:17].
- Fan, Y.V., Jamison, J.D. and Summers, H.L. (2019). Pandemic risk: how large are the expected losses? *Bull World Health Organ*, 96(2): 129-134.
- Faulkner, B. (2001). Towards a framework for tourism disaster management. *Tourism Management*, 22(2): 135-147.
- Field, A. (2003). Designing a questionnaire. [http://www.statisticshell.com/docs/designing\\_questionnaires.pdf](http://www.statisticshell.com/docs/designing_questionnaires.pdf) [Accessed the 27th of May 2021, 10:22].
- Fotiadis, A. (2018). Modelling wedding marketing strategies: An fsQCA Analysis. *Journal of Tourism, Heritage & Services Marketing*, 4(1), 23-26.
- Fotiadis, A., & Williams, R. (2018). “TiCoSa” a 3d matrix conceptual model to investigate visitors’ perceptions in an athletic event. *Journal of Tourism, Heritage & Services Marketing*, 4(2), 32-36.
- Gössling, S., Scott, D. and Hall, C.M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1): 1-20.
- Gretzel, U., Sigala, M. and Christou, E. (2012). Social Media Change the Name of the Game in the Tourism and Hospitality Industries, *The European Financial Review*, 20 October, available at: <http://www.europeanfinancialreview.com/?p=1340>.
- Hall, C.M. (2006). Tourism, disease and global environmental change: The fourth transition? In S. Gössling, S., C.M. Gössling, and C.M. Hall (Eds.), *Tourism & global environmental change: Ecological, social, economic and political interrelationships* (pp. 173-193). London: Routledge.
- Hall, C.M. (2010). Crisis events in tourism: Subjects of crisis in tourism. *Current Issues in Tourism*, 13(5): 401-417.
- Hughey, F.D. and Becken, S. (2016). Value-engaged evaluation of a tourism-specific disaster management plan. *Tourism Management Perspectives*, 19: 69-73.
- Huijbens, E. (2020). ATLAS Review and Webinar: Tourism and the Corona crisis: Some ATLAS reflections. <https://www.youtube.com/watch?v=gZ0OIVvzTBE> [Accessed the 27th of May 2021, 10:21].
- Hystad, W.P. and Keller, C.P. (2008). Towards a destination tourism disaster management framework: Long-term lessons from a forest fire disaster. *Tourism Management*, 29(1): 151-162.
- Jones, K. (2020). How COVID-19 Consumer Spending is Impacting Industries. <https://www.visualcapitalist.com/consumer-spending-impacting-industries/> [Accessed the 27th of May 2021, 10:23].
- Kamer, L. (2020). Estimated monthly revenue loss in the tourism industry in the Brussels-Capital Region and Flanders (Belgium) due to COVID-19 in 2020. <https://www.statista.com/statistics/1107555/revenue-loss-of-tourism-in-brussels-and-flanders-belgium-due-to-coronavirus/> [Accessed the 27th of May 2021, 10:17].
- Kiesnoski, K. (2020). Travel changed after 9/11; Here’s how it will look after the Covid-19 pandemic finally recedes. <https://www.cnbc.com/2020/05/10/heres-how-travel-will-change-after-the-covid-19-pandemic-recedes.html> [Accessed the 27th of May 2021, 10:10].
- Li, S., Blake, A. and Cooper, C. (2010). China’s tourism in a global financial crisis: a computable general equilibrium approach. *Current Issues in Tourism*, 13(5): 435-453.
- Lock, S. (2020). COVID-19: forecast job loss in travel and tourism sector worldwide 2020, by region. <https://www.statista.com/statistics/1104835/coronavirus-travel-tourism-employment-loss/> [Accessed the 27th of May 2021, 10:15].
- Mansfeld, Y. (2006). The role of security information in tourism crisis management: the missing link. In Y. Mansfield, and A. Pizam (Eds.), *Tourism, security & safety from theory to practice* (pp. 271-290). Boston (MA): Elsevier Butterworth-Heinemann.
- Mansfeld, Y. and Pizam, A. (2006). Toward a theory of tourism security. In Y. Mansfeld, and A. Pizam (Eds.), *Tourism,*



- security & safety from theory to practice (pp. 1-28). Boston (MA): Butterworth-Heinemann.
- Miller, G. and Ritchie, B. (2003). A farming crisis or a tourism disaster. An analysis of the Foot and Mouth Disease in the UK. *Current Issues in Tourism*, 6(2): 150-171.
- Milwood, P. A. and Crick, A. P. (2021). Culinary tourism and post-pandemic travel: Ecosystem responses to an external shock. *Journal of Tourism, Heritage & Services Marketing*, 7(1): 23-32.
- Nechoud, L., Ghidouche, F. and Seraphin, H. (2021). The influence of eWOM credibility on visit intention: An integrative moderated mediation model. *Journal of Tourism, Heritage & Services Marketing*, 7(1): 54-63.
- Niewiadomski, P. (2020). COVID-19: from temporary de-globalisation to a re-discovery of tourism? *Tourism Geographies*, 22(3): 651-656.
- Nella, A. and Christou, E. (2021). Market segmentation for wine tourism: Identifying sub-groups of winery visitors. *European Journal of Tourism Research*, 29, 2903.
- Novelli, M. (2020). ATLAS Review and Webinar: Tourism and the Corona crisis: Some ATLAS reflections. <https://www.youtube.com/watch?v=gZ0OIVvzTBE> [Accessed the 27th of May 2021, 10:17].
- OECD (2014). Guidelines for resilience systems analysis. OECD Publishing. <https://www.oecd.org/dac/Resilience%20Systems%20Analysis%20FINAL.pdf> [Accessed the 27th of May 2021, 10:17].
- Okuyama, T. (2018). Analysis of optimal timing of tourism demand recovery policies from natural disaster using the contingent behavior method. *Tourism Management*, 64: 37-54.
- Page, R. (2020). New NT Tourism campaign puts focus on domestic tourism. <https://www.cmo.com.au/article/680969/new-nt-tourism-campaign-puts-focus-domestic-tourism/> [Accessed the 27th of May 2021, 10:18].
- Page, S., Song, H. and Wu, D.C. (2012). Assessing the impacts of the global economic crisis and swine flu on inbound tourism demand in the United Kingdom. *Journal of Travel Research*, 51(2): 142-153.
- Papatheodorou, A. and Pappas, N. (2017). Economic recession, job vulnerability, and tourism decision making: A qualitative comparative analysis. *Journal of Travel Research*, 56(5): 663-677.
- Park, K. and Reisinger, Y. (2010). Differences in the perceived influence of natural disasters and travel risk on international travel. *Tourism Geographies*, 12(1): 1-24.
- Qualtrics. (2020). Qualtrics. Copyright 2020. Provo, Utah, USA. <https://www.qualtrics.com> [Accessed the 27th of May 2021, 10:22].
- Rangongo, T. (2018). The drought seemed to hit Cape Town tourism hard – but a new report says hotels did okay. <https://www.businessinsider.co.za/the-impact-of-the-cape-town-drought-on-tourism-was-rather-tiny-2018-7> Business Insider South Africa. [Accessed the 27th of May 2021, 10:24].
- Rittichainuwat, N.B. and Chakraborty, G. (2009). Perceived travel risks regarding terrorism and disease: The case of Thailand. *Tourism Management*, 30(3): 410-418.
- Ron, O. (2020). Tel Aviv launches new tourism campaign following coronavirus crisis. <https://www.jpost.com/israel-news/tel-aviv-launches-new-domestic-tourism-campaign-following-covid-19-crisis-631424> [Accessed the 27th of May 2021, 10:24].
- Rosselló, J., Becken, S. and Santana-Gallego, M. (2020). The effects of natural disasters on international tourism: A global analysis. *Tourism Management*, 79: 1-10.
- RTL Nieuws (2020). België gooit grens met Nederland dicht voor 'onnodige' reizen. <https://www.rtlnieuws.nl/nieuws/buitenland/artikel/5064246/>
- belgie-gooit-grens-naar-nederland-dicht-voor-onnodige-reizen [Accessed the 27th of May 2021, 10:25].
- Scholtz, M., Saayman, M. and Kruger, M. (2012). The influence of the economic recession on visitors to the Kruger National Park. *Journal of Economic and Financial Sciences*, 5(1): 247-270.
- Senbeto, L.D. and Hon, Y.H. (2020). The impacts of social and economic crises on tourist behaviour and expenditure: an evolutionary approach. *Current Issues in Tourism*, 23(6): 740-755.
- Sequeda, F.M. (2020). Covid-19 disrupts savings, spending and summer holidays in Europe. <https://think.ing.com/articles/covid-19-continues-to-disrupt-savings-spending-and-summer-holidays-in-europe/> [Accessed the 27th of May 2021, 10:25].
- Sigala, M., Christou, E. and Baum, T. (2002). The impact of low cost airlines on business travel. *Proceedings of AIEST Conference* (Vol. 44, pp. 313-334), Salvador-Bahia, Brazil.
- Sigala, M. and Christou, E. (2006). Investigating the impact of e-customer relationship management on hotels' website service quality. *ECIS 2006 Proceedings*, 118: 1-13.
- Sinclair-Maragh, G. and Simpson, S. B. (2021). Heritage tourism and ethnic identity: A deductive thematic analysis of Jamaican Maroons. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 64-75.
- SPSS (2020). Statistical package for the social sciences (Version 25). IBM.
- STATBEL (2020). Bevolking naar woonplaats, nationaliteit (Belg/niet-Belg), burgerlijke staat, leeftijd en geslacht. <https://bestat.statbel.fgov.be/bestat/crosstable.xhtml?view=161080d2-d411-4e40-9a0f-a27db5e2b6e1> [Accessed the 27th of May 2021, 10:26].
- The Nation Thailand (2020). 'We Love Thailand' campaign to stimulate domestic tourism. <https://www.nationthailand.com/news/30387237> [Accessed the 27th of May 2021, 10:27].
- The Research Alliance (2020). Together beyond Covid19. Retrieved from Istituto Piepoli. <https://www.istitutopiepoli.it/wp-content/uploads/2020/05/Together-Beyond-Covid19-1.pdf> [Accessed the 27th of May 2021, 10:27].
- Toerisme Vlaanderen (2020a). Wat is en doet 'Vlaanderen Vakantieland 2.0'? <https://www.toerismevlaanderen.be/vlaanderen-vakantieland-20> [Accessed the 27th of May 2021, 10:28].
- Toerisme Vlaanderen (2020b). Monitoring trends toerisme en coronavirus. <https://www.toerismevlaanderen.be/corona/monitoringcorona> [Accessed the 27th of May 2021, 10:28].
- Toerisme Vlaanderen (2019). Toerisme in kerncijfers: editie 2019. [https://www.toerismevlaanderen.be/sites/toerismevlaanderen.be/files/assets/documents\\_KENNIS/cijfers/Kerncijfers/2019-Toerisme-kerncijfers-2018\\_0.pdf](https://www.toerismevlaanderen.be/sites/toerismevlaanderen.be/files/assets/documents_KENNIS/cijfers/Kerncijfers/2019-Toerisme-kerncijfers-2018_0.pdf) [Accessed the 27th of May 2021, 10:28].
- Tsao, C. and Ni, C. (2016). Vulnerability, resilience and the adaptive cycle in a crisis-prone tourism community. *Tourism Geographies*, 18(1): 80-105.
- Tustin, D.H., Ligthelm, A.A., Martins, J.H. and Van Wyk, H.D. (2005). *Marketing research in practice*. Pretoria: UNISA Press.
- UNWTO (2020). UNWTO World Tourism Barometer May 2020 - Special focus on the Impact of COVID-19. <https://www.e-unwto.org/doi/book/10.18111/9789284421930> [Accessed the 27th of May 2021, 10:29].
- Van Wee, B. (2009). Self-selection: a key to a better understanding of location choices, travel behaviour and transport externalities?. *Transport reviews*, 29(3): 279-292.
- Visit Britain (2020). Helping the tourism industry recover from COVID-19. <https://www.visitbritain.org/helping-tourism-industry-recover-covid-19> [Accessed the 27th of May 2021, 10:29].

- Visit Flanders (2013). Tourism in figures 2013: the Belgian market in Flanders. [https://www.toerismevlaanderen.be/sites/toerismevlaanderen.be/files/assets/documents\\_KENNIS/cijfers/Marktrapporten/BELGIAN\\_market\\_13.pdf](https://www.toerismevlaanderen.be/sites/toerismevlaanderen.be/files/assets/documents_KENNIS/cijfers/Marktrapporten/BELGIAN_market_13.pdf) [Accessed the 27th of May 2021, 10:30].
- Vlaanderen (2020). Discover Flanders: At the heart of Europe. <https://www.visitflanders.com/en/destinations/> [Accessed the 27th of May 2021, 10:31].
- Statistiek Vlaanderen. (2019). Bevolking: omvang en groei. <https://www.statistiekvlaanderen.be/nl/bevolking-omvang-en-groei> [Accessed the 27th of May 2021, 10:31].
- Wesolowski, A., Stresman, G., Eagle, N., Stevenson, J., Owaga, C., Marube, E., Bousema, T., Drakeley, C., Cox, J. and Buckee, O. Quantifying travel behavior for infectious disease research: a comparison of data from surveys and mobile phones. *Nature*, 4(1): 1-7.
- Wilder-Smith, A. (2006). Tourism and SARS. In J. Wilks, D. Pendergast, and P. Leggat (Eds.), *Tourism in turbulent times: Towards safe experiences for visitors* (pp. 53-61). Oxford: Elsevier.
- Wilder-Smith, A. and Freedman, D.O. (2020). Isolation, quarantine, social distancing and community containment: pivotal role for old-style public health measures in the novel coronavirus (2019-nCoV) outbreak. *Journal of Travel Medicine*, 27(2): 1-3.
- Whyte, L.J. (2017). Understanding the relationship between push and pull motivational factors in cruise tourism: A canonical correlation analysis. *International Journal of Tourism Research*, 19(5): 557-568.
- Zhang, N., Jia, W., Lei, H., Wang, P., Zhao, P., Guo, Y., Dung, C-H., Bu, Z., Xue, P., Xie, J., Zhan, Y., Chen, R. and Li, Y. (2020). Effect of human behaviour changes during the COVID-19 pandemic on influenza spread in Hong Kong. *Clinical Infectious Diseases*. [in publication].

*Appendix A: List of Facebook groups where the questionnaire link was distributed*

The table below contains the list of Facebook groups that were joined during the lockdown where the questionnaire link was posted. These groups represent a good spread of the Flemish Region in Belgium.

Nr	Facebook groups joined	Area	Number of group members
1	Ge zijt van Zwijndrecht of Burcht als ge zonder censuur ...	Zwijndrecht & Burcht	4 100
2	Ge zijt van Mechelen als ...	Mechelen	20 000
3	Ge zijt van Antwerpen als ge...	Antwerpen	640 000
4	Ge zijt van Brugge als	Brugge	14 000
5	Ge zijt van Gent als ge....	Gent	39 400
6	Ge zijt van Humbeek als	Humbeek	2 800
7	Ge zijt van Grimbergen als	Grimbergen	10 953
8	Ge zijt van Grimbergen als (zonder censuur)	Grimbergen	1 900
9	Ge zij van Geel als,	Geel	7 200
10	Ge zijt van Leuven als ge...	Leuven	16 000
		Total:	756 353

SUBMITTED: FEB 2021

REVISION SUBMITTED: MAY 2021

ACCEPTED: JUN. 2021

REFEREED ANONYMOUSLY

PUBLISHED ONLINE: 18 OCT 2021



# Marketing performance of service firms: Recognizing market sensing capability and customer interaction orientation

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## Abstract:

**Purpose:** This study examines the effect of market sensing and interaction orientation capabilities on the marketing performance of service based firms in Ghana. The study particularly explored the moderation effect of interaction orientation capability on the relationship between market sensing and firm performance of the service firms.

**Methods:** This study adopted the survey approach focusing on a convenient sample of 200 employees of service firms. The hierarchical multiple regression analysis was used to establish the relationship between the variables of interest.

**Results:** The study revealed that market sensing capability and interaction orientation significantly account for variations in the marketing performance of the service businesses. Furthermore, the findings showed that the interaction of market sensing and interaction orientation capabilities is vital for extracting a higher marketing.

**Implications:** The research target of service firms limits the generalizability of the findings since the participants were not proportionally participated. In addition to insights on how marketing sensing and interaction orientation should fit the realization of marketing performance, the research offers other ideas to enhance measurement of marketing performance based on customer profits and customer relations.

**Keywords:** Marketing performance, service firms, market sensing, interaction orientation

**JEL Classification:** M03, L84, Z33

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## 1 INTRODUCTION

Management researchers (see; Katz, 1986; Hindley, 1988; Enderwick, 1991; Yavas et al., 1997) have long recognized that the service sector in many developing countries have been undergoing changes in order to keep up with the environmental competitiveness and world trends. It therefore

comes as no surprise that within the last few years, the banking, telecommunication, media, hospitality, transport and insurance sectors for example have seen some tremendous developments in Ghana, and that a lot of new players have entered into the Ghanaian market (Mahmoud et al., 2018; KanKam-Kwarteng et al., 2018; Anning-Dorson, 2018). The consequence of these reforms in the service sector, coupled with political and economic stability,



consistency in implementing political and economic policies, have led to the emergence of diverse types of service institutions in Ghana over the last decade (Owusu-Frimpong, 2008; Narteh et al., 2011). Due to enormous competitive pressure in the service industry, coupled with dynamic customer expectations, service firms now have to be receptive to what the customers want and need in order to be competitive (Cao et al., 2016), or even survive in some cases. The development of a strong interaction orientation with customers have been acknowledged to be relevant for the survival of firms in competitive markets (Srinivasan et al., 2002; Coviello et al., 2002). The effective and efficient management of interactions and the interfaces at which these interactions transpire are progressively being recognized as sources of competitive advantage (Rayport and Jaworski, 2005).

Meanwhile, developing a strong interaction orientation may also require a strong market sensing capability. The marketing literature views market sensing as the mode firms study about their environment to understand the environmental changes (see, Everett, 2014). Thus, the enterprise ability to envisage environmental change and respond readily is a substantial determination of success (Osisioma et al., 2016). Lindblom et al. (2008) show that in spite of the numerous studies on marketing capabilities in the literature, researchers exploring market sensing capabilities have been wrought with several challenges and methodological issues. The implication is that the impact of market sensing capabilities is still a grey area in the marketing literature and much research is required to understand its dynamics. More so; focusing on interaction orientation, Ramani and Kumar, (2008) have also observed some gaps concerning how interaction orientation has been conceptualised and investigated in the literature. Besides, while the direct link of market sensing and interaction orientation to marketing performance has been established, literature has not explored how the interaction effect of market sensing capabilities and interaction orientation on marketing performance of service firms; although theoretically the two concepts can complement each other within the context of capabilities literature. Until now, no known study has attempted to investigate this phenomenon. Bearing in mind the above mention, Ngo and O'Cass, (2012) argues that while various contexts of discussions in the literature focusing on resources and capabilities in the service sector, the interaction of firm capabilities couched within the complementarity perspective has not been empirically examined extensively, moreover, they contend that the process through which particular resources contribute to firm performance remain largely "a black box". It is possible that the interaction of market sensing capabilities and interaction orientation can contribute to the development of higher order capabilities and sustained competitive advantages (Krush et al., 2013); as identified by the resource based view of the firm. However, without adequate empirical support, such a conjecture will remain a conceptual issue. This work attempts to address this gap in the ensuing literature and hypothesizes that firms in the service sector can build strong competitive muscle and extract higher order marketing performance outlays motivated on the strong coalition between their market sensing capabilities and customer interaction orientation.

## 2 BACKGROUND LITERATURE

### 2.1. Market sensing capability

Capabilities have generally been considered as composite bundles of abilities and integrative learning, exercised through a firm processes that guarantee superior synchronisation of functional operations (Vanpoucke, et al., 2014; Martin, et al., 2017).

One capability is detailed to be essential in managing successful enterprises: the market sensing capability, which is significantly the ability of the enterprise to be aware of change in the industry and to perceive accurately responses to its operations and actions (Feng, et al., 2017). According to current literature, market-sensing capabilities denotes an enterprises' ability to use market intelligence that can be obtained through formal and informal mechanisms from various personal and public sources (Ardayan, 2016; Bharadwaj, and Dong, 2014; Osakwe, et al., 2016; Lin, and Wang, 2015). Essentially, market sensing capabilities are critical in developing market focus and thus, ultimately, business performance (Murray, et al., 2016). Thus, the management needs to understand customers in all their diversity. Sugiyarti and Ardayan (2017) consider this kind of understanding as 'market sensing'. Sensing the environment of the business is a skill that needs to be acquired in all firms, regardless of industry sector. Sensing capability contains the logic that in unpredictable, volatile and complex market environment, the capacity to sense market conditions and opportunities before they become reality (Mu, 2015; Celuch, and Murphy, 2010). According to Day, (2002) market sensing is continuous ability to learn through the collection and circulation of information about competitors, customers and relationships in the market (see, Fang et al., 2014).

Heusinkveld et al. (2009) has considered such market sensing as the ability of an enterprise to acquire and circulate information, and to use market knowledge for an enterprise change as requested. Therefore market-sensing capability is fundamentally the aptitude of an enterprise organization to be conscious of changes in the market and to predict precisely answers to its marketing strategies (see, Lindblom et al., 2008). Based on Day (2002), it can be presumed that enterprises that have mastered the market sensing operations increase competitive advantage and higher business performance. Essentially, an organization's ability to learn about its market conditions and use this information accordingly to direct its actions is the core stimulant of the enterprise performance (Vorhies and Morgan, 2005).

According to Day (2002), market sensing can be categorized into three levels: (1) sensing, (2) sensemaking, and (3) response. Sensing has been described as the gathering of information on customers, competitors and channel members. According Wilden, and Gudergan (2015) the element of sensing involves scanning, searching and exploration in dynamic markets, and defined as the acquisition and distribution of information about the consumers, competitors, and formation of relationships in the market. Moreover, Hou (2008) describes sensing as an enterprises' ability to sense the desire of its consumers and the dynamics of market better than its rival. Sense-making involves the interpretation of acquired information in relation to past experience and knowledge. It involves the mechanism

by which an individual assigns meanings to events (Ivanova and Torkkeli, 2013).

According to Colville and Pye, (2010) sense-making is concerned with the way people make bets on 'what is going on' and what to do next by way of (inter)action. Sense-making is also about giving meaning to events and situations (Sharifi and Zhang, 2009; Bonarou, 2021). Responses refer to utilizations of the acquired and interpreted information in making decisions. Essentially, through response, the information and knowledge is converted into marketing action. Day (2002) opines that the processes for market-sensing are more logical, thoughtful, and anticipatory in market-oriented enterprises than they are in rival enterprises, in which these processes becomes ad hoc, diffuse, constrained and reactive.

#### Interaction Orientation

Ramani and Kumar (2008) have described interaction orientations as the ability of an enterprise to interact with its customers and to take advantage of information acquired from them through continuums interactions to obtain profitable customer relationship. Interaction orientations have become a significant source for enterprises to achieve competitive advantage and superior business performance (see; Yuan and Liu, 2013). Kotler et al. (2014) argues that the marketing activities of businesses should be constructively conducted within the premise of efficiency, effectiveness and responsible marketing.

This requires that appropriate marketing systems and frameworks be put in place to ensure that the firm maximizes returns from all its marketing efforts. Interaction orientation is currently the mechanism used by firms to optimise the returns of their marketing activities (Yuan and Liu, 2013). According to Ramani and Kumar (2008) interaction orientation involves four components including customer concept, interaction response capacity, customer value management and customer empowerment (Daskalaki et al., 2020; Prahalad and Ramaswamy, 2004).

Customer concept has been described in literature as the assumptions that prescribes the base of estimations of marketing actions and reaction to be the customers (Öberg, 2011; Koomsap, 2013).

According to the authors, interaction responses capacity represent the extent to which the enterprise offers continuous goods, services, (Chen et al., 2012; Liang and Zhang, 2012) and relationship experiences customers by integrating feedback from previous behavioural responses of customers. Significantly, it reflects the ability of an enterprise's systems to respond to dissimilar consumers differently and also to each specific customer differently at different points in time by sharing information from several sources and points in time (Kumar et al., 2004).

Customer empowerment echoes the rate at which an enterprise provides its consumers the platform to connect with the firm and actively shape the nature of transactions and link and collaborate with others by providing information; praises; criticisms; suggestions; and ideas about its goods, services, and policies (Prahalad and Ramaswamy, 2004; Gretzel et al, 2012). Moreover, customer value management demonstrates the level at which the firm can define and measure individual consumer's value and implement it as a guiding metric for decisions on allocating resources for marketing operations. (Mulhern, 1999; Reinartz, et al., 2004).

## 2.2. Marketing performance

Marketing performance is the assessment of the relationship between marketing activities and business performance (Clark and Ambler, 2001; Donkor et al., 2017). Marketing Performance is to demonstrate the value of the marketing operations, which focuses on marketing not only as products, pricing, or customer relationships (Rust et al., 2004) but also as the marketing operations themselves, which includes marketing communication, promotion, and other operations that represent the greater part of marketing budget. Literature recommends that marketing performance can be categorized into measurement of marketing productivity (Morgan, 2002; Rust et al., 2004), identification of metrics (Barwise and Farley, 2003; Winer, 2000), and brand equity measurement (e.g., Ailawadi et al., 2002; Aaker and Jacobson, 2001). Rust et al. (2004) expand the work of Srivastava et al. (1998) to describe a marketing productivity that extends from marketing operations to shareholder value. Marketing operations affect intermediate results (customer thoughts, feelings, knowledge, and, ultimately, behavior), which turn to impact performance of the enterprise (Kamboj et al., 2015).

The marketing performance research evaluates how marketers measure the relationships along the range of marketing productivity; the metrics enterprises use or within this chain, especially financial, nonfinancial, and market-based assets; and contextual factors, especially the enterprise's market orientation (Mu, 2017; Clark and Ambler, 2001). Marketing performance has therefore been conceptualized in this study based on Srivastava et al. (1998) assessment of the customer. Ramani and Kumar (2008) define marketing performance based on customer profit performance and customer relational performance. A successful business strategy is probably to be one that empowers specific consumers by permitting them to develop experiences with the enterprise on their wishes (Prahalad and Ramaswamy, 2004; Newell, 2003). Enterprises that adopt customer value management practices also understand that emphasizing on the long-term value of consumers, and not simply maximizing either collection or retention, leads to higher efficiencies (Thomas et al., 2004; Kankam-Kwarteng et al., 2019). Using modeling techniques, enterprises that identify profitable consumers also identify variables that produce customer profitability (Reinartz and Kumar, 2003; Chatzigeorgiou and Christou, 2020a, 2020b).

The conceptual framework developed for this study is explained in this section. The framework specifies the relationship between the variables of interest leading to the rationalization of the research hypotheses. An illustration of the study's conceptual framework is then depicted by Figure one.

## 2.3. The relationship between market sensing capabilities and marketing performance

Literature suggests that the ability of an organisation to gain competitive advantage over its rivals does not only depend on its strategic position, but the ability to continually create and develop unique capabilities (Peteraf and Barney, 2003; Zollo and Winter, 2002). For a service oriented firm, it is required that businesses form strong marketing capabilities in the area of market sensing in order to remain competitive and

achieve higher performance thresholds in a competitive marketing (Harmsen and Jensen, 2004; Noble et al., 2002). Market sensing focus on information about customers, competitors, events and changes in the business environment to gain market intelligence through sense and sense-making to conduct strategic course of action (Rasmussen et al., 2011; Foley and Fahy, 2009). Lin and Wang, (2015) asserted that sensing capabilities in firms' business ecosystem form the basis for building their dynamic capabilities, including sensing development of technology, customer demand, and market segmentation which are vital ingredient for superior organisational performance and competitive advantages. According to Day (2002) and Cepeda and Vera, (2007), enterprises that apply market-sensing activities obtain competitive advantage and higher business performance. Thus, a firm's ability to acquire information about its business environment and implement this information accordingly to guide its policies is the core facilitator of enterprise performance (Vorhies and Morgan, 2005; Sirmon et al., 2007). Lindblom et al. (2008) conclude that market sensing capability of enterprises correlates positively but weakly with the enterprise's growth, and that it does not impact statistically and significantly on profitability; therefore, they suggested that sensing capability have a moderating rather than a direct effect on performance of enterprises. Morgan et al. (2009) found that market sensing capabilities have no significant direct effect on firm financial performance, but synergistically affect brand management capability in affecting financial performance. Their findings support the assertion that superior market knowledge perhaps resulting from greater market sensing capabilities offers higher value in evaluating enterprise's performance by indirectly impacting value selection, creation, and delivery processes (Hult et al., 2005; Morgan et al., 2003). The discussion explains market sensing capability's indirect impact on enterprise performance. The nature of the service industry in Ghana and the associated competitive intensity in the sector requires a clearer picture as to the extent to which market sensing can contribute to the strategic option of the firm. Based on the discussion the on the direction of market sensing in determining marketing performance of the service sector, the study hypothesis that:

*H1: Market sensing capability has a positive and significant effect on the firm performance of service based firms.*

#### **2.4. Interaction orientation and marketing performance**

According to Ramani and Kumar (2008) a superior interaction orientation is a vital capability that enables firms to offer successive products, services, and develop relationship experiences. It also affords the firm the opportunity to build a consistent customer empowerment practices which are likely to result in greater customer satisfaction and can consequently lead to higher performance due to associated word of mouth benefits and strong reputational returns (Newell, 2003; Prahalad and Ramaswamy, 2004). With strong interaction orientation, the service based firm can empower its customers who will then reciprocate by developing a greater motive of belonging to the enterprise and are expected to protect the welfare of the enterprise. Significantly, conscious abilities by an enterprise to generate and augment an interaction orientation results in

superior customer ownership of the enterprise. Word of mouth demonstrates the spread of information about goods, services, stops, organizations, sales, or customer managers from one client to another (Brown et al., 2005). Customers who make a personal reference must not only believe that an enterprise provides greater economic value but also feel good about their relationship with the organization (Reichheld, 2006). An interaction orientation leads to favourable word of mouth by encouraging and enabling consumers to refer the firm to potential customers to the firm (Gremier et al., 2001; Kumar et al., 2010). Further, it has been acknowledged that strong interaction orientation enables the estimations of transaction data collected from various interfaces and, subsequently, the use of this information to relate individual consumers' revenues to marketing investments. Measuring customer-oriented profits enables marketing executives' accountability while facilitating an enterprises' agility to generate efficient and effective marketing responses to consumer signals. Enterprises that invest in procedures that improve their interaction orientation are in a position to distinguish between the characteristics of profitable consumers and those of unprofitable consumers and to use this information to identify potentially profitable consumers; through customer value management and interaction response capability (e.g., Reinartz and Kumar 2003). Firms with strong interaction orientation also recognise that concentrating on the long-term value of customers, and not merely exploiting either acquisition or retention, results in superior efficiencies (Thomas et al., 2004). Studies have reported that the customer lifetime value metric enables enterprises to plan a suitable marketing and communication channel mixes and facilitate time- and product-based cross-selling and up-selling references for individual consumers (Kumar et al., 2004; Venkatesan and Kumar, 2004). It is based on this premise, that this study hypothesizes that:

*H2: Interaction Orientation has a positive and significant effect on the marketing performance of service based firms*

#### **2.5. Moderation hypothesis**

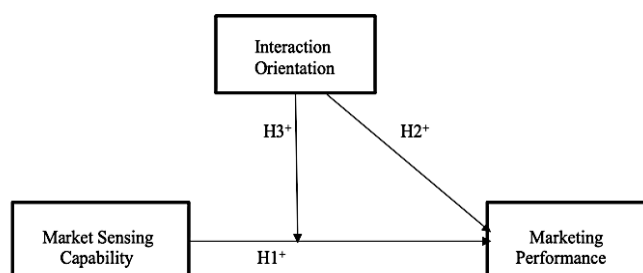
Research on marketing capabilities (Rapp et al., 2010) highlights the significance of the interaction impact between various organizational resources on firm-specific operational processes (Krush et al., 2013). Moreover, Kozlenkova et al. (2014) explain that many studies observe synergistic influences among dissimilar resources and abilities for generating and/or capturing customer value. It can be expected that firms with strong interaction orientation have the capacity to develop strong market sensing capabilities (Del Chiappa et al., 2021; Fotiadis, 2018; Fotiadis & Williams, 2018). The capacity to develop strong customer value management and customer empowerment increases firms capacity to learn more about the market; particularly its customers; which becomes critical in developing market focus strategies and thus, ultimately, marketing performance (Day, 1994). Zahra (2008) points that information intelligence comprises procedures to search and circulate information within the firm enables recognition of industry opportunities. According to Morgan et al. (2009) literature suggests that firms require complementary competences to deploy available resources in a manner that is suitable to the



industry conditions to drive organizational capabilities. Marketing researchers stress the significance of continuous interaction with customers (Teece, 2007). This orientation connects a sequence of information processing operations, such as, generating, allocating and interpreting environmental trends, customers' need and responses (Heusinkveld et al., 2009). Thus interaction orientation covers companies' routine and operations by gathering and circulating information to recognize industry opportunities through emphasizes on internal customers' needs, and the capability is likely to reinforce the organization's market sensing capabilities (Zablah et al., 2004; Christou, 2010; Nazdrol et al., 2011; Krakover and Corsale, 2021). On the other hand market sensing activities facilitate organizations with deeper insights on customer needs and competitor information, enabling companies to discover undeveloped industry niches and potential differentiation opportunities (Cao et al., 2012). According to Demirel and Kesidou (2019) there is a clear link between market sensing, learning theory and organizational learning which is divided into acquiring information, disseminating the information, and shared interpretation. Therefore, market sensing capability is considered not a remote activity, but relevant in each stage of the interaction orientation process (Heusinkveld et al., 2009). Based on the discussions above the study hypothesize that:

*H3: interaction orientation has a positive and significant effect on the relationship between market sensing and marketing performance of service firms*

Figure 1: Conceptual framework



### 3 METHODOLOGY

#### 3.1. Sample size and sampling techniques

Due to the fact that the target population is too large in size, a small but carefully selected services marketing professionals were selected to participate in the study. The sample reflects the characteristics of the population from which it is drawn. The research employed the convenient sampling technique to carry out this study. Convenient sampling is concerned with reaching respondents easily accessible for selection of samples and the process is continued till the required sample size is achieved. Convenience sampling method was used because of the scattered nature of the target population and the fact the researchers did not have a list of service marketing professionals to conduct random sampling on them. Marketing professionals from the service sector were targeted to participate in the study. Considering the nature of the service sector and the firms operating in the industry,

industries were not given specific quota of participants. 206 marketing professionals from different service firms participated in the study (see; Table I). The researchers distributed the questionnaires using self-administered approach. The respondents were entreated to complete the survey instruments within a two week period after which the researchers collected all the completed questionnaires for interpretation and analysis of the data. 206 questionnaires that were fully completed and returned, were checked and verified to ensure consistency and exhaustiveness in the information expected. 6 questionnaires were removed because of inconsistencies in the responses. Descriptive statistics such as mean, standard deviation, frequency and percentages were used to describe the basic characteristics of the data gathered. Inferential analysis such as correlation and regression analysis were employed to determine the nexus between the dependent and explanatory variables as well as the control variables. To communicate the research findings, data obtained from the questionnaires were analysed with the help of SPSS.

Table I: Service sector and participants

Service sector	Number participants (%)
Hotels	19(9.5)
Restaurants	17(8.5)
Commercial Banks	22(11)
Insurance	9(4.5)
Rural banks	13(6.5)
Financial houses	14(7)
Airlines	5(2.5)
Education	21(10.5)
Internet services providers	12(6)
Mobile telecommunication	11(5.5)
Automobile services	19(9.5)
Security services	14(7)
Media houses	17(8.5)
Courier services	7(3.5)
<b>Total</b>	<b>200</b>

#### 3.2. Measures and scale development

**Market sensing:** the measures for market sensing is a conceptualization based on the firms' capability to gather and use the information required to commercialize patented innovations from markets (Lin et al., 2015; Foley and Fahy, 2009). Four items used to measure market sensing is based on previous studies by Cohen and Levinthal (1990); Day (2002); Teece (2007). The items include; (1) acquire and use market information, (2) anticipate rivals' actions, (3) predict consumer demand and (4) establish database to serve customers. A 7-point Likert scale ('1' strongly disagree to '7' strongly agree) was used, and the respondents were asked to indicate their firms' interaction orientation in relation to marketing performance.

**Interaction orientation:** interaction orientation was measured using four components; customer concept (3-items) (Blankson, & Kalafatis, 2004); interaction responses capacity (4-items) Prahalad and Ramaswamy 2004; customer empowerment (3-items) customer value management (3-items) (Reinartz et al., 2004). The researchers used composite items of the four dimensions to measure the overall interaction orientation of the service firms. A 7-point Likert scale ('1' strongly disagree to '7' strongly agree) was used,

and the respondents were asked to indicate their firms' interaction orientation in relation to marketing performance. Marketing performance: The measures used in this study were based on Ramani and Kumar (2008) categorization of marketing performance as customer relational performance; (1) customer satisfaction, (2) customer ownership (Newell, 2003), and (3) positive word of mouth (Brown et al., 2005) and customer profit performance; (1) identification of profitable customers, (2) acquisition and retention of profitable customers, and (3) conversion of unprofitable customers to profitable ones. The six items were finally used after series of further literature support from (Jayachandran et al., 2005; Reinartz and Kumar 2003, Sheth et al., 2000) and discussions with service marketing experts. A 7-point Likert scale ('1' strongly disagree to '7' strongly agree) was used, and the respondents were asked to indicate their firms' marketing performance relative to interaction orientation and market sensing.

Control variable: the study controlled for firm specific variables; firm size, firm age and R&D

The marketing professionals were asked to indicate how the firm specific variables are prevail in their respective organizations. Firm size was measured according to the number of employees (Kartikasari, and Merianti, 2016; Dooley et al., 2016) Firm age was measured on the period the service firm has operated (Kankam-Kwarteng et al., 2020; Coad et al., 2018; Rossi, 2016; Akben-Selcuk, 2016; Mugobi and Mlozi, 2021). R&D was based on a dichotomous question 'Yes' or 'No' (Lome et al., 2016).

### 3.3. Reliability and validity test of instruments

The validity and reliability of the research instrument are reported subsequently on Table II. The confirmatory factor analysis was employed to test whether the constructs are robust using the maximum likelihood estimation process. As reported on Table I, the reliability of the measurement scales was assured given the values for composite reliability and Cronbach's alpha coefficients. It is observed that all the Cronbach's alpha values were high and above 0.7 which is the statistically recommended value. This imposes that responses obtained for each construct were internally consistent and provide a reliable measure.

Table II: Reliability and validity tests

Construct	Items	Loadings	AVE	CR	CA	MSV
Interaction Orientation	CIO1 Our firm believe that the customer should always be provided with their needs to generate customer satisfaction	0.951	.748	.922	.921	.472
	CIO2 Our firm has strong interaction responses capacity	0.808				
	CIO3 Our firm have policies towards customer empowerment	0.872				
	CIO4 Our customer value management policy well structured	0.822				
Market Sensing	MSC1 Our firm acquire and use market information	0.800	.740	.919	.917	.516
	MSC2 Our firm always anticipate rivals actions and reaction.	0.863				
	MSC3 Our operations involve predicting consumers' demand.	0.826				
	MSC4 Our firm has well establish database to serve customers.	0.944				
Marketing Performance	MP1 Our firm is able to provide customer satisfaction	0.866	.618	.906	.905	.398
	MP2 Our customers show interest in the wellbeing and survival of the firm	0.716				
	MP3 Customers who consume our services are usually base on positive word of mouth	0.740				
	MP4 Our firm is able to identify profitable customers	0.921				
	MP5 Our operations involves acquisition and retention of profitable customers	0.716				
	MP6 Our strategies aim at conversion of unprofitable customers to profitable ones	0.734				

Note: CA = Cronbach's Alpha, CR = Composite Reliability; AVE = Average Variance Extracted; M.S.V = Maximum Shared Variance

To cross examine the reliability of the scales, the composite reliability values are also expected to be high and above 0.7. As observed on Table I, there is no reason to doubt the reliability of the measurement scales; as all the composite reliability coefficients were statistically higher than the recommended value of 0.7. To examine the validity of the scales, the convergent validity was used. Convergent validity was examined by making sure that first, only the items that loaded significantly on their respective constructs were retained. Again, only the items with factor loadings in excess of 0.7 were retained. Secondly, the researchers endeavoured that all items that cross loaded with other items were excluded. These steps were taken to ensure that convergent validity was achieved with satisfactory.

### 3.4. Demographic attributes of the sample respondents

The demographic characteristics of the respondents and their business unit is reported in this section. Table III provides the results of the demographic analysis of the respondents and the businesses. It can be shown on Table III that the majority of the respondents were males (54%). The majority of the respondents were also observed to be either non-managers of the company (52%) or managers (39%). Again, it was revealed that most of the respondents are between the ages of 20-39 years (176 representing 89%). The attributes of the sampled firms are also reported on Table III. It was identified that the majority of the service based firms are relatively matured firms. The majority of the firms have operated for more than 5 years (81%). It is interesting to note that 43% of the sampled firms had a thriving research and development unit. This is suggestive of the commitment of the majority of the sampled companies to pursue innovative practices; as this holds the potential to increase the level of competitiveness in the industry. Notwithstanding, the number of the firms which do not have a R&D department is also considered significant (57%).

Table III: Respondent profiles

	Frequency	Percent (%)
Gender	Male	107
	Female	93
	<b>Total</b>	<b>200</b>
Position	Manager	78
	Non-Manager	104
	Executive	18
	<b>Total</b>	<b>200</b>
Age	20-29	102
	30-39	76
	40-49	21
	50 and above	2
	<b>Total</b>	<b>200</b>
Firm size	Less than 30 employees	37
	31-60 employees	96
	60+ employees	67
	<b>Total</b>	<b>200</b>
Firm age	1 to 4 years	39
	5 to 9 years	102
	10 years and above	59
	<b>Total</b>	<b>200</b>
R & D	Yes	96
	No	104
	<b>Total</b>	<b>200</b>

### 3.5. Descriptive statistics and correlation analysis results

Table IV gives a report of the descriptive statistics and the correlation analysis results. According to the descriptive statistics, it is noted that the pursuit of the level of market sensing capabilities among the sampled firms is high (mean

= 6.000, SD = 0.331). The results also point to the fact that the average service based firm has a strong interaction orientation capability (mean = 6.250, SD = 0.353). The correlation analysis are also reported on Table IV. Generally there is a positive relationship between market sensing capability and the marketing performance of service firm ( $r = 0.472$ ;  $p < 1\%$ ). The implication is that an increase in market sensing capability corresponds with an increase in business performance. It is also observed that there is a positive and statistically significant relationship between interaction orientation and business performance ( $r = 0.398$ ;  $p < 1\%$ ).

Table IV Correlation analysis

Variables	Market Sensing	Interaction Orientation	Marketing Performance
Market Sensing	1.00		
Interaction Orientation	.516	1.00	
Marketing Performance	.472	.398	1.00
Mean	6.000	6.250	6.143
Standard Deviation	0.331	0.353	0.300
Minimum	4.500	3.270	5.290
Maximum	6.830	7.000	6.710

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

\*. Correlation is significant at the 0.05 level (2-tailed).

## 4 RESULTS AND HYPOTHESIS TESTING

The Hierarchical Multiple Regression (HMR) technique was used to explore the causal relationship between the study variables while testing the study hypotheses. Market Sensing Capability (MSC), Interaction Orientation (IO) and Marketing Performance (MP) and control variables firm age, Firm size and research and development (R&D). The results of the model 1 ( $R^2 = .14$ ,  $\Delta R^2 = .14$ ) show a statistically significant positive relationship between R&D and marketing performance ( $\beta = .121$ ,  $t = 2.489$ ;  $p < 5\%$ ). The results of firm age ( $\beta = -.314$ ,  $t = 1.215$ ,  $p < 5\%$ ), firm size ( $\beta = .021$ ,  $t = 1.054$ ,  $p < 5\%$ ), however did not prove to be statistically significant. In model 2 ( $R^2 = .216$ ,  $\Delta R^2 = .102$ ), market sensing has a strong positive effect on the marketing performance of service-based firms ( $MSC \rightarrow MP$ ,  $\beta = .547$ ,  $t = 8.229$ ;  $p < 5\%$ ).

Table V: Hierarchical multiple regression analysis

Variables	Model 1 Beta (t-value)	Model 2 Beta (t-value)	Model 3 Beta (t-value)	Model 4 Beta (t-value)	VIF
<b>Control paths</b>					
-Constant	6.178 (4.055)***	6.267 (4.337)***	5.249 (4.390)***	5.218 (5.389)***	
-Firm age	-.314 (1.215)	-.324 (1.415)	-.319 (1.236)	-.416 (1.564)	1.332
-Firm Size	.021 (1.054)	.023 (1.034)	-.023 (.914)	-.023 (.893)	1.141
-R&D	.121 (2.489)**	.328 (2.460)**	.124 (2.459)**	.021 (2.471)**	1.542
<b>Hypothesised</b>					
-Market Sensing (MS)		.547 (8.229)**	.410 (6.909)*	.212 (1.898)*	1.574
-Interaction Orientation (IO)			.311 (4.150)***	.262 (3.104)***	1.211
-MS x IO				.478 (7.230)**	1.638
<b>Diagnostics</b>					
R-square	.114	.216	.263	.279	
Δ R-square	.114	.102	.047	.016	
F-statistics (df)	1.767 (199)	1.028 (199)	3.630 (199)***	3.219 (199)***	

Note: t-values are in the parenthesis; \*, \*\*, \*\*\* denotes  $p < .10$ ,  $p < .05$ ,  $p < .01$  respectively

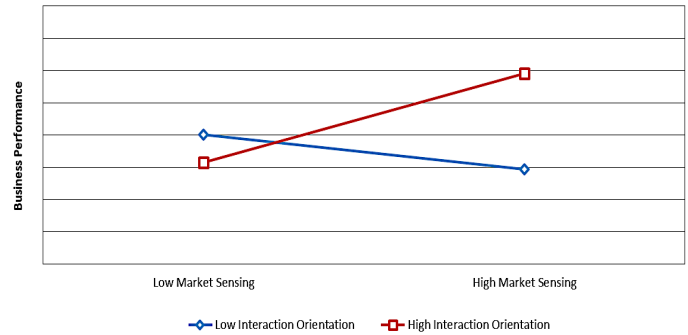
Firm age ( $\beta = -.324$ ,  $t = 1.415$ ), firm size ( $\beta = .023$ ,  $t = 1.034$ ) and R&D ( $\beta = .328$ ,  $t = 2.460$ ). R&D again shown to be positive and significant. Thus hypothesis 1 which states that market sensing capability has a positive and significant effect on the marketing performance of service firms was supported. Model 3 ( $R^2 = .263$ ) captures the incremental effect of interaction orientation on marketing performance (see; Table V). Hypothesis 2 states that there is significant positive of interaction orientation on marketing performance. Controlling for firm age ( $\beta = -.319$ ,  $t = 1.236$ ), firm size

( $\beta = -.023$ ,  $t = .9134$ ) and R&D ( $\beta = .124$ ,  $t = 2.459$ ). It is revealed that there is a significant positive relationship between interaction orientation and marketing performance ( $IO \rightarrow MP$ ,  $\beta = .311$ ,  $t = 4.150$ ;  $p < 1\%$ ). H2 is therefore supported.

### 5.1. Moderation analysis

In model 4, the moderation of market sensing capability and interaction orientation were included in the model ( $R^2 = .279$ ). Controlling for firm age ( $\beta = -.416$ ,  $t = 1.564$ ), firm size ( $\beta = -.023$ ,  $t = .893$ ) and R&D ( $\beta = .021$ ,  $t = 2.741$ ), the evidence show that the moderation of market sensing capability and interaction orientation has a statistically significant positive effect on marketing performance ( $MSC \times IO \rightarrow MP$ ,  $\beta = 0.478$ ,  $t = 7.230$ ;  $p < 5\%$ ), (see; Table V). Thus hypothesis 3 which indicates that interaction orientation moderates the relationship between market sensing and marketing performance was supported. To examine the nature of the interactions, plots of the effects of the market sensing capability on service-based firm performance at various levels of interaction orientation were created following the procedure of Aiken and West (1991). In Figure 2, it is observed that the effect of market sensing on marketing performance is accentuated with a higher level of interaction orientation capability.

Figure 2: The Moderating Role of Interaction Orientation



## 5 DISCUSSION AND CONCLUSIONS

This study assesses the effect of market sensing capability and interaction orientation capability on the marketing performance of service-based firms in Ghana. The study results suggest that there is a positive relationship between market sensing capability (acquire and use market information, anticipate rivals' actions, predict consumer demand and establish database to serve customers) and marketing performance as well as interaction orientation capability (customer concept, interaction responses capacity, customer empowerment and customer value management) on marketing performance; customer relational performance and customer profit performance (Ramani and Kumar, 2008). This supports the assertion that firms with strong interaction orientation obtain long-term value; from their interaction with their customers which leads to superior overall efficiencies (Thomas et al., 2004). These results provide the support for the resource based view which indicates that variations in firm performance is accounted for by differences in strategic resources. The theory emphasizes that it is the inherent variations in resources and capabilities

among firms in the industry that brings about the differences in firm level performance. Morgan et al. (2006) posits that resource based approach hammers on the relevance of resource heterogeneity among organizations in influencing their performance. According to the evidence provided by this work, building strong capabilities in market sensing and interaction orientation with customers is vital for extracting favorable customer responses among service firms. Researchers (see; Kankam-Kwarteng, et al., 2019; Salah and Abou-Shouk, 2019; Sigala and Christou, 2006; Spillan et al., 2013; Pelham, 2000) also identified that service firms can reap significant benefits from their marketing efforts and interactions with customers. Bagheri et al. (2015) also shows that customer oriented firms are generally more likely to obtain superior performance and competitive advantage than their less oriented counterparts. This can be accounted by the fact that a wide majority of the sampled marketing professionals engaged in strong customer-focused activities. Moreover the evidence proves that aside their direct effect, the interaction of interaction orientation capability and market sensing capability are complementary and extracts a higher effect on marketing performance.

### 5.1. Implication for theory and practice

A detailed review of academic literature shows that the identification of rigorous and complete outcome of marketing performance is a complicated one. Nevertheless, a common trend nowadays takes RBV as a reference to propose a diverse dimensions of market sensing and customer interaction orientation towards marketing performance indicators of service firms (Chen et al., 2012; Menguc and Auh, 2008). This research venue is quite new and there are still few studies testing the combined effects of market sensing and interaction orientation on marketing performance. The study has found that marketing performance of service firms is dependent on the effective application of market sensing and customer interaction orientation. Previous research shows that marketing performance outcome, according to (Morgan, 2002), largely depends on marketing productivity and brand management. However, the current findings suggest that the previous studies were incomplete. For this reason, the study described herein provides a comprehensive contribution of market sensing and customer interaction effect in measuring marketing performance. The findings thus corroborate the findings of previous researchers (see; Nella and Christou, 2021; Rasmussen et al., 2011; Foley and Fahy, 2009; Lindblom et al. (2008) on the relevance of market sensing to marketing performance (Gremler et al., 2001; Kumar et al., 2010). The findings thus provides grounds for the service firms to systematically introduce market sensing activities and promote effective interaction with customers in order to achieve higher marketing performance levels. In the research, the authors designed a reliable tool to measure market sensing, interactive orientation and marketing performance in the service sector, testing its validity and the internal capabilities as the resource based view reference.

### 5.2. Limitations and future research

The study by Ramani and Kumar (2008) and Nazdrol et al. (2011) on marketing performance calls for a continue research into the dimensionalities of customer relational

performance and customer profit based performance of the firm. In spite of the findings and the contribution of the study to both theory and practice, the study wrought with some limitations. First, the study had methodological issues regarding the population and the sampling process. Participants of were drawn from managers of service firms who were willing to participate. This process did not create a proportional representation for all the service sectors in Ghana. The study findings therefore face generalization limitations. Future research on the subject area can improve the rigorosity by enhancing the sampling processes. Second, another area of limitation to the study has to do with the conceptualization of marketing performance. The study limited the concept of marketing performance to only the customer profit oriented performance and customer relational performance (Anderson, et al., 2004; Srinivasan et al., 2002; Venkatesan et al., 2019).

Future researchers can expand the scope of marketing performance by introducing concepts such as the significance of brand image in measuring marketing performance. Third, a study of this nature should have covered industry based analysis to appreciate the significance of the interaction terms of market sensing capability and customer interaction orientation in measuring marketing performance. The study is limited because it proclaim all the service industry to be homogenous and that the study findings can be generalized to the entire sector. Future researchers in the field can concentrate on industry specific such as banking, telecommunication, insurance, hospitality etc. Fourth, this study supports previous theoretical views of market sensing capability and interaction orientation elements that are significant in achieving marketing performance. The primary discovery is that acquire and use market information, anticipating competitor actions, predicting consumer demand and establish database to serve customers contribute to marketing performance. This study also support the argument that interaction orientation is important predictor of marketing performance. Thus, more studies on the relationship between market sensing and interaction orientation are needed to cross validate the findings from different direction.

## REFERENCES

- Akben-Selcuk, E. (2016). "Does Firm Age Affect Profitability. Evidence from turkey". *International Journal of Economic Sciences*, 5(3), 1-9.
- Anderson, E. W., Fornell, C. and Mazvancheryl, S. K. (2004), "Customer Satisfaction and Shareholder Value," *Journal of Marketing*, (68), 172–85.
- Anning-Dorson, T. (2018), "Customer involvement capability and service firm performance: The mediating role of innovation". *Journal of Business Research*, 86, 269-280.
- Ardayan, E. (2016), "Market sensing capability and SMEs performance: The mediating role of product innovativeness success". *DLSU Business & Economics Review*, 25(2), 79-97.
- Barney, J. (1991), "Firm resources and sustained competitive advantage". *Journal of management*, 17(1), pp.99-120.
- Bagheri, G.H., Bonadonna, C., Manzella, I. and Vonlanthen, P., (2015), "On the characterization of size and shape of irregular particles". *Powder Technology*, 270, pp.141-153.
- Bharadwaj, N., and Dong, Y. (2014), "Toward further understanding the market-sensing capability–value creation

- relationship". *Journal of Product Innovation Management*, 31(4), 799-813.
- Blankson, C., and Kalafatis, S. P. (2004). The development and validation of a scale measuring consumer/customer-derived generic typology of positioning strategies. *Journal of marketing management*, 20(1-2), 5-43.
- Bonarou, C. (2021), "The poetics of travel through unravelling visual representations on postcards: A critical semiotics analysis". *Journal of Tourism, Heritage & Services Marketing*, 7(1), 44-53.
- Brown, T. J., Barry T. E., Dacin, P. A. and Gunst R. F. (2005), "Spreading the Word: Investigating Antecedents of Consumers' Positive Word-of-Mouth Intentions and Behaviors in a Retailing Context," *Journal of the Academy of Marketing Science*, 33 (2), 123-38.
- Clark, B. H., and Ambler, T. (2001), "Marketing performance measurement: evolution of research and practice". *International journal of business performance management*, 3(2-4), 231-244.
- Chen, Y. C., Li, P. C., and Evans, K. R. (2012), "Effects of interaction and entrepreneurial orientation on organizational performance: Insights into market driven and market driving". *Industrial Marketing Management*, 41(6), 1019-1034.
- Chatzigeorgiou, C., and Christou, E. (2020a), "Promoting agrotourism resorts online: an assessment of alternative advertising approaches". *International Journal of Technology Marketing*, 14(3), 249-266.
- Chatzigeorgiou, C., and Christou, E. (2020b), "Adoption of social media as distribution channels in tourism marketing: A qualitative analysis of consumers' experiences". *Journal of Tourism, Heritage & Services Marketing*, 6(1), 25-32.
- Christou, E. (2010), "Investigating attitudes towards mobile commerce for travel products". *Tourism: An International Interdisciplinary Journal*, 58(1), 7-18.
- Cao, J., Jiang, Z., and Wang, K. (2016), "Customer demand prediction of service-oriented manufacturing incorporating customer satisfaction". *International Journal of Production Research*, 54(5), 1303-1321.
- Celuch, K., and Murphy, G. (2010), "SME Internet use and strategic flexibility: the moderating effect of IT market orientation". *Journal of Marketing Management*, 26(1-2), 131-145.
- Coad, A., Holm, J. R., Krafft, J., & Quatraro, F. (2018). Firm age and performance. *Journal of Evolutionary Economics*, 28(1), 1-11.
- Cohen, W. M., and Levinthal, D. A. (1990), "Absorptive capacity: a new perspective on learning and innovation". *Administrative Science Quarterly*, 35(1), 128-152.
- Coviello, N.E., Brodie, R.J., Danaher, P.J., and Johnston W.J. (2002), "How Firms Relate to Their Markets: An Empirical Examination of Contemporary Marketing Practices," *Journal of Marketing*, 66, 33-46.
- Daskalaki, V. V., Voutsas, M. C., Boutsouki, C., and Hatzithomas, L. (2020), "Service quality, visitor satisfaction and future behavior in the museum sector", *Journal of Tourism, Heritage & Services Marketing (JTHSM)*, 6(1), 3-8.
- Day, G. S. (2002), "Managing the market learning process". *Journal of Business Industrial Marketing*, 17(4), 240-252.
- Del Chiappa, G., Bregoli, I., & Fotiadis, A. (2021), "The impact of COVID-19 on the Italian accommodation sector and related response actions: A supply-perspective using a mixed method approach". *Journal of Tourism, Heritage & Services Marketing*, 7(1), 13-22.
- Demirel, P., and Kesidou, E. (2019), "Sustainability-oriented capabilities for eco-innovation: Meeting the regulatory, technology, and market demands". *Business Strategy and the Environment*, 28(5), 847-857.
- Donkor, J., Donkor, G. N. A., & Kankam-Kwarteng, C. (2017). "Strategic planning and family business performance in Ghana: Moderating role of IT capability". *Academy of Entrepreneurship Journal*, 23(2), 1-12.
- Dooley, L., Kenny, B., & Cronin, M. (2016). "Interorganizational innovation across geographic and cognitive boundaries: does firm size matter?". *R&D Management*, 46(S1), 227-243.
- Enderwick, P. (1991), "Service sector multinationals and developing countries". In *Multinational Enterprises in Less Developed Countries* (pp. 292-309). Palgrave Macmillan, London.
- Everett, R. F. (2014), "A crack in the foundation: Why SWOT might be less than effective in market sensing analysis". *Journal of Marketing & Management, Special Issue 1* (1), 58-78.
- Fang, S., Chang, E., Ou, C. and Chou, C. (2014), "Internal market orientation, market capabilities and learning orientation". *European Journal of Marketing*, 48(1/2), 170-192.
- Feng, H., Morgan, N. A., & Rego, L. L. (2017). Firm capabilities and growth: the moderating role of market conditions. *Journal of the Academy of Marketing Science*, 45(1), 76-92.
- Foley, A., and Fahy, J. (2004), "Towards a further understanding of the development of market orientation in the firm: a conceptual framework based on the market-sensing capability". *Journal of Strategic Marketing*, 12, 219-230.
- Fotiadis, A. (2018), "Modelling wedding marketing strategies: An fsQCA Analysis". *Journal of Tourism, Heritage & Services Marketing*, 4(1), 23-26.
- Fotiadis, A., & Williams, R. (2018), "TiCoSa" a 3d matrix conceptual model to investigate visitors' perceptions in an athletic event". *Journal of Tourism, Heritage & Services Marketing*, 4(2), 32-36.
- Gremler, D. D., Gwinner, K. P., and Brown, S. W. (2001), "Generating positive word-of-mouth communication through customer-employee relationships". *International Journal of Service Industry Management*.
- Gretzel, U., Sigala, M., and Christou, E. (2012), "Social Media Change the Name of the Game in the Tourism and Hospitality Industries", *The European Financial Review*, 20 October, available at: <http://www.europeanfinancialreview.com/?p=1340>.
- Heusinkveld, S., Benders, J., and van den Berg, R. J. (2009), "From market sensing to new concept development in consultancies: The role of information processing and organizational capabilities". *Technovation*, 29(8), 509-516.
- Hindley, B. (1988), "Service sector protection: considerations for developing countries". *The World Bank Economic Review*, 2(2), 205-224.
- Hult, G. T. M., Ketchen, D. J., and Slater, S. F. (2015), "Market orientation and performance: an integration of disparate approaches". *Strategic Management Journal*, 26(12), 1173-1181.
- Ivanova, M., and Torkkeli, L. (2013), "Managerial sensemaking of interaction within business relationships: A cultural perspective". *European Management Journal*, 31(6), 717-727.
- Jayachandran, S., Sharma, S., Kaufman, P. and Raman, P. (2005), "The Role of Relational Information Processes and Technology Use in Customer Relationship Management," *Journal of Marketing*, (69) 177-92.
- Kamboj, S., Goyal, P., & Rahman, Z. (2015), "A resource-based view on marketing capability, operations capability and financial performance: An empirical examination of mediating role". *Procedia-Social and Behavioral Sciences*, 189(2015), 406-415.
- Katz, R. L. (1986), "Explaining information sector growth in developing countries". *Telecommunications Policy*, 10(3), 209-228.
- Kankam-Kwarteng, C., Gatsi, J. G., Donkor, J., and Acheampong, S. (2018), "Service Innovation and Firm Performance of SMEs auto service: the mediating role of Pricing Capability". *Archives of Business Research*, 6(8).

- Kankam-Kwarteng, C., Osman, B., and Acheampong, S. (2020), "Performance of restaurants: Recognizing competitive intensity and differentiation strategies", *Journal of Tourism, Heritage & Services Marketing (JTHSM)*, 6(3), 25-34
- Kankam-Kwarteng, C., Donkor, J., and Acheampong, S. (2019), "Measuring performance of SMEs service firms: customer orientation and service innovation approach. *Journal of Management Research*, 19(2), 103-119.
- Kartikasari, D., and Merianti, M. (2016). The effect of leverage and firm size to profitability of public manufacturing companies in Indonesia. *International Journal of Economics and Financial Issues*, 6(2), 409-413.
- Koomsap, P. (2013). Design by customer: concept and applications. *Journal of Intelligent Manufacturing*, 24(2), 295-311.
- Kotler, P., Armstrong, G., Harris, L. C., and Piercy, N. (2014), "Principles of Marketing, 4th European edition". Financial times/Prentice hall.
- Kozlenkova, I.V., Samaha, S.A. and Palmater, R.W. (2014), "Resource based theory in marketing". *Journal of Academy of Marketing Science*, 42(1), 1-21.
- Krakov, S., and Corsale, A. (2021), "Sieving tourism destinations: Decision-making processes and destination choice implications". *Journal of Tourism, Heritage & Services Marketing*, 7(1), 33-43.
- Krush, M.T., Agnihotri, R., Trainor, K.J. and Nowlin, E. (2013), "Enhancing organisational Sense-making: an examination of the interactive effects of sales capabilities and marketing dashboards". *Industrial Marketing Management*, 42, 824-835.
- Kumar, V., Aksoy, L., Donkers, B., Venkatesan, R., Wiesel, T. and Tillmanns, S. (2010), "Undervalued or overvalued customers: capturing total customer engagement value". *Journal of service research*, 13(3), 297-310.
- Lindblom, A. (2006), "The Market-sensing capabilities of K-food retailers". Helsinki: Publications of Helsinki of School of Economics.
- Lindblom, A. T., Olkkonen, R. M., Mitronen, L., and Kajalo, S. (2008). Market-sensing capability and business performance of retail entrepreneurs. *Contemporary Management Research*, 4(3).
- Lin, J. H., and Wang, M. Y. (2015), "Complementary assets, appropriability, and patent commercialization: Market sensing capability as a moderator". *Asia Pacific Management Review*, 20(3), 141-147.
- Liang, R. D., and Zhang, J. S. (2012), "The effect of service interaction orientation on customer satisfaction and behavioral intention", *Asia Pacific Journal of Marketing and Logistics*. Vol. 24 No. 1, pp. 153-170
- Lome, O., Heggeseth, A.G. and Moen, Ø. (2016), "The effect of R&D on performance: Do R&D-intensive firms handle a financial crisis better?. *The Journal of High Technology Management Research*, 27(1), pp.65-77.
- Mahmoud, M. A., Hinson, R. E., and Anim, P. A. (2018), "Service innovation and customer satisfaction: the role of customer value creation". *European Journal of Innovation Management*.
- Martin, S. L., Javalgi, R. G., and Cavusgil, E. (2017). Marketing capabilities, positional advantage, and performance of born global firms: Contingent effect of ambidextrous innovation. *International business review*, 26(3), 527-543.
- Menguc, B., and Auh, S. (2008), "The asymmetric moderating role of market orientation on the ambidexterity-firm performance relationship for prospectors and defenders". *Industrial Marketing Management*, 37(4), 455-470.
- Morgan, N. A., Slotegraaf, R. J., and Vorhies, D. W. (2009), "Linking marketing capabilities with profit growth". *International Journal of Research in Marketing*, 26(4),
- Morgan, N. A., Zou, S., Vorhies, D. W., and Katsikeas, C. S. (2003), "Experiential and Informational knowledge, architectural marketing capabilities, and the adaptive performance of export ventures: a cross-national study". *Decision Sciences*, 34(2),
- Mu, J. (2015), "Marketing capability, organisational adaptation and new product development performance". *Industrial Marketing Management*, 49, 151-166.
- Mu, J. (2017), "Dynamic capability and firm performance: The role of marketing capability and operations capability". *IEEE Transactions on Engineering Management*, 64(4), 554-565.
- Mugobi, T., and Mlozi, S. (2021), "The impact of external factors on ICT usage practices at UNESCO World Heritage Sites". *Journal of Tourism, Heritage & Services Marketing*, 7(1), 3-12.
- Murray, N., Lynch, P., and Foley, A. (2016), "Unlocking the magic in successful tourism destination marketing: the role of sensing capability". *Journal of marketing management*, 32(9-10), 877-899.
- Nazdrol, W.M., Breen, J. and Josiassen, A. (2011), "The relationship between strategic orientation and SME firm performance: developing a conceptual framework", paper presented at 8th AGSE International Entrepreneurship Research Exchange, Melbourne, 1-4 February.
- Nella, A., and Christou, E. (2021), "Market segmentation for wine tourism: Identifying sub-groups of winery visitors". *European Journal of Tourism Research*, 29, 2903.
- Nechoud, L., Ghidouche, F., & Seraphin, H. (2021), "The influence of eWOM credibility on visit intention: An integrative moderated mediation model". *Journal of Tourism, Heritage & Services Marketing*, 7(1), 54-63.
- Newell, F. (2003), "Why CRM Doesn't Work?" Princeton, NJ: Bloomberg Press.
- Ngo, L.V. and O'Cass, A. (2012), "Performance implications of market orientation, marketing resources, and marketing capabilities". *Journal of Marketing Management*, 28 (1-2), 173-187.
- Noble, C. H., Sinha, R. K. and Kumar, A. (2002), "Market Orientation and Alternative. Strategic Orientations: A Longitudinal Assessment of Performance Implications," *Journal of Marketing*, 66 (October), 25-39.
- O'Sullivan, D. and Abela, A.V. (2007), "Marketing Performance Measurement Ability and Firm Performance", *Journal of Marketing*. 71, 2, pp. 79-93.
- Öberg, C. (2011), "The core-customer concept", *The Service Industries Journal*, 31(16), 2677-2692.
- Osakwe, C. N., Chovancova, M., and Ogbonna, B. U. (2016), "Linking SMEs profitability to brand orientation and market-sensing capability: A service sector evidence. *Periodica Polytechnica Social and Management Sciences*, 24(1), 34-40.
- Osisoma, H., Nzewi, H., and Mgbemena, I. (2016), "Dynamic capabilities and performance of selected commercial banks in Awka, Anambra State, Nigeria". *European Journal of Business and Social Sciences*, 4(10).
- Owusu-Frimpong, N. (2008), "An evaluation of customers' perception and usage of rural community banks (RCBs) in Ghana". *International Journal of emerging markets*.
- Prahalad, C.K. and Ramaswamy, V. (2004), "The Future of Competition: Co-creating Unique Value with Customers". Boston: Harvard Business School Press.
- Rapp, A., Trainor, K. J., and Agnihotri, R. (2010), "Performance implications of customer-linking capabilities: Examining the complementary role of customer orientation and CRM technology", *Journal of Business research*, 63(11), 1229-1236.
- Ramani, G. and Kumar, V. (2008), "Interaction orientation and firm performance", *Journal of Marketing*, Vol. 72 No. 1, pp. 27-45.
- Rasmussen, E., Mosey, S. and Wright, M. (2011), "The Evolution of Entrepreneurial Competencies: A Longitudinal Study of University Spin-Off Venture Emergence". *Journal of Management Studies*, 48:6



- Rayport, J.F. and Jaworski, B.J. (2005), "Best Face Forward", Harvard Business School Press, Boston, MA.
- Reinartz, W. J., Krafft, M. and Hoyer W. D. (2004), "The Customer Relationship Management Process: Its Measurement and Impact on Performance," *Journal of Marketing Research*, (41), 293–305.
- Reichheld, F. F., and Covey, S. R. (2006), "The ultimate question: Driving good profits and true Growth". Vol. 211. Boston, MA: Harvard Business School Press.
- Rossi, M. (2016). The impact of age on firm performance: a literature review. *Corporate Ownership & Control*, 13(2), 217–223.
- Rust, R. T., Ambler, T., Carpenter, G. S., Kumar, V. and Srivastava, R. K. (2004), "Measuring marketing productivity: Current knowledge and future directions", *Journal of Marketing*, Vol. 68, No. 4, pp. 76–89.
- Salah, M., and Abou-Shouk, M. A. (2019), "The effect of customer relationship management practices on airline customer loyalty", *Journal of Tourism, Heritage & Services Marketing (JTHSM)*, 5(2), 11–19.
- Sheth, Jagdish N., Sisodia, R. S., and Sharma, A. (2000), "The Antecedents and Consequences of Customer-Centric Marketing," *Journal of the Academy of Marketing Science*, 28 (1), 55–66.
- Sigala, M., and Christou, E. (2006), "Investigating the impact of e-customer relationship management on hotels' website service quality". *ECIS 2006 Proceedings*, 118, 1–13.
- Sirmon, D., Hitt, M. and Ireland, R. (2007), "Managing Firm Resources in Dynamic Environments to Create Value: Looking Inside the Black Box", *Academy of Management Review*, 32 (1), 273–292
- Spillan, J.E., Kara, A., King, D.O. and McGinnis, M.A. (2013), "Market orientation and firm performance: An empirical analysis of Ghanaian microenterprises". *Journal of Global Marketing*, 26(5), pp.258–272.
- Srinivasan, S. S., Anderson, R. and Ponnnavolu K. (2002), "Customer Loyalty in E-Commerce: An Exploration of Its Antecedents and Consequences," *Journal of Retailing*, 78 (1), 41–50.
- Srivastava, R. K., Shervani, T. A., and Fahey, L. (1998), "Market-based assets and shareholder value: A framework for analysis". *Journal of marketing*, 62(1), 2–18.
- Sugiyarti, G., and Ardyan, E. (2017), "Market sensing capability and product innovation advantages in emerging markets: The case of market entry quality and marketing performance of Batik Industry in Indonesia", *DLSU Business & Economics Review*, 27(1), 1–12.
- Teece, D. J. (2007), "Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance", *Strategic Management Journal*, 28(13), 1319–1350.
- Thomas, J. S., Reinartz, W. J. and Kumar, V. (2004), "Getting the Most Out of All Your Customers," *Harvard Business Review*, 82 (7–8), 116–23.
- Vanpoucke, E., Vereecke, A., and Wetzels, M. (2014). Developing supplier integration capabilities for sustainable competitive advantage: A dynamic capabilities approach. *Journal of operations management*, 32(7–8), 446–461.
- Venkatesan, R. and Kumar, V. (2004), "A Customer Lifetime Value Framework for Customer Selection and Resource Allocation Strategy," *Journal of Marketing*, 68 (October), 106–125.
- Venkatesan, R., Bleier, A., Reinartz, W., & Ravishanker, N. (2019), "Improving customer profit predictions with customer mindset metrics through multiple overimputation", *Journal of the Academy of Marketing Science*, 47(5), 771–794.
- Vorhies, D. W., and Morgan, N. A. (2005), "Benchmarking Marketing Capabilities for Sustainable Competitive Advantage". *Journal of Marketing*, 69(1), 80–94.
- Wilden, R., and Gudergan, S. P. (2015), "The impact of dynamic capabilities on operational marketing and technological capabilities: investigating the role of environmental turbulence", *Journal of the Academy of Marketing Science*, 43(2), 181–199.
- Yuan, P., and Liu, Y. (2013), "The Study of the Relationship between Interaction Orientation and Business Performance". *Procedia Computer Science*, 17, 1209–1215.
- Zablah, A.R., Bellenger, D.N. and Johnston, W.J. (2004), "An evaluation of divergent perspectives on customer relationship management: towards a common understanding of an emerging phenomenon", *Industrial Marketing Management*, Vol. 33, pp. 475–89.
- Zahra, S.A., Sapienza, H.J. and Davidsson, P. (2008), "Entrepreneurship and dynamic capabilities: a review, model and research agenda", *Journal of Management Studies*, 43(4), 917–955.
- Zollo, M. and Winter, S. (2002), "Deliberate learning and the evolution of dynamic capabilities", *Organization Science*, 13 (3), 339–351.

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*SUBMITTED: DEC 2020*

*1<sup>st</sup> REVISION SUBMITTED: MAR 2021*

*2<sup>nd</sup> REVISION SUBMITTED: JUN 2021*

*ACCEPTED: JUL 2021*

*REFEREED ANONYMOUSLY*

*PUBLISHED ONLINE: 18 OCT 2021*



# Modeling Facebook users' behavior towards the use of pages related to healthy diet and sport activities

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## Abstract:

**Purpose:** In this article we aim to model social media users' behavior in relation with the use of specified Facebook pages and groups, related to eHealth, specifically to healthy diet and sport activities. The study represents to the best of our knowledge the first region-focused on a specific geographical area research.

**Methods:** The users' personality is measured through the well-known Big Five model and the behavior is predicted with the Theory of Planned Behavior (TPB). Structural Equation Modeling is used in order to statistically control the associations among the diverse observed and latent variables.

**Results:** The results suggest an extended theory of planned behavior in combination with personality traits, on eHealth field. Openness and Extraversion do not seem to have positive effect on Attitude. Users' attitude can be affected positively from Agreeableness and Subjective Norms, guiding to finally positive affection of users' actual behavior. Agreeableness cannot influence behavior, directly, nor through SN, since the hypothesis path A-SN is not verified, but it can through Attitude. Neuroticism was negatively correlated to PBC but this hypothesis was not, also, confirmed in the proposed model.

**Implications:** While literature confirms all of our hypotheses, in our study only 8 in 12 are finally confirmed. The difference between the present model and literature findings can be located on the different cultural dimensions among the different studies. The present survey is focused on the Greek region with all the participants to be Greeks. This location-based limitation could be surpassed by conducting the same research on different geographical regions and then confront the outcomes.

**Keywords:** Big Five Personality Model, Personality traits, Facebook, Theory of Planned Behavior

**JEL Classification:** C31, O35, L86

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## 1 INTRODUCTION

Internet has a major impact on social life with the self-presentation need or the need to belong to be important (Nadkarni & Hofmann, 2012; Seidman, 2013). Nowadays, human interaction through social media platforms is rapidly increasing, providing researchers the opportunity to understand human behavior exploiting the rich information available in social media (Carpenter, Green, & LaFlam, 2011; Krakover & Corsale, 2021).

Facebook counts more than 1.71 billion monthly active users worldwide, as of July 2018 (Samy, 2016; Marengo, Poletti, & Settanni, 2020; Önder, Gunter, & Gindl, 2020). According to Facebook, 757 million users log on Facebook daily with half of them having more than 200 friends (Sedghi, 2014). Facebook has become a useful tool not only for daily friendship interaction but also for seeking information, jobs and advertising medium. Extant research suggests that there is an association between Facebook activity data and personality, demonstrating a relationship between users' online and offline activities. This indicates that users'



personality can be extracted from their Facebook activity (Gosling, Augustine, Vazire, Holtzman, & Gaddis, 2011; Marengo et al., 2020). Facebook profiles reflect actual personality and not just a self-idealization and therefore it is suggested that people use Facebook to communicate their real personality and accurate personal profiles (Amichai-Hamburger & Vinitzky, 2010; Garcia & Sikström, 2014). As a result, it can be claimed that Facebook users do not try to misrepresent their profiles but on the contrary, Facebook profiles represent the true personality of a person. Given the multidisciplinary nature of the field, many researchers use theories from behavioral intention in order to better understand individuals who use specific features of social media. Diffusion of Innovation (DOI), Theory of Reasoned Actions (TRA), Technology of Acceptance Model (TAM) and Theory of Planned Behavior (TPB) are the main theories used by academics and researchers. In this research the TPB model is used for two main reasons: TPB has been widely used for health behavior predictions. Furthermore, the addition of the Big Five model as extra variables on TPB provides a more comprehensive theoretical perspective of the user's acceptance and final behavior in the context of eHealth features of Facebook (Gretzel et al., 2012; Branley & Covey, 2018). TPB derives from TRA and it was first developed by Ajzen (1985). In TPB the performance of a person's particular behavior can be predicted by three variables: the attitude of a person towards the behavior (ATT), the subjective norms (SN) and the perceived behavioral control (PBC). These three variables lead to the Intention towards a specific behavior (I), affecting finally the individual's actual behavior.

The present study associates known personality traits with consumers' planned behavior. Both Big Five and TPB are previously used in literature individually or in combination. The combination, though of the two models in the field of eHealth has never tested or used before. The current literature present a gap, to the best of our knowledge. Most of the variables used have been examined previously, separately but not as a unique conceptual model. Furthermore, the article's questionnaire is used for the first time. It is also conducted for the first time in Greece. This two aspects - the combination of the models applied in the eHealth field and the localization of the research - cover the existing gap, not only of the theoretical framework but also the practical implication.

The aim of this study is to model social media users' behavior with regard to the use of specified Facebook pages and groups, related to eHealth, specifically to healthy diet and sport activities. Furthermore, this study will be region-focused on a specific geographical area that has never been used for the aforementioned scope. In order to model this behavior, theories and tools from a variety of disciplines will be used.

The present article contributes to multiple aspects: First a theoretical and conceptual model is developed, examining the effects on individuals' behavior towards healthy diet and sport activities in combination to Facebook pages and groups.. The results will be confronted with other research and outcomes in order to examine the concurrence and consistency with different geographical regions. Finally, the article combines theories and models from different fields, paving the ground to future multidisciplinary research.

The paper is organized as follows: In the next section the literature review is presented. Furthermore, the constructs, included in the theoretical model, are explained. Big Five and TPB are thoroughly analyzed. Next paragraph presents the methodology used, following by and the research results. Finally, the last part includes a discussion on the outcomes as well as limitations of the research and future research implications.

## 2 LITERATURE

The research was conducted using questionnaires, in order to examine the factors that affect users' behavior towards the adoption of healthy eating/ sports tips suggested by various pages/ groups on Facebook. Many theories are used to explain the online behavior of users in combination with their personality (Gosling et al., 2011; Hall & Pennington, 2013; John, Naumann, & Soto, 2008; Daskalaki et al, 2020; Jspeert & Hernandez-Maskivker, 2020).

One of them, the Five-Factor Model of personality (FFM), known as Big Five, represents the most commonly used model for researching and examining the relationships between personality traits and online users. This taxonomy is one of the most reliable methods for exporting and monitoring personalities (McCrae & John, 1992; Moore & McElroy, 2012; Ryan & Xenos, 2011; Tan, 2012; Zywnica & Danowski, 2008; Misirlis et al, 2018). Big Five is based on the notion that users' personality can be ranked on a five axes model. Every axis represents a specific factor from: Openness to experience, Conscientiousness, Extraversion, Agreeableness and Neuroticism. The aforementioned variables present the first set of our observed set of items.

In literature, each one of the five factors has been examined, showing associations with the way users interact on social media. Furthermore, several of the measurable activities on social media are believed to be influenced by each of the five factor model, negatively or positively. Some of them indicate which personalities use Facebook under certain conditions (Sigala & Christou, 2006; Carpenter et al., 2011; Correa, Hinsley & de Zúñiga, 2010; Moore & McElroy, 2012; Ryan & Xenos, 2011; Błachnio, Przepiorka & Rudnicka, 2016; J.-E. R. Lee, Moore, Park & Park, 2012; Orosz, Tóth-Király & Bőthe, 2015; Skues, Williams & Wise, 2012; Wilson, Fornasier & White, 2010; Bachrach, Kosinski, Graepel, Kohli & Stillwell, 2012; Čukić & Bates, 2014; Chatzigeorgiou & Christou, 2019, 2020; Del Chiappa et al., 2021; Fotiadis, 2018; Fotiadis & Williams, 2018). Together with the Personality trait models, behavioral models are used in order to analyze users' behavior. TBP is a theory that explains individuals' behavior. Basic concept of TBP is the fact that every individual has the intention of particular behaviors. These behaviors are determined by attitude (ATT), subjective norms (SN) and perceived behavioral control (PBC) (Şahin, Karadağ, & Tuncer, 2019).

Attitude is defined as a person's demeanor towards a behavior that shapes the individual's behavioral intention and actual behavior. Ajzen (1985) proposed that attitude is the main factor that develops the intention of using something. Thus, we propose the following hypotheses, regarding the association between ATT and diverse Big Five's personality traits as well as between ATT and TPB concepts:

*Hypothesis #1: There is a positive correlation between Openness and Attitude towards the use of Facebook pages related to healthy diet and sport activities.*

*Hypothesis #2: There is a positive correlation between Extraversion and Attitude towards the use of Facebook pages related to healthy diet and sport activities.*

*Hypothesis #3: There is a positive correlation between Agreeableness and Attitude towards the use of Facebook pages related to healthy diet and sport activities.*

*Hypothesis #4: There is a positive correlation between Attitude and Intention towards the use of Facebook pages related to healthy diet and sport activities.*

Subjective Norms refer to individuals' awareness of social influence from their narrow social circle to follow or not to follow a certain behavior (Ajzen, 1991). Ajzen's assumption was that individuals tend to behave in such a way as to be accepted by their important referents. Godin and Kok (1996) and Hagger, Chatzisarantis, and Biddle (2002) studied SN in relation to ATT and PBC, finding that SN is a weaker predictor for the Intention, with respect to ATT and PBC. Lo, McKercher, Lo, Cheung, and Law (2011) found that SN, regarding Facebook users in specific, positively influence the intention to perform a certain behavior. Bozionelos and Bennett (1999); Devaraj, Easley, and Crant (2008); Hampson, Andrews, and Barckley (2007); Christou (2010); Marino et al. (2016) analyze and correlate the TPB or the use of social media with users' personalities as predictors for exercise. In these studies, research indicates that extraversion and agreeableness are two of the traits that are positively associated with subjective norms, something that enforces our hypotheses 5 and 6.

Thus, we hypothesize the following positive relationship between SN and Big Five's personality traits as well as between SN and TPB components:

*Hypothesis #5: There is a positive correlation between Extraversion and Subjective Norms towards the use of Facebook pages related to healthy diet and sport activities.*

*Hypothesis #6: There is a positive correlation between Agreeableness and Subjective Norms towards the use of Facebook pages related to healthy diet and sport activities.*

*Hypothesis #7: There is a positive correlation between Subjective Norms and Intention towards the use of Facebook pages related to healthy diet and sport activities.*

*Hypothesis #8: There is a positive correlation between Subjective Norms and Attitude towards the use of Facebook pages related to healthy diet and sport activities.*

PBC refers to the amount of the control individuals possess on specific behaviors. In other words, PBC explains how easy or difficult it is for a person to perform a certain behavior. Individuals without control over behavioral intentions tend not to perform the behavior, eventually (Trafimow et al., 2002; Mugobi & Mlozi, 2021; Nechoud et al., 2021). Rosen and Kluemper (2008) associate positively, extraversion and conscientiousness with PBC and negatively neuroticism and PBC. In specific, neuroticism represents a rather doubled-featured trait, since some authors associate neuroticism positively with Facebook usage (Correa et al., 2010; Mehdizadeh, 2010) but others, negatively (Amichai-Hamburger & Vinitzky, 2010). Furthermore, Al-Debei, Al-Lozi, and Papazafeiropoulou (2013) assert that experienced Facebook users tend to use the platform more frequently due to their abilities and that they will continue participating on

Facebook, leading to a higher intention to continue carrying out the behaviors. Next we present the hypotheses formulated regarding PBC and Big Five and TPB:

*Hypothesis #9: There is a positive correlation between Conscientiousness and Perceived Behavioral Control towards the use of Facebook pages related to healthy diet and sport activities.*

*Hypothesis #10: There is a positive correlation between Extraversion and Perceived Behavioral Control towards the use of Facebook pages related to healthy diet and sport activities.*

*Hypothesis #11: There is a negative correlation between Neuroticism and Perceived Behavioral Control towards the use of Facebook pages related to healthy diet and sport activities.*

*Hypothesis #12: There is a positive correlation between Perceived Behavioral Control and Intention towards the use of Facebook pages related to healthy diet and sport activities.*

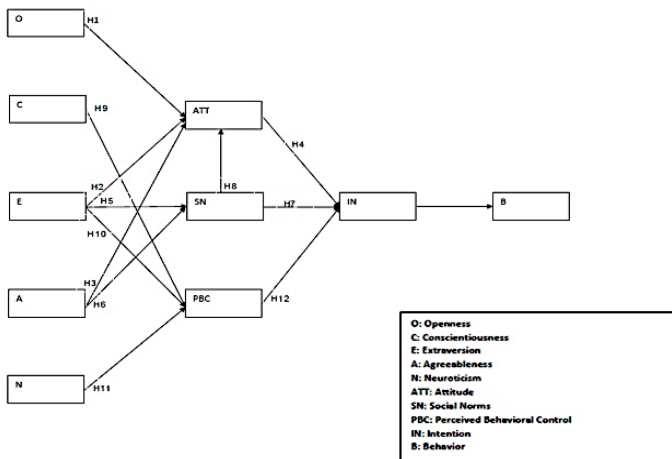
Table 1: The conceptual definitions of the research

Research Variables	Conceptual description	References
Openness (O)	Openness measures peoples' originality and open-mindedness. Openness to new experiences describes how original or complex an individual is in his life	Cukic and Bates (2014) D.-H. Choi and Shin (2017); Liu and Campbell (2017)
Conscientiousness (C)	Conscientiousness measures the constraint and the control of impulse. Such impulses are thinking before acting, delaying gratification, following rules and being organized	J. Choi and Kim (2014); Nadkarni and Hofmann (2012); Seidman (2014)
Extraversion (E)	Extraversion measures a person's energy and enthusiasm. Extravert individuals usually have positive way of thinking	Augustine and Hemenover (2008)
Agreeableness (A)	Agreeableness measures a person's altruism and affection. Agreeableness may also refer to individuals who seek information on internet	J. Choi and Kim (2014); Nadkarni and Hofmann (2012); Seidman (2013)
Neuroticism (N)	Neuroticism measures a person's negative emotionality and nervousness. Neurotic individuals often hide some aspects of themselves, but they show them only online	John et al. (2008); Smith, Saklofske, and Nordstokke (2014) Seidman (2013)
Attitude (ATT)	A person's attitude towards a specific behavior, that shapes the individual's behavioral intention and actual behavior	Al-Debei et al. (2013); Chang and Chen (2014); Chu and Chen (2016); Hajli, Shanmugam, Powell, and Love (2015); Ozkan and Kanat (2011); Pi, Chou, and Liao (2013)
Subjective Norms (SN)	An individual's perception about a particular behavior, which is influenced by the judgment of significant others (parents, spouse, close friends, teachers)	Al-Debei et al. (2013); Amjad and Wood (2009); Chang and Chen (2014); Chu and Chen (2016); Hajli et al. (2015); S.-Y. Lee, Hansen, and Lee (2016); Ozkan and Kanat (2011); Pi et al. (2013)
Perceived Behavioral Control (PBC)	An individual's perceived ease (or difficulty) of performing a particular behavior. PBC is determined by the total set of accessible control beliefs. In general PBC adds to the effort a person will apply to a behavior. It is an independent variable that determines behavior as attitude and subjective norms remain constant	Al-Debei et al. (2013); Armitage (2005); Chang and Chen (2014); Chu and Chen (2016); Hajli et al. (2015); Ozkan and Kanat (2011); Pi et al. (2013)
Intention (IN)	An indication of an individual's readiness to perform a given behavior. It is assumed to be an immediate antecedent of behavior. It is based on attitude towards the behavior, SN and PBC, with each predictor weighted for its importance in relation to the behavior and population of interest	Ahmad et al. (2014); Ajzen (2002); Bozionelos and Bennett (1999)
Behavior (B)	An individual's observable response in a given situation with respect to a given target. A behavior is a function of compatible intentions and perceptions of behavioral control, in that perceived behavioral control is expected to moderate the effect of intention on behavior, such that a favorable intention produces the behavior only when perceived behavioral control is strong	Ajzen (1991, 2002)

Despite the plethora of articles for various alternations of usages and associations, there is a lack of research in literature regarding Big Five and Facebook usage related to healthy eating or sports tips that are suggested by various pages/ group. Furthermore, there is no research, to the best of our knowledge that combines Big Five, Facebook, eHealth and the TPB together in one unified model. The originality of this article consists of correlating TPB and personality traits on the field of eHealth, in specific healthy eating or sports tips that are suggested by various pages/ group on Facebook. The unified proposed model is tested statistically with Structural Equation Modeling (SEM), using AMOS SPSS 18. Table (1) summarizes the conceptual description for each research variable used in the research with the relevant literature. Depending on each hypothesis formulated, these variables are divided in dependent or independent.

Figure 1 shows the conceptual model, based on the literature review and the association among the diverse components of the model, indexed with the relevant hypothesis.

Figure 1: Initial Conceptual Model



### 3 METHODOLOGY AND RESULTS

#### 3.1. Operationalization of variables

Table 2 (Appendix) indicates the operational definitions of the study instruments. Each variable is measured through diverse items based on a 5-point Likert scale, ranking from 1 (completely disagree) to 5 (completely agree). An extended 24-item Big Five Personality Trait Inventory was used for Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism. After reviewing the relevant literature, a 14-item inventory for TPB was created, customized for providing information about the adoption of healthy eating or sports tips suggested by various pages/ groups on Facebook.

#### 3.2. Data collection and sample characteristics

A questionnaire was distributed online on 750 Facebook users, via e-mail, Facebook and LinkedIn posts and personal messages. Answers were collected for a 6-month period, specifically from May 2018 to November 2018. We conducted a pilot collection of answers (n=40) in order to identify any misunderstandings and lacks of clarity and accuracy. 578 users responded the questionnaire completely, obtaining a response rate equal to 77%. Table 3 presents the demographic profile of the participants. Sex is equally distributed. The vast majority belongs to the 18-24 age range (76.8%), making the research even more targeted of specific age groups. Considering that the range 18-27 occupies the 87.7% of the total sample, we can extract hyper focused outcomes regarding the aforementioned age decade. An ample majority of the respondents are undergraduate students (82%), living in big cities and urban areas (82.7%).

Table 3: Demographic characteristics of the participants

Demographics		Frequency	Percent
Gender	Male	286	49.5%
	Female	292	50.5%
Age	18-21	288	49.8%
	22-24	156	27.0%
	25-27	63	10.9%
	28-30	37	6.4%
	30+	34	5.9%
Education	UG student	474	82%
	PG student	97	16.8%
	PhD candidate	5	0.9%
	PhD+ education	2	0.3%
Residence	Urban area	478	82.7%
	Suburban area	72	12.5%
	Rural area	28	5.8%

It is also interesting to present the most used social media platforms (Table 4). The top three social media in the list, with a significant difference from the fourth, are: Facebook, where the overwhelming 99.3% has an active account, Instagram with 72% active users from our sample and Twitter with 41.2% of the participants responding to possess an active account. An important finding is that even in times of great economic crisis in the country where the research was conducted; only 3.3% of respondents have an account on the largest professional social medium, to wit, LinkedIn, something logical, taken into consideration the respondents' age. Table 4 presents the percentage of users with active accounts, among our sample.

Table 4: Social media platforms with active accounts

Platform	Frequency	Percent
Facebook	574	99.3%
Instagram	416	72%
Twitter	238	41.2%
LinkedIn	19	3.3%
Pinterest	11	1.9%
Viber	6	1%
Snapchat	5	<1%
YouTube channel	4	<1%
Reddit	2	<1%
Tumblr	1	<1%
Github	1	<1%
Tinder	1	<1%
Discord	1	<1%

#### 3.3. Data analysis and results

The proposed model with the hypotheses was tested with Structural Equation Modeling (SEM), using maximum likelihood estimation. The techniques SEM uses, examine the covariance structure and the relationships between and among latent variables, including the effects of direct, indirect, reciprocal and misleading causal relationships. A main difference between SEM and other similar models is that SEM assumes that variables cannot be measured with precision, so it includes an error on its measurements. Two models are created in SEM, the measurement and the structural. The first one represents the construction on the measured variables, while the structural model presents the various associations between constructs. The measurement model proves that the latent variables measured the intended constructs. This technique is known as the Confirmatory Factor Analysis (CFA). CFA verifies the factor structure of the set of our observed variables. With CFA researchers can assume that a relationship between observed variables and their underlying latent constructs exists. After the CFA technique application, we confirmed that all constructs meet the measurement standards. This confirmation leads to the second test of the structural model in order to investigate the relationships among the theoretical constructs, thus confirming or not, the hypotheses model. Final purpose in order to confirm the theoretical model is an insignificant difference between measurement and structural model. SPSS 21 and SPSS AMOS 21 were used in this study to determine measurement and structural models.

#### 3.4. Measurement model

The constructs are represented by the measured variables of our model. In order to test the measurement model, CFA was used. The model used 38 items that describe the 10 latent constructs, analytically: Openness (O), Conscientiousness



(C), Extraversion (E), Agreeableness (A), Neuroticism (N), Attitude (ATT), Subjective Norms (SN), Perceived Behavioral Control (PBC), Intention to use (IN) and Behavior (B). Su and Chan (2017) recommend a list of fit indices from different classes, such as absolute fit, incremental fit and comparative fit. The following combination of fit measures was used:  $\chi^2/d.f.$ , non-norm fit index (NNFI), the root mean square error of approximation (RMSEA), the adjusted goodness of fit index (AGFI), the goodness of fit index (GFI), the comparative fit index (CFI) and the root mean square residual (RMR). For every index a threshold is given, together with the model's data, to set the goodness of fit. As it is shown on Table 5, the proposed model fits well with the data collected. As a result, reliability and validity (convergent and discriminant) could be calculated and evaluated.

Table 5: The model's fit indices

Fit Indices	Recommended value	Measurement model	Structural model
$\chi^2/d.f.$	$\leq 3.00$	2.17	2.16
NNFI	$\geq 0.90$	0.96	0.96
RMSEA	$\leq 0.09$	0.050	0.049
AGFI	$\geq 0.80$	0.90	0.88
GFI	$\geq 0.90$	0.91	0.91
CFI	$\geq 0.90$	0.96	.996
RMR	$\leq 0.05$	0.049	0.049

The internal consistency was estimated through the Construct Reliability (CR) on Table 6, together with the Average Variance Extracted (AVE). CR is greater than 0.7, or close to 0.7 in only two cases, rendering all variables acceptable, and indicating also high internal consistency.

Table 6: Construct Reliability (CR) and Average Variance Extracted (AVE)

Variable	CR	AVE
Extraversion	0.761	0.51
Agreeableness	0.780	0.49
Conscientiousness	0.789	0.55
Neuroticism	0.614	0.57
Openness	0.710	0.59
Attitude	0.787	0.55
Subjective Norms	0.821	0.60
Perceived Behavioral Control	0.669	0.49
Intention	0.735	0.53
Behavior	0.829	0.70

Table 7: Discriminant Validity

Variables	1	2	3	4	5	6	7	8	9	10
E	1.000									
A	.270	1.000								
C	.088	.155	1.000							
N	.018	.122	.036	1.000						
O	.263	.223	.247	.061	1.000					
ATT	.060	.025	.092	.122	.007	1.000				
SN	.175	.104	.036	.117	.083	.516	1.000			
PBC	.033	.155	.212	-.010	.107	.476	.382	1.000		
I	.125	.127	.094	.056	.063	.587	.401	.428	1.000	
B	.133	.070	.044	.002	.039	.554	.362	.419	.545	1.000

AVE's lowest value is 0.49 for Agreeableness and PBC, all values though are greater than the squared correlation estimates on Table 7 (see the values below the diagonal). As a result, the test does not show problems with the discriminant validity and no new path was included in order to improve the fit of the model, therefore, next paragraph analyzes the results of our structural model.

### 3.5. Structural model

The next step consists of estimating the structural model in order to empirically measure the relationships among variables and constructs. The structural model presented similar estimates to the measurement model, suggesting an overall good model fit. Table 8 presents the coefficients for each hypothesis and the t-value calculation based on Bonsón and Flores (2011), posing the t-critical cutoff on 1.69. By these measurements, 4 hypotheses are not significant (H1, H2, H6, H11). In conclusion, given that 8 out of 12 estimates are consistent with the initial hypotheses, the results support the theoretical model, therefore, our SEM model (Figure 2), explains the data equally well with the CFA model. Analytically, the first hypothesis that is not confirmed is H1 (H1;  $\beta = -0.04$ ;  $t = -0.96$ ;  $p > 0.05$ ), meaning that it is not confirmed the fact that there is a positive correlation between Openness and Attitude towards the use of Facebook pages related to healthy diet and sport activities, on our model and on our sample. Non confirmation we obtain also from the H2, H6 and H11 hypotheses, related to Extraversions and Attitude (H2;  $\beta = -0.02$ ;  $t = -0.48$ ;  $p > 0.05$ ), Agreeableness and Subjective Norm (H6;  $\beta = 0.02$ ;  $t = 0.48$ ;  $p > 0.05$ ), and Neuroticism and Perceived Behavioral Control (H11;  $\beta = -0.02$ ;  $t = -0.48$ ;  $p > 0.05$ ), respectively.

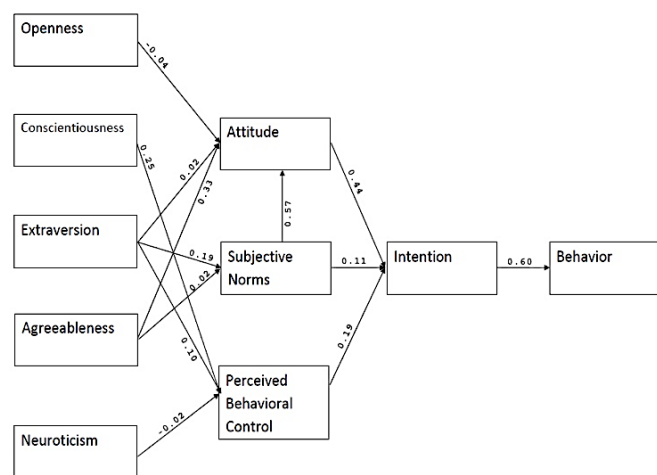
On the other side 8 hypotheses of our initial model are confirmed. Immediate positive correlations from the Big Five to TPB factors were expected such as the Conscientiousness to PBC (H9;  $\beta = 0.25$ ;  $t = 6.23$ ;  $p < 0.05$ ), the Extraversion to Subjective Norm and PBC (H5;  $\beta = 0.19$ ;  $t = 4.67$ ;  $p < 0.05$ , H10;  $\beta = 0.10$ ;  $t = 2.42$ ;  $p < 0.05$ ) and the Agreeableness to Attitude (H3;  $\beta = 0.33$ ;  $t = 8.43$ ;  $p < 0.01$ ). Furthermore, Attitude and Subjective norm were found to have a strong positive impact on intention to behavior (H4;  $\beta = 0.44$ ;  $t = 11.8$ ;  $p < 0.01$ , H7;  $\beta = 0.11$ ;  $t = 2.67$ ;  $p < 0.05$ ), supporting our hypotheses. PBC was found to have positive impact on intention to behavior (H12;  $\beta = 0.19$ ;  $t = 4.67$ ;  $p < 0.05$ ). Last, but not least, a very strong positive impact is noted on Subjective norm to Attitude (H8;  $\beta = 0.57$ ;  $t = 16.73$ ;  $p < 0.01$ ). This last correlation is the only one between internal factors of the same model, in this case TPB.

Table 8: Hypotheses' paths, coefficients and t-values

Hypothesis	Path	Coefficient	t-value	p-value
H1	O→ATT	-0.04	-0.96	> 0.05
H2	E→ATT	-0.02	-0.48	> 0.05
H3	A→ATT	0.33	8.43	<0.01
H4	ATT→IN	0.44	11.8	<0.01
H5	E→SN	0.19	4.67	<0.05
H6	A→SN	0.02	0.48	> 0.05
H7	SN→IN	0.11	2.67	<0.05
H8	SN→ATT	0.57	16.73	<0.01
H9	C→PBC	0.25	6.23	<0.05
H10	E→PBC	0.10	2.42	<0.05
H11	N→PBC	-0.02	-0.48	> 0.05
H12	PBC→IN	0.19	4.67	<0.05



Figure 2: SEM results for the proposed model



## 4 THEORETICAL AND MANAGERIAL IMPLICATIONS

The results of the proposed model suggest an extended theory of planned behavior in combination with personality traits, on eHealth field. Two thirds (8 in 12) of the hypotheses are verified, in the proposed model. Openness and Extraversion do not seem to have positive effect on Attitude. On the other side, users' attitude can be affected positively from Agreeableness and Subjective Norms, guiding to finally positive affection of users' actual behavior. Agreeableness cannot influence behavior, directly, nor through SN, since the hypothesis path A->SN is not verified, but it can through Attitude. Neuroticism was negatively correlated to PBC but this hypothesis was not confirmed in the proposed model, either. In general, the personality traits of Big Five are not considered individually but in combination with one another. So it's not very important that one trait does not affect a construct of the TPB, because there will be another one that does it. For example, individuals with elevate Extraversion and Agreeableness will affect their Attitude, if not directly from the extraversion, then agreeableness.

From the proposed model it derives that Intention to behavior, and therefore behavior, are affected directly by ATT and PBC. Even if the study found that SN influence less the intention to use Facebook groups and pages related to healthy diet and sport activities, this can be done through ATT, considering the path SN->ATT->IN. Furthermore, conscientiousness via PBC and agreeableness via ATT can affect more the intention to use, and therefore the final behavior of usage. TPB literature can be contributed strongly to the verification of the hypotheses of our mode, as well as social science. Regarding the negative coefficients of our hypotheses (O->ATT, E->ATT, A->SN and N->PBC) even if they are not verified, useful outcomes can be extracted. Neurotic users for example tend to use a lot the social media platforms. Even though, theory implies that neurotics are quick and nervous. The other three hypotheses that were not verified, present a unique characteristic. All three hold a value of  $p$ , slightly greater than 0.5. We cannot accept them, but the theory implies that if such hypotheses run again in another environment or time, outcomes might be different.

The conclusions of the present study can contribute to practitioners by helping them assess their marketing decisions based on the knowledge of which combination of personalities and planned behavior influence more the use of social media pages and groups related to healthy diet and sport activities. Companies involved in such activities can modify their strategies in order to communicate their products to a wider audience, maximizing awareness and engagement. Furthermore, international brands can take into consideration that the Greek market presents particularities that maybe other regions do not, altering, thus, their planning and approaches.

### 4.1. Limitations and future implications

While literature confirms all of our hypotheses, in our study only 8 in 12 are finally confirmed. The difference between the present model and literature findings can be located on the different cultural dimensions among the different studies. The present survey is focused on the Greek region with all the participants being young Greek students. A repetitive research in other countries and/ or different age groups, taking into consideration the cultural differences and dimensions can lead to interesting outcomes. This way, the location-based limitation could be surpassed. The same implies for applying this research in other than eHealth areas. Furthermore, considering a wider sample from the same region could add to the research with a more depictive view of the social media services penetration.

## 5 NOTE

Parts of the present article, especially the statistical analysis and the theoretical framework, make part of the first author's doctoral dissertation and therefore can be found on first author's affiliation's repository (University of Macedonia, Thessaloniki, Greece) for doctoral dissertations.

## REFERENCES

- Ahmad, M. H., Shahar, S., Teng, N. I. M. F., Manaf, Z. A., Sakian, N. I. M., & Omar, B. (2014). Applying theory of planned behavior to predict exercise maintenance in sarcopenic elderly. *Clinical interventions in aging*, 9, 1551.
- Ajzen, I. (1985). From Intentions to Actions: A Theory of Planned Behavior. In J. Kuhl & J. Beckmann (Eds.), *Action Control: From Cognition to Behavior* (pp. 11-39). Berlin, Heidelberg: Springer Berlin Heidelberg.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Ajzen, I. (2002). Perceived behavioral control, Self-Efficacy, locus of control, and the theory of planned Behavior1. *Journal of applied social psychology*, 32(4), 665-683.
- Al-Debei, M. M., Al-Lozi, E., & Papazafeiropoulou, A. (2013). Why people keep coming back to Facebook: Explaining and predicting continuance participation from an extended theory of planned behaviour perspective. *Decision Support Systems*, 55(1), 43-54. doi: <http://dx.doi.org/10.1016/j.dss.2012.12.032>
- Amichai-Hamburger, Y., & Vinitzky, G. (2010). Social network use and personality. *Computers in Human Behavior*, 26(6), 1289-1295. doi: <http://dx.doi.org/10.1016/j.chb.2010.03.018>
- Amjad, N., & Wood, A. M. (2009). Identifying and changing the normative beliefs about aggression which lead young Muslim

- adults to join extremist anti-Semitic groups in Pakistan. *Aggressive behavior*, 35(6), 514-519.
- Armitage, C. J. (2005). Can the theory of planned behavior predict the maintenance of physical activity? *Health psychology*, 24(3), 235.
- Augustine, A. A., & Hemenover, S. H. (2008). Extraversion and the consequences of social interaction on affect repair. *Personality and Individual Differences*, 44(5), 1151-1161. doi: <http://dx.doi.org/10.1016/j.paid.2007.11.009>
- Bachrach, Y., Kosinski, M., Graepel, T., Kohli, P., & Stillwell, D. (2012). Personality and patterns of Facebook usage. Paper presented at the Proceedings of the 4th Annual ACM Web Science Conference, Evanston, Illinois.
- Błachnio, A., Przepiorka, A., & Rudnicka, P. (2016). Narcissism and self-esteem as predictors of dimensions of Facebook use. *Personality and Individual Differences*, 90, 296-301.
- Bonsón, E., & Flores, F. (2011). Social media and corporate dialogue: the response of global financial institutions. *Online Information Review*, 35(1), 34-49. doi: [doi:10.1108/14684521111113579](https://doi.org/10.1108/14684521111113579)
- Bozionelos, G., & Bennett, P. (1999). The theory of planned behaviour as predictor of exercise: The moderating influence of beliefs and personality variables. *Journal of health psychology*, 4(4), 517-529.
- Branley, D. B., & Covey, J. (2018). Risky behavior via social media: The role of reasoned and social reactive pathways. *Computers in Human Behavior*, 78(Supplement C), 183-191. doi: <https://doi.org/10.1016/j.chb.2017.09.036>
- Carpenter, J. M., Green, M. C., & LaFlam, J. (2011). People or profiles: Individual differences in online social networking use. *Personality and Individual Differences*, 50(5), 538-541. doi: <http://dx.doi.org/10.1016/j.paid.2010.11.006>
- Chang, C.-W., & Chen, G. M. (2014). College students' disclosure of location-related information on Facebook. *Computers in Human Behavior*, 35(0), 33-38. doi: <http://dx.doi.org/10.1016/j.chb.2014.02.028>
- Chatzigeorgiou, C., & Christou, E. (2019). Social media in tourism marketing: Travellers' attitudes and encounters. Published in: TOURMAN 2019 Conference Proceedings, Thessaloniki: Greece (27 October 2019): pp. 164-173.
- Chatzigeorgiou, C., & Christou, E. (2020). Adoption of social media as distribution channels in tourism marketing: A qualitative analysis of consumers' experiences. *Journal of Tourism, Heritage & Services Marketing*, 6(1), 25-32.
- Choi, D.-H., & Shin, D.-H. (2017). Exploring political compromise in the new media environment: The interaction effects of social media use and the Big Five personality traits. *Personality and Individual Differences*, 106(Supplement C), 163-171. doi: <https://doi.org/10.1016/j.paid.2016.11.022>
- Choi, J., & Kim, Y. (2014). The moderating effects of gender and number of friends on the relationship between self-presentation and brand-related word-of-mouth on Facebook. *Personality and Individual Differences*, 68(0), 1-5. doi: <http://dx.doi.org/10.1016/j.paid.2014.03.040>
- Christou, E. (2010). Investigating attitudes towards mobile commerce for travel products. *Tourism: An International Interdisciplinary Journal*, 58(1), 7-18.
- Christou, E., & Nella, A. (2016). Web 2.0 and networks in wine tourism: The case studies of greatwinecapitals.com and wineandhospitalitynetwork.com. In *Social Media in Travel, Tourism and Hospitality: Theory, Practice and Cases*. M. Sigala, E. Christou and Gretzel, U. (Eds). Surrey, UK: Ashgate Publishing, pp.11-24.
- Chu, T.-H., & Chen, Y.-Y. (2016). With good we become good: Understanding e-learning adoption by theory of planned behavior and group influences. *Computers & Education*, 92, 37-52.
- Correa, T., Hinsley, A. W., & de Zúñiga, H. G. (2010). Who interacts on the Web?: The intersection of users' personality and social media use. *Computers in Human Behavior*, 26(2), 247-253. doi: <http://dx.doi.org/10.1016/j.chb.2009.09.003>
- Čukić, I., & Bates, T. C. (2014). Openness to experience and aesthetic chills: Links to heart rate sympathetic activity. *Personality and Individual Differences*, 64(0), 152-156.
- Daskalaki, V. V., Voutsas, M. C., Boutsouki, C. and Hatzithomas, L. Service quality, visitor satisfaction and future behavior in the museum sector. *Journal of Tourism, Heritage & Services Marketing (JTHSM)*, 6, 1 (2020), 3-8.
- Del Chiappa, G., Bregoli, I., & Fotiadis, A. (2021). The impact of COVID-19 on the Italian accommodation sector and related response actions: A supply-perspective using a mixed method approach. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 13-22
- Devaraj, S., Easley, R. F., & Crant, J. M. (2008). Research note—how does personality matter? Relating the five-factor model to technology acceptance and use. *Information systems research*, 19(1), 93-105.
- Fotiadis, A. (2018). Modelling wedding marketing strategies: An fsQCA Analysis. *Journal of Tourism, Heritage & Services Marketing*, 4(1), 23-26.
- Fotiadis, A., & Williams, R. (2018). "TiCoSa" a 3d matrix conceptual model to investigate visitors' perceptions in an athletic event. *Journal of Tourism, Heritage & Services Marketing*, 4(2), 32-36.
- Garcia, D., & Sikström, S. (2014). The dark side of Facebook: Semantic representations of status updates predict the Dark Triad of personality. *Personality and Individual Differences*, 67(0), 92-96. doi: <http://dx.doi.org/10.1016/j.paid.2013.10.001>
- Godin, G., & Kok, G. (1996). The theory of planned behavior: a review of its applications to health-related behaviors. *American journal of health promotion*, 11(2), 87-98.
- Gosling, D., Augustine, A., Vazire, S., Holtzman, N., & Gaddis, S. (2011). Manifestation of personality in online social networks: Self-reported facebook-related behaviors and observable profile information. *Cyberpsychology, behavior and social networking*, 14, 483-488.
- Gretzel, U., Sigala, M., & Christou, E. (2012). Social Media Change the Name of the Game in the Tourism and Hospitality Industries, *The European Financial Review*, 20 October, available at: <http://www.europeanfinancialreview.com/?p=1340>.
- Hagger, M. S., Chatzisarantis, N. L., & Biddle, S. J. (2002). The influence of autonomous and controlling motives on physical activity intentions within the Theory of Planned Behaviour. *British journal of health psychology*, 7(3), 283-297.
- Hajli, N., Shanmugam, M., Powell, P., & Love, P. E. (2015). A study on the continuance participation in on-line communities with social commerce perspective. *Technological Forecasting and Social Change*, 96, 232-241.
- Hall, J. A., & Pennington, N. (2013). Self-monitoring, honesty, and cue use on Facebook: The relationship with user extraversion and conscientiousness. *Computers in Human Behavior*, 29(4), 1556-1564. doi: <http://dx.doi.org/10.1016/j.chb.2013.01.001>
- Hampson, S. E., Andrews, J. A., & Barckley, M. (2007). Predictors of the development of elementary-school children's intentions to smoke cigarettes: Hostility, prototypes, and subjective norms. *Nicotine & Tobacco Research*, 9(7), 751-760.
- John, Naumann, L., & Soto, C. (2008). Paradigm Shift to the Integrative Big Five Trait Taxonomy: History, Measurement, and Conceptual Issues. In O. John, R. Robbins & L. Pervin (Eds.), *Handbook of Personality: Theory and Research* (pp. 114-156): Guilford.
- Jspeert, R. and Hernandez-Maskivker, G. Active sport tourists: Millennials vs baby boomers. *Journal of Tourism, Heritage & Services Marketing (JTHSM)*, 6, 2 (2020), 12-20.

- Krakov, S., & Corsale, A. (2021). Sieving tourism destinations: Decision-making processes and destination choice implications. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 33–43.
- Lee, J.-E. R., Moore, D. C., Park, E.-A., & Park, S. G. (2012). Who wants to be “friend-rich”? Social compensatory friending on Facebook and the moderating role of public self-consciousness. *Computers in Human Behavior*, 28(3), 1036–1043. doi: <http://dx.doi.org/10.1016/j.chb.2012.01.006>
- Lee, S.-Y., Hansen, S. S., & Lee, J. K. (2016). What makes us click “like” on Facebook? Examining psychological, technological, and motivational factors on virtual endorsement. *Computer Communications*, 73, Part B, 332–341. doi: <https://doi.org/10.1016/j.comcom.2015.08.002>
- Liu, D., & Campbell, W. K. (2017). The Big Five personality traits, Big Two metatraits and social media: A meta-analysis. *Journal of Research in Personality*, 70(Supplement C), 229–240. doi: <https://doi.org/10.1016/j.jrp.2017.08.004>
- Lo, I. S., McKercher, B., Lo, A., Cheung, C., & Law, R. (2011). Tourism and online photography. *Tourism Management*, 32(4), 725–731. doi: <http://dx.doi.org/10.1016/j.tourman.2010.06.001>
- Marengo, D., Poletti, I., & Settanni, M. (2020). The interplay between neuroticism, extraversion, and social media addiction in young adult Facebook users: Testing the mediating role of online activity using objective data. *Addictive Behaviors*, 102, 106150. doi: <https://doi.org/10.1016/j.addbeh.2019.106150>
- Marino, C., Vieno, A., Pastore, M., Alberty, I. P., Frings, D., & Spada, M. M. (2016). Modeling the contribution of personality, social identity and social norms to problematic Facebook use in adolescents. *Addictive behaviors*, 63, 51–56.
- McCrae, R. R., & John, O. P. (1992). An Introduction to the Five-Factor Model and Its Applications. *Journal of Personality*, 60(2), 175–215. doi: 10.1111/j.1467-6494.1992.tb00970.x
- Mehdizadeh, S. (2010). Self-presentation 2.0: Narcissism and self-esteem on Facebook. *Cyberpsychology, Behavior, and Social Networking*, 13(4), 357–364.
- Misirlis, N., Lekakos, G. and Vlachopoulou, M. Associating Facebook measurable activities with personality traits: A fuzzy sets approach. *Journal of Tourism, Heritage & Services Marketing*, 4, 2 (2018), 10–16.
- Moore, K., & McElroy, J. C. (2012). The influence of personality on Facebook usage, wall postings, and regret. *Computers in Human Behavior*, 28(1), 267–274. doi: <http://dx.doi.org/10.1016/j.chb.2011.09.009>
- Mugobi, T., & Mlozi, S. (2021). The impact of external factors on ICT usage practices at UNESCO World Heritage Sites. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 3–12.
- Nadkarni, A., & Hofmann, S. G. (2012). Why do people use Facebook? *Personality and Individual Differences*, 52(3), 243–249. doi: <http://dx.doi.org/10.1016/j.paid.2011.11.007>
- Nechoud, L., Ghidouche, F., & Seraphin, H. (2021). The influence of eWOM credibility on visit intention: An integrative moderated mediation model. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 54–63.
- Önder, I., Gunter, U., & Gindl, S. (2020). Utilizing Facebook statistics in tourism demand modeling and destination marketing. *Journal of Travel Research*, 59(2), 195–208.
- Orosz, G., Tóth-Király, I., & Bőthe, B. (2015). Four facets of Facebook intensity—The development of the Multidimensional Facebook Intensity Scale. *Personality and Individual Differences*.
- Ozkan, S., & Kanat, I. E. (2011). e-Government adoption model based on theory of planned behavior: Empirical validation. *Government Information Quarterly*, 28(4), 503–513. doi: <https://doi.org/10.1016/j.giq.2010.10.007>
- Pi, S.-M., Chou, C.-H., & Liao, H.-L. (2013). A study of Facebook Groups members’ knowledge sharing. *Computers in Human Behavior*, 29(5), 1971–1979. doi: <http://dx.doi.org/10.1016/j.chb.2013.04.019>
- Rosen, P. A., & Kluemper, D. H. (2008). The impact of the big five personality traits on the acceptance of social networking website. *AMCIS 2008 proceedings*, 274.
- Ryan, T., & Xenos, S. (2011). Who uses Facebook? An investigation into the relationship between the Big Five, shyness, narcissism, loneliness, and Facebook usage. *Computers in Human Behavior*, 27(5), 1658–1664. doi: <http://dx.doi.org/10.1016/j.chb.2011.02.004>
- Şahin, F., Karadağ, H., & Tuncer, B. (2019). Big five personality traits, entrepreneurial self-efficacy and entrepreneurial intention. *International Journal of Entrepreneurial Behavior & Research*.
- Samy, H. (2016). Exploring Factors that Influence Domestic Tourists’ Satisfaction with Budget Hotel Services in Egypt. *Journal of Tourism, Heritage & Services Marketing*, 2(2), 17–22. <http://doi.org/10.5281/zenodo.376344>.
- Sedghi, A. (2014). Facebook: 10 years of social networking, in numbers. *The Guardian*. Retrieved from <http://www.theguardian.com/news/datablog/2014/feb/04/facebook-in-numbers-statistics>.
- Seidman, G. (2013). Self-presentation and belonging on Facebook: How personality influences social media use and motivations. *Personality and Individual Differences*, 54(3), 402–407. doi: <http://dx.doi.org/10.1016/j.paid.2012.10.009>
- Seidman, G. (2014). Expressing the “True Self” on Facebook. *Computers in Human Behavior*, 31(0), 367–372. doi: <http://dx.doi.org/10.1016/j.chb.2013.10.052>
- Sigala, M., & Christou, E. (2006). Investigating the impact of e-customer relationship management on hotels’ website service quality. *ECIS 2006 Proceedings*, 118, 1–13.
- Skues, J. L., Williams, B., & Wise, L. (2012). The effects of personality traits, self-esteem, loneliness, and narcissism on Facebook use among university students. *Computers in Human Behavior*, 28(6), 2414–2419. doi: <http://dx.doi.org/10.1016/j.chb.2012.07.012>
- Smith, M. M., Saklofske, D. H., & Nordstokke, D. W. (2014). The link between neuroticism and perfectionistic concerns: The mediating effect of trait emotional intelligence. *Personality and Individual Differences*, 61–62(0), 97–100. doi: <http://dx.doi.org/10.1016/j.paid.2013.12.013>
- Su, C. C., & Chan, N. K. (2017). Predicting social capital on Facebook: The implications of use intensity, perceived content desirability, and Facebook-enabled communication practices. *Computers in Human Behavior*, 72, 259–268. doi: <http://dx.doi.org/10.1016/j.chb.2017.02.058>
- Tan, W., Yang, C. (2012). Personality Traits Predictors of Usage of Internet Services. Paper presented at the International Conference on Economics, Business Innovation, Singapore.
- Trafimow, D., Sheeran, P., Conner, M., & Finlay, K. A. (2002). Evidence that perceived behavioural control is a multidimensional construct: Perceived control and perceived difficulty. *British Journal of Social Psychology*, 41(1), 101–121.
- Wilson, K., Fornasier, S., & White, K. M. (2010). Psychological predictors of young adults’ use of social networking sites. *Cyberpsychology, Behavior, and Social Networking*, 13(2), 173–177.
- Zywica, J., & Danowski, J. (2008). The Faces of Facebookers: Investigating Social Enhancement and Social Compensation Hypotheses; Predicting Facebook™ and Offline Popularity from Sociability and Self-Esteem, and Mapping the Meanings of Popularity with Semantic Networks. *Journal of Computer-Mediated Communication*, 14(1), 1–34. doi: 10.1111/j.1083-6101.2008.01429.

## Appendix 1

Table 2: The operational definitions of the research variables

Research Variables	Operational Definitions
Openness (O)	O1. I use a rich vocabulary O2. I have a vivid imagination O3. I often have great new ideas O4. I can easily understand difficult and new concepts
Conscientiousness (C)	C1. I am always prepared C2. I look at the details C3. I never leave pending C4. I like the order in my stuff C5. I always follow a program C6. I am demanding in my work
Extraversion (E)	E1. I am always the focus of interest in a celebration E2. I feel comfortable between people E3. I always start a conversation first E4. I usually talk to many people (e.g. at a party) E5. I do not mind being at the center of attention
Agreeableness (A)	A1. I am interested in the problems of others A2. I am interested for people's problems A3. I am a sensitive person A4. I enjoy my spare time for others A5. I understand the feelings of others A6. I make them around me feeling comfortable
Neuroticism (N)	N1. I rarely feel despondent and sad N2. I never get anxious N3. I am high tempered person
Attitude (ATT)	ATT1. I find it a good idea to follow healthy eating or sports tips that suggest various pages / groups on Facebook. ATT2. I would feel enjoyable if I follow healthy eating or sports tips that suggest various pages / groups on Facebook. ATT3. I would be very helpful to follow healthy eating or sports tips that suggest various pages / groups on Facebook.
Subjective Norms (SN)	SN1. Most of my friends think I should be following healthy eating or sports tips that suggest different pages / groups on Facebook. SN2. People who are important to me consider that I should follow healthy eating or sports tips that suggest different pages / groups on Facebook. SN3. The people who influence me with their opinions believe that it would be good to follow healthy eating or sports tips that suggest various pages / groups on Facebook.
Perceived Behavioral Control (PBC)	PBC1. I plan carefully the daily schedule so I follow the healthy eating or sports tips suggested by various pages / groups on Facebook. PBC2. If I really want it, it is very easy for me to follow the healthy eating or sports tips suggested by various pages / groups on Facebook. PBC3. It only depends on me if I follow the healthy eating or sports tips that suggest various pages / groups on Facebook.
Intention (IN)	IN1. If I have already used such tips, I intend to reuse. IN2. I believe that in the future I will use Facebook pages that offer tips for healthy eating or sports. IN3. I'm aiming to visit Facebook pages that offer tips for healthy eating or sports.
Behavior (B)	B1. I already use Facebook pages or other social media that offer tips for healthy eating or sports. B2. I already follow pages on Facebook or other social media that offer tips for healthy eating or sports.

SUBMITTED: JULY. 2020

1<sup>st</sup> REVISION SUBMITTED: DEC 20202<sup>nd</sup> REVISION SUBMITTED: FEB 2021

ACCEPTED: MAR 2021

REFEREED ANONYMOUSLY

PUBLISHED ONLINE: 18 OCT 2021



# Lisbon as a literary tourism site: Essays of a digital map of Pessoa as a new trigger

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## Abstract:

**Purpose:** The purpose of this paper is to analyse the potential of literary tourism in Portugal and explore the advantages of creating a digital literary map about the places associated with the widely renowned Portuguese author Fernando Pessoa (hereafter Pessoa), as well as the places that he suggests in one of his works, a tourist guide of Lisbon: *What the Tourist Should See* (1925).

**Methods:** Firstly, a study of the state of art of the key concepts was made in order to apply them in the second part, the methodology, in the case of studying Lisbon from Pessoa's perspective. Then, allying personal taste for the writer/author with interest in cultural promotion gave rise to a digital literary map of Pessoa's Lisbon. Methodologically, a questionnaire was applied covering a sample of 173 valid literary tourists.

**Results:** Literary tourism should be an object of in-depth studies, as it tends to be beneficial for cultural promotion of tourist destinations and products, specifically for literary tourists. Further limitations, implications and future suggestions of this study are provided.

**Implications:** This paper is the first to empirically test literary tourism, proposing a digital literary tourism map. Regarding the main findings, there is high interest from literary tourists in exploring the literary places associated with Pessoa, physically or digitally.

**Keywords:** Digital tourism, literary tourism; literary map; Fernando Pessoa

**JEL Classification:** L83, Z30, M00

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## 1 INTRODUCTION

Within the tourism sector, one of the most popular forms of travel is cultural tourism (Ferreira et al., 2019), in which tourists travel to historical sites, cultural landscapes, events

or festivals related to culture and visit museums (Vareiro et al., 2020), among many other activities (Du Cros & McKercher, 2020; Pereira et al., 2021). For Baleiro and Quinteiro (2018), literary tourism is commonly recognized as a part of cultural tourism or heritage tourism (Herbert, 2001). "Literary tourism is a form of tourism in which the primary



motivation for visiting specific locations is related to interest in literature" (Butler, 2000, p. 360).

This study focuses on literary tourism, i.e. a tourism niche based on tourists who show interest in visiting literary places, fictional or real, created or described in literary works or places through which writers have passed or with which they had some connection (Hoppen, Brown & Fyall, 2014). Watson (2006) advocates that the evolution of literary tourism derived from the great interest in authors' birthplaces as well as other biographical sites. Although literary tourism has received growing academic attention "many questions remain unexplored, particularly, why novels stimulate travel and the nature of the relationship between reading fiction and holidaymaking" (Mansfield, 2015, p. 19). Literary tourism should be considered, first and foremost, as a means of diversifying the supply of cultural tourism (Carvalho & Baptista, 2015), and it thus plays a key role in destination development and competitiveness (Hoppen, Brown & Fyall, 2014). Furthermore, literary tourism is also found to be an important factor of attraction due to destinations being referenced in a specific book or movie (O'Connor & Kim, 2014).

"This [literary tourism] activity continues to expand and many regions and sites exploit their literary connections, encouraging visitors to seek out places linked to authors' lives and their imaginative outpourings" (MacLeod, Shelley & Morrison, 2018, p. 388). Although this type of tourism is not yet widely studied, either by tourism agents or academics, it can bring numerous benefits not only for the destinations involved, but also for the dissemination of their intangible heritage (Hoppen, Brown & Fyall, 2014). For a more detailed knowledge of the literary tourist, information needs to be collected that complements the definition of this segment, that is, to recognize the motivations, the expenses and typologies, among other factors. It is also necessary to continue to analyse the destinations where literary tourism is already recognized, raising interest in the development of this type of tourism in destinations that are still little explored (Añel and Vila, 2017; Valeri, 2021b). Toward this direction, this study fills this detected gap, through a scientific case study that consists of the creation and adherence to a digital literary map about the most important places in the life of the renowned author/writer Fernando Pessoa.

This research is divided into two parts. Initially, in the literature review, theoretical research is done on the main concepts used, namely from tourism and culture to literature and digital. Later, in the methodology section, the dissertation focuses on a specific case: "A Lisboa de Pessoa" (The Lisbon of Pessoa), exploring the presence of biographical and bibliographical information in digital form. Finally, a digital literary map is created and its receptivity is evaluated through a quantitative method. The analysis of results, as well as the conclusions, limitations and future suggestions, are presented in the last part.

## 2 BACKGROUND LITERATURE

### 2.1. Literary tourism

In fact, books, very old tools, function as a form of registration and therefore act as a way to accumulate knowledge. Through books, various stories can be

transmitted with the power to transport the reader to other atmospheres, which may be real or imaginary. The reader can travel or experience other realities without moving geographically to a certain place, or physically insert themselves into a social plot (Sousa et al., 2021). A book, like tourism, can be seen as a leisure activity, and so combining the two areas allows tourists to obtain the best of both worlds (Redondo, 2017). Jiang and Yu (2020) found different dimensions of the embodied consumption of literary tourism, such as: perception, imagination, understanding and emotion (Santos et al., 2021b). These four underlying dimensions have an interrelated role in the multisensory experience of a literary tourism place. The value created by this interaction is so powerful that specific places related to important authors and their books attract millions of tourists every month. Although literary tourism is already a long-standing phenomenon, its development has been evident mainly in the 19th, 20th and 21st centuries. However, it has only recently gained prominence as a distinct subsector in the field of cultural tourism. According to Watson (2009), although literary tourism was already addressed in the Grand Tour, when aristocrats visited the house of Francesco Petrarca, for example. (Francesco Petrarca (1304-1374) was an Italian poet who contributed to the Italian Renaissance, and was considered the father of Italian Humanism and inventor of the sonnet.) It was around the 19th century that the practice of visiting places associated with writers, their books or their experiences began. Although the Grand Tour itinerary included certain places related to literature, the century that followed the century of the Enlightenment saw the expansion of these itineraries, socially and geographically, with the aim of creating intellectual individuals capable of exploring literary places in the United Kingdom and later in America. During the 20th and 21st centuries, however, this theme has only developed in recent decades (Watson, 2009).

Through a study on literary tourism, Quinteiro and Baleiro (2017) define "literature of tourism" as those literary texts that can add tourist value to a destination, thus giving rise to the practice of tourism. The authors classify this form of literature as "any literary work that promotes literary tourism" (Quinteiro & Baleiro, 2017, p. 12). This tourism literature exists when there is an oscillation between the imagination of the reader (based on the connection he or she has sought to establish between the text and the place/author, place/personage and place) and the physical world, that is, the physical spaces identified in the text to which the tourist moves, and contributes to the construction of the city identity (Daly et al., 2021). Literary tourism can also be included in cultural tourism due to its aesthetic and distinctive sense. Literature – prose, fiction, poetry or drama – differs from other forms of visual art or music in that it can potentially create personal involvement, understand the conventions used by the writer to narrate history and/or find the words to create aesthetic or semantic patterns (Quinteiro & Baleiro, 2017).

Literary tourism is a segment of tourism based on interest in literature as a motivation to visit a given place. During the trip the tourist can visit houses, old or current, that have belonged to the writers, living or dead, factual/fictitious places that may have inspired the writer or may have been created by him, or even places where literary events take place (Butler, 2015, quoted in Quinteiro & Baleiro 2017).



## 2.2. Literary place and literary itinerary

Marques and Cunha (2013) stated that literary tourism arises from the connection between an emotional aspect created by the tourist and that later related to a concrete physical space. Regardless of the emotional connection created either with a character, a book or the author, literary tourism is built from a geographical space. It is important, however, to distinguish "literary place" from "literary itinerary".

A tourist can travel to a literary place in order to discover places related to the writer's life, that is, the place where he was born or where he lived and which can serve as inspiration for those who visit them. Tourists also visit literary places that are the stage for real or fictional stories. These places may have been known to the author or may simply have been incorporated into an imagined or real story and have thus taken on special significance (Herbert, 2001). A tourist visits a particular place because of a deeper emotion than he or she feels towards the writer or the story. In addition to the factors highlighted, literary places can become stopping points in a certain itinerary due to individual characteristics (Herbert, 2001).

Literary itineraries, for Carvalho (2009), do not yet represent a strong role in economic, social and/or local/regional development. However, if the cultural agents responsible for preparing the itineraries are allied with tourism agents, a greater promotion of local culture and literature may emerge. According to Carvalho and Batista (2015), the routes oscillate between regional, supra-regional or international, so they involve places, landscapes and/or attractions related to the writer. It is up to the tourist to decide whether to travel independently or on the basis of a tourist package. According to Mendes (2007, p. 92), "the itineraries draw the profile of the region and of the author himself (...)" allowing a reading of the work in question through the collective imaginary provided or through the autobiographical trend. In this way, the reading complements itself on the basis of the landscape route visited, which combines aesthetics with ethics.

The literary places present in itineraries, or which can be visited individually, are listed as tourist attractions or as elements that are added to tourist attractions. It is up to tourism to foster the cultural/literary image capable of being present in the mind of the visitor, thus creating an appeal to visit these places (Mendes, 2007). Thus, it is understood that the places marked by the writer, in life or on paper, establish an image favourable to the destination, consequently attracting visitors. Writers have the ability to change prevailing attitudes towards scenery or nature, reversing real landscapes into literary landscapes based on imagination and emotion, evoking distant memories (Agarwal & Shaw, 2017).

## 2.3. Visitor, tourist and literary pilgrim

Visiting literary places can be something practised especially by groups: visitors, tourists and literary pilgrims. The literary tourist seeks evidence of the author's real life in order to use it symbolically for inspiration or as a complement to reading. Writers are thus great personalities capable of attracting tourists. Each reader is a member of an audience that makes use of the word and has access to this art form, since he or she understands how it can be used formally and stylistically (Robinson & Andersen, 2004). According to Jia (2009), the literary tourist seeks authenticity in the objects visited in his trip and something that helps him discover his "real self".

Quinteiro and Baleiro (2014) mention the existence of two types of visitors interested in literary tourism, namely the literary tourist and the literary pilgrim. According to the authors, the latter appeared with the Grand Tour, and travelled in order to personally experience a connection with the author who he/she appreciates, by walking the paths he had passed along, the places he had seen, where he had lived and where he had been buried, among other places that foster this connection. The notion of the existence of literary pilgrims is not recent (Herbert, 2001). The author states that literary pilgrims are educated tourists, with experience in classics and with sufficient cultural capital to appreciate and understand this form of heritage.

Literary pilgrims, or individuals with a strong literary conscience, are especially motivated by the narrative or the life of the author in question. Other tourists have motivations that may not initially be focused on literature, as is the case with individuals who travel to get to know new landscapes, but when they find themselves in the literary place they end up relating to that space in order to recreate their personal narrative and thus develop emotional or even spiritual ties. Literary places that share something with a narrative contribute to this emotional bond because they have already been imagined, and thus become sources of personal and social creations, images previously shaped by society and political strategies (Marques & Cunha, 2013). There is, for example, the literary pilgrimage, as well as others, the aim of which is to demonstrate a feeling of deep commitment when experiencing being in a place on a spiritual level. Literary pilgrims therefore want to find themselves in unison with a place and feel as if they were transported to another immaterial dimension (Fairer-Wessels, 2005).

Carson et al. (2017) reveal that the literary tourist is changing. They argue that "cities are not merely products to be consumed, but rather, they continually grow and add to the environment around them (p. 380). As such, this type of tourist wants to obtain a vast number of literary experiences capable of revealing the complexity of the history of the place they visit, through the built environment, also obtaining greater access to digital information about these places and experiences. These authors (Carson et al., 2017) encourage the idea that there should be an interconnected approach to the various forms of cultural tourism, which can be adapted to various international urban environments. Thus, the literature contributes to add layers of creative production that contributes to a more complex cultural environment.

## 2.4. Literary tourism in the world and in Portugal

Literary tourism is related to heritage tourism because of interest in the personal life stories of writers or their literary works which are usually narrated according to a historical context. There are many examples throughout the world of writers who have voluntarily or involuntarily granted certain cities a literary connection. Shakespeare, although British, by writing "Romeo and Juliet" (1595), eternalized Verona in Italy, the place where the narrative takes place, and where it is possible, at present, to visit the "house" and the respective balcony of Juliet, as well as her tomb in St Francis' Monastery. Scott Fitzgerald made the Long Island coast, near New York, in the United States, a place to visit for fans of "The Great Gatsby" (1925). In England, more specifically in Yorkshire, there are several references to the fields and

villages described in the works of the Brontë sisters, especially in Emily Brontë's "Wuthering Heights" (1847). Recalling World War II, Anne Frank reported the calamities that she went through in her diary, and today many visitors come to Amsterdam, Holland, to visit the house where she was hiding in her last years (Agarwal & Shaw, 2017).

In the literary field, several creative cities are highlighted by UNESCO. In Spain, Barcelona has gained universal recognition as the publishing centre for Spanish, Latin American and Catalan literature since the 19th century. The fact that it belongs to the Creative Cities group makes it possible to promote the literature sector at a local level and to host an annual convention of international publishers, for example. Also in Europe, Milan (Italy), Manchester (United Kingdom) and Krakow (Poland) are part of this network of cities. In Portugal, Óbidos was designated by UNESCO as the Creative City of Literature in 2015 and has since been known as the Literary Village. This literary project is characterized by artistic and cultural manifestations marked by quality with local and world recognition (UNESCO, 2020).

Portugal is known for its "(...) climate, natural landscapes, heritage, gastronomic wealth and hospitality of the population" (Silva, 2018, p. 34). However, there is still potential to explore the country in the form of literary tourism. This niche has been gradually adopted, offering new routes and/or itineraries related to literary places (Silva, 2018). In Portugal, for example, the capital is recognized by several writers, such as Fernando Pessoa, Eça de Queirós or Camões, and therefore has several literary milestones. However, there are few routes within cultural tourism and literary tourism and they are not prominent in cultural tourism networks. The construction of a system capable of renewing the city's image through the memory of narratives and/or writers has been considered; however, it is still at an early stage (Henriques & Henriques, 2010). Although literary tourism is a niche, and in the case of Portugal it is aimed at its residents, it is possible to "boost and strengthen cultural synergies (...)" (Henriques & Quinteiro, 2011, p. 606) in literary sites, and in the case of study, the development of the niche allows socio-economic development.

## 2.5. Digital literary itinerary

Digital technology can be a fundamental aid to cultural heritage, since in addition to sharing information, it promotes and sells its offerings, improving the visitor experience (Maurer, 2015). There is a diversity of literary sites, comprising eight different typologies of literary-inspired sites, from writers' homes, graves and bookshop tourism to literary festivals (Gentile & Brown, 2015). Literary sites, together with the words of the writer, allow the design of itineraries, which can be "(...) built, amplified and even created and staged to attract tourists" (Quinteiro and Baleiro, 2017, p. 72), which gives them an essential role. According to Quinteiro and Baleiro (2017), a literary itinerary is not only about listing literary places, but also about aggregating other elements as forms of expression present in the heritage and cultural heritage, or the suggestion of performing leisure activities or recreation.

Thus, the following types of routes exist: (1) short itinerary: no suggestion for accommodation, they are carried out in a few hours; (2) normal itinerary: they last between one and

two weeks; (3) linear itinerary: the exit point differs from the arrival point; (4) nodal itinerary: the exit point and the arrival point coincide; (5) local, regional or national nature; (6) travel: walking, road, rail, sea, river or air (Quinteiro & Baleiro, 2017).

Using a brief survey of literary itineraries from different countries, one can find, for example, the Literary Tour to France – From Hugo to Proust: Exploring Literary Paris, an itinerary that primarily explores the Parisian city within the literary places marked by Victor Hugo, Ernest Hemingway, Alexandre Dumas, among others. The itinerary includes a visit to museums, restaurants, cafés, the Opera, heritage buildings and more (WorldStrides, 2020). It is also possible to find a tour involving several French cities such as Orléans, Bordeaux, Lyon, Toulouse, as well as others, with the aim of getting to know the universe of books and booksellers, suggested by Robert Darnton (2014), for those who want to discover France from 1769 and 1789.

In Spain there are several literary routes to various cities that have been recognised by writers. The work "Don Quixote", written by Miguel de Cervantes, eternalized places like Toledo, Albacete, Ciudad Real and Guadalajara, which were the stage of the nobleman's trips. There is also the option of visiting, for example, the "Barrio de las Letras" in Madrid, which includes a visit to museums, art galleries, bookshops, cafés and music tents (El País, 2019).

Travelling to the British Isles, it is tempting to travel through the lands of several classical writers of English literature. The British Authors Tour lasts ten days (nine nights), includes first class accommodation and starts in London. Between bookshops and castles, from England to Scotland, the itinerary involves places related to writers such as Charles Dickens, Conan Doyle, Jane Austen, The Brontë Sisters and Beatrix Potter, among others. In addition to this general itinerary, there are itineraries about certain authors or specific works available, such as the Grand Harry Potter Tour or the Jane Austen Tour. As for Ireland, there is a possibility to take a Literary Tour of Ireland through the itinerary created by Muriel Bolger, Ireland's Literary Heritage.

In Portugal, through the main tourist entity – Turismo de Portugal – it is possible to access Literary Routes online ([www.visitportugal.com](http://www.visitportugal.com)). In addition to the option of building a personalised itinerary, there are scripts about the "Writers to the North", the "Elephant's Journey", a journey that involves the centre of Portugal, the "Literary Tours in Lisbon", which highlights literary places related to Pessoa, Saramago and Eça de Queiroz, for example, and also the "Literary Tours of the Azores" (Turismo de Portugal, 2020). Although they are present on digital platforms in order to reach a larger number of individuals, these itineraries have the potential to gain greater recognition.

In the city of Lisbon, Casa Fernando Pessoa offers a tour, Places, Trajectories and Affections of Pessoa, which goes through the outstanding places of Fernando Pessoa's life and work. This itinerary can be printed and accompanied by an audio that complements the description and characterization of the literary places. The José Saramago Foundation also offers three itineraries based on Saramago's works, offering tourists the chance to explore Lisbon, take the Portuguese route of "A Viagem do Elefante" (The Elephant's Journey) or get to know the places related to the work "Levantando do Chão" (Raised from the Ground). A Portuguese entity,

"Lisbon Literary Tours", present in digital format, involves a group of qualified guides able to present the main places of the Portuguese capital, according to renowned writers such as Fernando Pessoa, José Saramago, Eça de Queirós and Luís de Camões.

### 3 METHODOLOGY

#### 3.1. Methodological approach

Lisbon is located in the Lisbon and Tagus Valley Region, an area of 12 216 km, thus aggregating the NUTIII of the Lisbon Metropolitan Area, Lezíria do Tejo, Médio Tejo and Oeste. The fact that it is located on the West Coast of Europe grants it the privilege of being the most western border of the European continent. This region not only centralizes various scientific, technological, economic, financial and political infrastructures, but also offers a wide variety of landscapes, activities and culture, making this area authentic (CCDR-LVT, 2019). The Portuguese capital has been the scene of important historical scenarios and has witnessed the existence of some of the greatest Portuguese writers. Thus, with the writer Fernando Pessoa as a case study, the first methodological part will develop the analysis of the city at a cultural and literary level. Afterwards, the writer in question is approached, as are the literary places associated with him. In the final part, a digital literary map present in an omnichannel is suggested, the usefulness and interest of which will then be studied by means of a questionnaire survey. This questionnaire is used to collect data in order to understand the profile of (possible or already existing) literary tourists.

#### 3.2. Literary places of Pessoa

Lisbon was a special city for Pessoa. In addition to being his place of birth, it was his home for practically all his life and ended up being the place where his life ended. The writer made a point of mentioning the capital several times in his works.

Thus, the most emblematic places with the literary signature of Pessoa stand out:

- Chiado ("The bell of my village, Gaspar Simões, is that of the Church of the Martyrs there in Chiado". Letter to João Gaspar Simões, 1931; "In Chiado I met José Figueiredo and we spent some time at the entrance of Rua da Emenda (...) " *Diário de Fernando Pessoa*, 1913);
- Graça;
- Jardim da Estrela ("The Garden of the Star, in the afternoon, is for me the suggestion of an ancient park, in the centuries before the discontent of the soul". LdD, Bernardo Soares, n.d.) - Rossio ("Awakening of Rossio, at the doors of the cafes (...) ", Awakening of the city of Lisbon, later than the others, Álvaro de Campos, n.d.; "That was the other day, he said, in the "Brasileira do Rossio". A certain friend of mine had, for some time, the mania of hypnotism..., Fernando Pessoa, n.d.; "Anyway, the trip between Rossio and Estrela, which is not usually a very transatlantic thing of beauty, was yesterday twice pleasant (...), Letter to Ophélia Queiroz, Fernando Pessoa, 1929);
- Rua do Arsenal ("The Arsenal Street, the Customs Street, the extension of the sad streets that spread (...) ", LdD,

Bernardo Soares; "(...) You can hardly imagine that Rua do Arsenal, in terms of movement, has been my own head". Letter to Mário Beirão, Fernando Pessoa, 1913; "(...) it often happened that I came from home and passed by Cais do Sodré and Rua do Arsenal, where I buy English newspapers every day". Letter to Ophélia Queiroz, Fernando Pessoa, 1920);

- Rua do Carmo;
- Rua dos Douradores ("But the case is in the Rua dos Douradores office and the boys are an obstacle". LdD, Bernardo Soares; "(...) in this Rua dos Douradores that is my whole life (...) " LdD, Bernardo Soares; "Leaving Rua dos Douradores for the Impossible..." LdD, Bernardo Soares; "See me on the fourth floor above Rua dos Douradores (...)", LdD, Bernardo Soares, n.d.);
- Rua Nova do Almada ("As I was walking down Rua Nova de Almada today, I suddenly noticed the back of the man who was walking down it in front of me". LdD, Bernardo Soares, n.d.) "Whoever has never left Lisbon travels in infinity in the car to Benfica, and if one day he goes to Sintra, he feels he has travelled to Mars". Book of Restlessness, Bernardo Soares, undated;
- St. Peter of Alcantara ("These casual words were dictated to me by the great expanse of the city, seen in the universal light of the sun, from the top of St. Peter of Alcantara". LdD, Fernando Pessoa, n.d.);
- Terreiro do Paço (Praça do Comércio, seen from the Tagus) - "But I love the Tagus because there is a big city next to it" LdD, Bernardo Soares; "Ócio Tejo ancestral and silent, / Little truth where the sky is reflected" Lisbon Revisited, Álvaro de Campos, 1923; "Pelo Tejo vai-se para o Mundo (...)", O Guardador de Rebanhos, Alberto Caeiro, 1914).

#### 3.3. Digital literary tourism map of Pessoa in Lisbon

The author and writer Fernando Pessoa is part of Portugal's distinguished history. Fernando Pessoa is a writer whose name is recognized nationally and internationally and his work is a source of pride across borders. After analysing the potential that this niche tourism represents (Cillo et al., 2021), and recognizing the scarcity of studies on the subject, it becomes relevant to analyse the travelling context of several individuals, as well as their motivation and loyalty towards this proliferative form of tourism.

#### 3.4. Research instrument

The number of tourists accessing the Internet before, during and after the trip is increasing. Initially, they look for information about what to visit in a certain tourist destination and then share their experience online, and so it is important for any entity to have a digital presence. A questionnaire on literary tourism in digital format was therefore developed in this methodological part of this study. Due to the exploratory nature of this study, to goal of this survey was to collect additional information regarding the tourists profile and the importance of the literary topics regarding the Pessoa's itinerary in Lisbon. As such, we used a non-purposive sampling approach, more specifically a non-probabilistic sampling method combined with a snowball technique to obtain additional responses to the questionnaire.

Respondents were asked to complete the online questionnaire before, during and after a trip, by providing the Google Forms

link which was provided by the three tours guides that agreed to collaborate with this study. Since it is very difficult to obtain the respondents' participation in a direct approach, the use of this approach benefited the contact with visitors, and was considered the best solution to assess the perspectives of cultural-oriented visitors. Furthermore, the researchers opted for a questionnaire in comparison with other qualitative approach (e.g. in-depth interviews, focus groups) since visitors were not available to spend too much time responding to extensive conversations. The questionnaire was applied in bilingual form (Portuguese and English).

A diversified sample was obtained; (1) Portuguese students and young people, since part of the writer's work is part of the educational plan (high school and high school), and students may acquire greater motivation to study Pessoa by getting to know his life and the places that marked him and that were marked by him; (2) literary visitors/tourists, understood as visitors or tourists who travel mainly for cultural reasons; and (3) literary tourists – tourists who seek information before, during and after a trip.

Thus, considering the online exhibition, in order to divulge the subject and obtain various opinions on it, a heterogeneous sample was obtained according to the respondents' profile. The questionnaire was carried out between 13 May and 13 June 2020, and 173 fully valid answers were obtained in total. The questionnaire was composed of the five following sections:

Section I – Sociodemographic data – this first part aims at obtaining more personal information, i.e. data on the age, gender, residence, academic qualifications and professional status of the sample. The aim is to know the respondent and create a collective profile.

Section II – Travel context – the motivation factor is essential in choosing a tourist destination. There can be several and varied reasons for a tourist to travel, and the choice of a destination can come from a set of individual variables such as need, will or desire. These needs oscillate between intrinsic (through the psychological perspective) or extrinsic (related to the social environment in which they are inserted). However, assessing motivations in tourism is somewhat relative, since each tourist will have specific reasons to travel (Heitmann, 2011; Christou et al., 2021). This questionnaire aims to explore the main motivation of the sample, ranging from nature, religion, culture, family/friends, gastronomy/wines, sport, business, health and well-being, or other personal options (Santos et al, 2021c).

Section III – Internet use (for tourism and cultural purposes) – the Internet is an important tool in the tourism industry, since it allows both the planning of trips and the search for information on destinations, booking transport and accommodation, among others (Buhalis & Jun, 2011; Gretzel et al., 2012). In fact, new technologies help to promote, market and interact with the final consumer (Santos et al., 2021a). According to Alves (2010), the union between social networks and the local media allows "a reorganization of the processes of dissemination, creation, management and marketing of tourism products and destinations, among other possibilities opened by these invocations in communication" (Alves, 2010, p. 854). Therefore, with the results obtained in this part, it will be possible to understand if the creation of a digital map will be relevant or not (Chemli et al., 2020; Sousa et al., 2021; Toanoglou et al., 2021; Valeri, 2021).

Section IV – Cultural interest – as previously mentioned, almost all tourism activities involve some element of culture, directly or indirectly. The definition of culture is vast and so is cultural tourism, which may include heritage, architecture, arts, gastronomy, sports, handicrafts, pilgrimages, among others, as stated in the literature review. It is essential to know what cultural interest has developed before and during the trip.

Section V – Knowledge of Portuguese literature and image of Fernando Pessoa – considering literature a key piece in this dissertation, it is necessary to study the previous knowledge and interest in Portuguese literature. Finally, the questions presented are related to the image of this Portuguese writer. They may know Pessoa partially or more deeply and interest in him may fluctuate. In this way, this is a key point not only for the creation of a digital literary map, but also for the encouragement of cultural sharing.

## 4 RESULTS

### 4.1. Sample profile

The following table describes the socio-demographic characteristics of the two samples. As can be seen, the most representative ages range from 18 to 55, with foreigner visitors being younger. Respondents are from several countries in the foreign sample, but with a higher prevalence of Peruvian, Turkish and British nationalities.

Table 1: Sociodemographic profile of the sample

	Portuguese Inquiry	English Survey
Gender	Female (75%)	Female (69.2%)
Nationality	Portuguese (96, 3%)	Peruvian, Turkish and British (15.4% each)
Country of Residence	Portugal (95, 6%)	Turkey, Turkey and United Kingdom (15.4%)
City of Residence	Barcelos (35%)	Tujillo and Istanbul (15.4%)
Age	36 - 55 years (44.4%)	18 - 35 years (100%)
Academic Qualifications	Graduation (43.8%)	Graduation (53.8%)
Professional Occupation	Employee (64.4%)	Student (76.9%)
Net Monthly Salary	€1000 - €2500 (51.4%)	€1000 - €2500 (60%)
Children	None (51.2%)	None (92, 3%)

### 4.2. Travel context

Table 2 shows the context in which travel takes place. It should be noted that in both groups, culture is the main motivation for travelling, with the majority preferring to travel with family or friends.

Table 2: Travel context

	Portuguese Questionnaire	English Questionnaire
Travel Motivation	Culture (28, 64%) Nature (23%) Family/Friends (17, 61%)	Culture (27, 1%) Nature (20, 8%) Gastronomy/Wine (20, 8%)
Who You Travel With	With family/friends (47, 5%) Couple with children (23, 3%) Couple (18, 1%)	With family/friends (40, 9%) Alone (36, 4%) Couple (22, 7%)
Travel Frequency	Once a year (41, 9%)	Once a year (46, 2%)
Average Stay Duration	3-7 nights (60, 6%)	3-7 nights (69, 2%)
Travelling in National Territory	Yes (91, 9%)	Yes (53, 8%)
Travel during the Trip	Car (47, 5%) Public transport (16, 3%) On foot (13, 1%)	Train (27, 9%) Public transport (25, 6%) On foot (20, 9%)

### 4.3. Internet use (for tourism and cultural purposes)

The Internet is an important source at all stages of a cultural journey. As shown in table 3, the Internet comprises an essential tool from travel planning to post-trip behaviour. However, throughout these various stages, the importance recognized declines. Thus, while 92.5% reveal that they use the internet to plan the trip, the use of the internet to share their lived experience is only 53.8%.

Table 3: Internet use (for tourism and cultural purposes)

	Portuguese Inquiry	English Survey
Planning Your Trip over the Internet	Yes (92, 5%)	Yes (100%)
Book on Digital Platforms	Yes (85, 6%)	Yes (92, 3% each)
Internet as a Source of Information (before and during the trip)	Yes (96, 9%)	Yes (100%)
Sharing Experience on Digital Platforms	Yes (53, 8%)	Yes (53, 8%)
Use of ICT for Cultural Purposes	Yes (79, 4%)	Yes (53, 8%)
If "Yes", Periodicity	1 - 2 times a week (63%)	Yes (57, 1%)

### 4.4. Cultural interest

Table 4 shows the results in relation to cultural interest when travelling. The vast majority not only show that the cultural dimension is important when visiting a tourist destination, but also practise it, whether planned or not.

Table 4: Cultural interest

	Portuguese Inquiry	English Survey
Planning the Visit to Cultural Elements	Yes (95%)	Yes (100%)
Visit Cultural Elements without Planning	Yes (92, 5%)	Yes (100%)
Important to Know the History/Culture of a Tourist Destination	Yes (98, 1%)	Yes (100%)
Literature as an Important Component of Culture	Yes (99, 4%)	Yes (92, 3%)

### 4.5. Knowledge of Portuguese literature and image of Fernando Pessoa

Table 5 presents the distribution of participants according to the importance of reading habits and the degree of knowledge about the work of Fernando Pessoa. These results show that despite the recognition of the importance of reading by all participants, only half actually have reading habits.

Table 5: Knowledge of Portuguese literature and image of Fernando Pessoa

	Portuguese Inquiry	English Survey
Reading Habits Practice	Yes (54, 7%)	Yes (76, 9%)
Important Reading Habits	Yes (99, 4%)	Yes (100%)
Knowledge of Fernando Pessoa	Yes (100%)	No (84, 6%)
Reading of Something by Pessoa (orthonym/heteronym)	Yes (91, 3%)	No (92, 3%)
Search for Information about the Writer/Delegate Online	Yes (71, 9%)	No (69, 2%)
Visit to Lisbon		Yes (92, 31%)
Interest in Exploring Personal Places	Yes (88, 1%)	Yes (76, 9%)
Interest in Exploring Personal Places online	Yes (91, 3%)	Yes (69, 2%)
Knowledge of Personal Places/Markets	Yes (60, 6%)	No (100%)

As a kind of special interest tourism, literary tourism takes place in the junction of cultural and heritage tourism. Whereas heritage tourism is more placed-based, cultural tourism is rooted in the creation of anthropological sense (Otay Demir et al., 2021). This study, being of an exploratory nature, since the objective is to analyse the potential of

literary tourism in Portugal, as well as the advantages of a digital literary map of Pessoa, was complemented on the basis of a questionnaire survey. To sum up, through the second part, the respondent is recognized as a traveller/tourist, concluding that culture is the main reason that drives him to a tourist destination, followed by nature and family/friends. This information is fundamental for the subject under study, since it addresses literary tourism, a niche of cultural tourism, and that by incorporating personal, nature-based places in a digital map, for example, these can be visited with friends or family, whether they live in the destination or not.

Considering that most of the respondents travel only once a year and their stay mainly varies between 3 and 7 nights, it is important to create new attractions that are both a form of leisure and a source of knowledge. These can fill a large part of the travel time or not – hence the role of the tourist in planning a trip in advance with the necessary information to give him or her the power of choice. As this study incorporates a digital map, it would be essential to obtain information about the respondent's contact with the "new digital era". This group of questions obtained very positive results which indicate that, in general, respondents from both samples use the Internet to plan a trip, make reservations on digital platforms and make use of this network to acquire more information when they are in a tourist destination. They then make a point of sharing their experiences online, for example through social networks or booking platforms (Valeri, 2016; Baggio & Valeri, 2020; Valeri & Baggio, 2020a; 2020b; 2020c; 2021). There is also access to information and communication technologies in order to explore cultural themes, about once or twice a week. Therefore, a digital presence is indisputable nowadays, both for entities and consumers, and taking advantage of the fact that the number of individuals planning a trip over the Internet is high, it is essential to be present and offer what they are looking for (or need and don't know).

In the field of cultural interest, the questions were quite direct and the results quite positive when framed in the study. It is recognized that the vast majority of respondents in the sample are in the habit of visiting some cultural element when they are in a tourist destination and end up doing so even when they had no previous intention (Albattat et al., 2020). It can be said that about 100% (of the two samples) consider it important to know the history and culture of a destination and also consider literature a relevant cultural component. If there is interest in this, it should be explored. Finally, and in perhaps the most important group of questions for the case, the results are very favourable to the case study. Going from the general to the particular, the result was obtained that a large part of the respondents have the habit of reading and almost all – except for one of the 173 respondents – understand that it is important to foster the practice of these habits.

As for the knowledge of Fernando Pessoa, the vast majority of respondents say they know who he is. The absolute majority resulting from the first survey have already read something by the writer, regardless of whether it was orthonymous or heteronymous. Thus, once again, the respondents in the first sample reveal that they have previously sought information about the writer or his legacy, as opposed to the second sample, in which the majority did



not. However, both samples claim to be interested in knowing some personal places if they planned a visit to Lisbon, just as they confirm the interest in visiting those places digitally, using a personalized map. Given the writer's presence in several corners of the capital, respondents were also asked a question about whether or not they know of any landmark or personal place which most of the sample in Portuguese know about, especially Café A Brasileira and the respective statue of the poet on the terrace. Chiado is still the most mentioned place, along with Casa Fernando Pessoa.

In the last part where the respondents had the opportunity to classify eleven items, it can be concluded that, in the case of the first sample, the evaluations oscillated mainly between very important and extremely important, while in the second sample, although the results also focused especially on these two options, they varied more, with more lower-scoring answers. These results highlight the interest of the respondents in knowledge and exploration of new tourism niches, which deserve to be studied and presented to the community. They recall illustrious names that highlight the culture and history of a destination and offer the opportunity to travel without leaving home, plan a trip or revisit such places when nostalgia for them arises.

## 5 DISCUSSION AND CONCLUSIONS

The results previously described in the field of literary tourism, based on the literature review, indicate the role of this niche which functions as a sustainable alternative for those who want to get to know a destination culturally, avoiding mass tourism as suggested by Dias et al. (2020). Literary tourism can only be perceived as the notion where perception, sensation, experience, and semiotics meet. To appeal to literary tourists with successful branding strategies and efforts (Sousa & Anjo, 2020), it is important to diagnose what sentiments and emotions are created about a place and what experiences in the specific parts of the place are highlighted in literary works (Chatzigeorgiou & Christou, 2020; Otay Demir et al., 2021; Valeri & Katsoni, 2021).

In addition to literary tourists, who seek to acquire knowledge about certain places that have influenced a writer or work in a certain way, there are literary pilgrims, whose intention is to find a more spiritual connection by visiting literary places. Considering this public, it is necessary for entities – both research and tourism – to explore this market and create solutions that correspond to tourists' expectations. This is a form of tourism which is accessible to all, non-seasonal, and can be adopted on either long or short trips. Literary tourism involves mediated textual experience (Otay Demir et al., 2021); when readers visit a place that they had read about, they perceive the place through the eyes of the author and within the sentimental state of the main characters of a novel (Baraw, 2017; Fotiadis, 2018; Del Chiappa et al., 2021).

The creation of a personal digital map can be useful for those who plan their trip over the Internet and at the same time have an interest in Lusophone literature. When exploring these places digitally, tourists can include in their personal itinerary those which they wish to visit physically. The map was also thought of for those individuals who want to know about these places or landmarks but who do not have the possibility of visiting the Portuguese capital. Thus, they can be "tourists"

from home. In addition these two groups, the map can also be advantageous for tourists who, after visiting Lisbon, feel nostalgia for such places and can access them with just a click. Note also the role that this map can play in teaching, acting as a more attractive complement in the study of the poet.

The results of the survey by means of the questionnaire prepared to complement this dissertation reveal that the majority of the public consulted undoubtedly have an interest in literary tourism in Portugal, especially in the case of Fernando Pessoa. In general, the interest in culture on the part of the respondents as tourists can be specified, with literature being one of those areas capable of receiving more attention. In addition to the closed answers, through the open answer question it is understood that there is a willingness to explore other writers from the places that were part of their path. As it is a relatively small market but one with purchasing power, combining tourism and culture will enable it to function as an added value element, both for the tourist destination and for the tourist.

Regarding the limitations inherent to this research, the greatest limitation was the period in which this research was developed (first semester of 2020), as there was a global pandemic – COVID-19 – which limited the course of study. This made it impossible, for example, to disseminate the survey in physical spaces, such as in Casa Fernando Pessoa, municipal libraries or bookstores, among others. The fact that most establishments were closed (especially between March 2020 and June 2020) made contact with them and the contribution of possible respondents impossible. Furthermore, considering that this study is if an exploratory nature, it opens the topic for further and more extended research. We believe the use of mixed methods could improve the article's findings and provides further detail and reliability of the final results.

As for future research, use of a method of quantitative analysis is suggested, using structural equation models to test a previously proposed conceptual model, with the appropriate variables and postulated hypotheses (such as consumer expectations, satisfaction, loyalty, word-of-mouth (WOM), quality of service provided and degree of consumer involvement, among others).

Future research can perform a similar analyses but with spatial categories, instead of temporal, to provide information on the distribution of sentiments, emotions and topics in relation to different places in a city (Fotiadis & Williams, 2018; Otay Demir et al., 2021; Mugobi & Mlozi, 2021; Bonarou, 2021; Nella et al., 2021; Sinclair-Maragh & Simpson, 2021). In other words, emotion maps of specific parts of the city can be created, as in the example of emotions of Lisbon or Oporto, to help identify locations in the city with potential to become marketing assets.

In addition, it would also be important to carry out methodological research of a qualitative nature, based on interviews, for example, with tourism agents directly involved in the field of literary tourism, as well as cultural agents. The creation of a synergy between tourism and culture will result in an advantage for both areas, and new strategies should be created in order to position literary tourism in Portugal.



## REFERENCES

- Agarwal, S. & Shaw, G. (2017). *Heritage, screen and literary tourism*. Channel View Publications.
- Albattat, A., Jamaludin, A., Zuraimi, N.S.M. & Valeri, M. (2020). Visit Intention and Destination Image in Post- Covid- 19 Crisis Recovery. *Current Issues in Tourism*. <https://doi.org/10.1080/13683500.2020.1842342>
- Alves, L. G. (2010). Applications of social networks and locative media in tourism communication. *Revista Turismo & Desenvolvimento*, 2(13/14), pp. 853-860.
- Añel, I.V. & Vila, N.A. (2018). Review of literary tourism and its current state. Analysis of the case of Galicia (España). *Cuadernos Geográficos*, 57(1), pp. 305-329.
- Baggio, R. & Valeri, M. (2020). Network science and sustainable performance of family businesses in tourism. *Journal of Family Business Management*. DOI 10.1108/JFBM-06-2020-0048
- Baleiro, R. & Quinteiro, S. (2018). A small place, by Jamaica Kincaid: envisioning literary tourism in Antigua. *Journal of Tourism and Cultural Change*. DOI: 10.1080/14766825.2018.1529772
- Baraw, C. (2017). Hawthorne, a pilgrimage to Salem, and the poetics of literary tourism. *Canadian Review of American Studies*, 47 (1), 76–11.
- Bonarou, C. (2021). The poetics of travel through unravelling visual representations on postcards: A critical semiotics analysis. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 44–53.
- Buhalis, D. & Jun, S. H. (2011). E-tourism. *Contemporary tourism reviews*, 1, pp. 2-38.
- Butler, R. (2000). Literary tourism. In Jafar Jafari (Ed.), *Encyclopedia of Tourism* (p. 360). London: Routledge.
- Butler, R. (2015). The evolution of tourism and tourism research. *Tourism Recreation*
- Carson, S., Hawkes, L., Gislason, K. & Cantrell, K. (2017). Literature, tourism and the city: writing and cultural change. *Journal of Tourism and Cultural Change*, 15(4), pp. 380-392.
- Carvalho, I. (2009). *Literary tourism and business networks: Walking in Sintra with Os Mayas*. Master Thesis, Aveiro: University of Aveiro.
- Carvalho, I. & Baptista, M.M. (2015). Perspectives on literary tourism in Portugal. *Revista Turismo & Desenvolvimento*, 24, pp. 55-68.
- CCDR-LVT (2019). The Region. Available in: <http://www.ccdr-lvt.pt/pt/a-regiao/7279.html>
- Chatzigeorgiou, C. & Christou, E. (2020). Adoption of social media as distribution channels in tourism marketing: A qualitative analysis of consumers' experiences. *Journal of Tourism, Heritage & Services Marketing*, 6(1), 25-32.
- Chemli, S., Toanoglou, M. & Valeri, M. (2020). The impact of Covid-19 media coverage on tourist's awareness for future traveling. *Current Issues in Tourism*. DOI 10.1080/13683500.2020.1846502
- Christou, E., Fotiadis, A. & Alexandris, K. (2021). *Restarting tourism, travel and hospitality: The day after*. Thessaloniki, Greece: International Hellenic University, ISBN: 978-618-84798-9-0. <https://doi.org/10.5281/zenodo.5159065>
- Cillo, V., Rialti, R., Del Giudice, M., & Usai, A. (2021). Niche tourism destinations' online reputation management and competitiveness in big data era: Evidence from three Italian cases. *Current Issues in Tourism*, 24(2), 177-191.
- Daly, P., Dias, A. L., & Patuleia, M. (2021). The Impacts of Tourism on Cultural Identity on Lisbon Historic Neighbourhoods. *Journal of Ethnic and Cultural Studies*, 8(1), 1-25.
- Del Chiappa, G., Bregoli, I., & Fotiadis, A. K. (2021). The impact of COVID-19 on Italian accommodation: A supply-perspective. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 13–22.
- Dias, Á., Silva, G. M., Patuleia, M., & González-Rodríguez, M. R. (2020). Developing sustainable business models: local knowledge acquisition and tourism lifestyle entrepreneurship. *Journal of Sustainable Tourism*, 1-20.
- Du Cros, H. & McKercher, B. (2020). *Introduction: Defining cultural tourism*. Cultural tourism. Routledge.
- Fairer-Wessels, F. (2005). *A literary pilgrimage to Robben island as inspired by Nelson*
- Ferreira, J., Sousa, B. & Gonçalves, F. (2019). Encouraging the subsistence artisan entrepreneurship in handicraft and creative contexts, *Journal of Enterprising Communities: People and Places in the Global Economy*, Vol. 13 No. 1/2, pp. 64-83. <https://doi.org/10.1108/JEC-09-2018-0068>
- Fotiadis, A. (2018). Modelling wedding marketing strategies: An fsQCA Analysis. *Journal of Tourism, Heritage & Services Marketing*, 4(1), 23-26.
- Fotiadis, A. & Williams, R. (2018). “TiCoSa” a 3d matrix conceptual model to investigate visitors' perceptions in an athletic event. *Journal of Tourism, Heritage & Services Marketing*, 4(2), 32-36.
- Gentile, R. & Brown, L. (2015). A life as a work of art: Literary tourists' motivations and experiences at il Vittoriale degli Italiani. *European Journal of Tourism, Hospitality and Recreation*, 6(2), pp. 25-47
- Gretzel, U., Sigala, M. & Christou, E. (2012). Social Media Change the Name of the Game in the Tourism and Hospitality Industries, *The European Financial Review*, 20 October, available at: <http://www.europeanfinancialreview.com/?p=1340>.
- Heitmann, S. (2011). Tourist behaviour and tourism motivation. *Research themes for tourism*, pp. 31-44.
- Henriques, C. & Quinteiro, S. (2011). Literary tourism. Olhão from the perspective of João Lúcio. *Tourism & Management Studies*, 1, pp. 600-608.
- Herbert, D. (2001). Literary places, tourism and the heritage experience. *Annals of tourism research*, 28(2), pp. 312-333.
- Hoppen, A., Brown, L. & Fyall, A. (2014). Literary tourism: Opportunities and challenges for the marketing and branding of destinations? *Journal of Destination Marketing & Management*, 3(1), pp. 37-47.
- Jia, H. (2009). The construction of literary tourism site. *Turizam: međunarodni znanstveno-stručničasopis*, 57(1), pp. 69-83.
- Jiang, L. & Yu, L. (2020). Consumption of a literary tourism place: a perspective of embodiment. *Tourism Geographies*, 22(1), 127-150, DOI: 10.1080/14616688.2019.1586985
- MacLeod, N., Shelley, J. & Morrison, A. M. (2018). The touring reader: Understanding the bibliophile's experience of literary tourism. *Tourism Management*, 67, pp. 388-398.
- Mandela's. *South African Journal of Cultural History*, 19(2), pp. 1-16.
- Mansfield, C. (2015). *Researching literary tourism. Shadows*.
- Marques, L. & Cunha, C. (2013). Literary rural tourism entrepreneurship: case study evidence from Northern Portugal. *Journal of Policy Research in Tourism, Leisure and Events*, 5(3), pp. 289-303.
- Maurer, C. (2015). Digital divide and its potential impact on cultural tourism. In *Cultural tourism in a digital era*. Springer, Cham, pp. 231-241.
- Mendes, M. C. G. (2007). *In the aesthetic and poetic path of tourist and literary itineraries: the Lima Valley*. Master Dissertation, University of Aveiro, Aveiro, Portugal.
- Mugobi, T., & Mlozi, S. (2021). The impact of external factors on ICT usage practices at UNESCO World Heritage Sites. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 3–12.

- Nella, A. & Christou, E. (2021). Market segmentation for wine tourism: Identifying sub-groups of winery visitors. *European Journal of Tourism Research*, 29, 2903.
- O'Connor, N. & Kim, S. (2014). Pictures and prose: exploring the impact of literary and film tourism. *Journal of Tourism and Cultural Change*, 12(1), pp. 1-17.
- Otay Demir, F., Yavuz Gökem, Ş., & Rafferty, G. (2021). An inquiry on the potential of computational literary techniques towards successful destination branding and literary tourism. *Current Issues in Tourism*, 1-15.
- Pereira, L., Jerónimo, C., Sempiterno, M., Lopes da Costa, R., Dias, Á., & António, N. (2021). Events and Festivals Contribution for Local Sustainability. *Sustainability*, 13(3), 1520.
- Quinteiro, S. & Baleiro, R. (2017). A character in search of literature: Literary fiction and tourist practice. *Dos Algarves: A Multidisciplinary e-Journal*, (24), pp. 9-27.
- Redondo, R.J.P. (2017). Un viaje desde lo imaginario a lo real. Una aproximación al perfil del turista literario en España. *Methados. Revista de ciencias sociales*, 5(1), pp. 119-129.
- Robinson, M. & Andersen, H. C. (Eds.). (2004). *Literature and tourism. Introduction*. Cengage Learning EMEA. XIII
- Santos, V., Ramos, P., Sousa, B., Almeida, N. & Valeri, M. (2021a). Factors influencing touristic consumer behavior. *Journal of Organizational Change Management*. DOI: 10.1108/JOCM-02-2021-0032
- Santos, V., Sousa, B., Ramos, P. & Valeri, M. (2021b). Emotions and Involvement in Tourism Settings. *Current Issues in Tourism* (in press)
- Santos, V., Ramos, P., Sousa, B. & Valeri, M. (2021c). Towards a framework for the global wine tourism system. *Journal of Organizational Change Management*. <https://doi.org/10.1108/JOCM-11-2020-0362>
- Silva, A.C.B.S. (2018). Literature as a pretext for travel: From Lisbon to Santarém with Almeida Garrett. *Dos Algarves: A Multidisciplinary e-Journal*, (33), pp. 34-47.
- Sinclair-Maragh, G., & Simpson, S. B. (2021). Heritage tourism and ethnic identity: A deductive thematic analysis of Jamaican Maroons. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 64-75.
- Sousa B., Malheiro A., Liberato D., Liberato P. (2021) Movie Tourism and Attracting New Tourists in the Post-pandemic Period: A Niche Marketing Perspective. In: de Carvalho J.V., Rocha Á., Liberato P., Peña A. (eds) *Advances in Tourism, Technology and Systems*. ICOTTS 2020. Smart Innovation, Systems and Technologies, vol 208. Springer, Singapore.
- Sousa, B., & Anjo, A. M. (2020). Literatura e turismo no digital: o caso de Lisboa e Fernando Pessoa. *Revista Lusófona de Estudos Culturais / Lusophone Journal of Cultural Studies*, vol. 7, n. 2, 2020, pp. 185-201
- Sousa, B., Vareiro, L., Marques, A. R., Santos, V. R., & Valeri, M. (2021). "The Impact of River Tourism on the Development of the Demarcated Regions in specific (post-pandemic crisis) contexts: The Case of Cruise Ships", In Valeri, M. (Ed), *Tourism risk. Crisis and recovery management*, Emerald Publishing
- Toanoglou, M., Chemli, S. & Valeri, M. (2021). The organizational impact of COVID-19 crisis on travel perceived risk across four continents. *Journal of Organizational Change Management*. DOI 10.1108/JOCM-12-2020-0369
- Turismo de Portugal (2020). It is time to... read Portugal. Available in: <https://www.visitportugal.com/pt-pt/content/Read-Portugal>
- UNESCO (2020). Creative Cities. Available in: <https://en.unesco.org/creative-cities/home>
- Valeri, M. (2016). Networking and cooperation practices in the Italian tourism business. *Journal of Tourism, Heritage & Services Marketing*, 2(1), pp. 30-35, <https://doi.org/10.5281/zenodo.376333>
- Valeri, M. (2021a). *Tourism Risk. Crisis and Recovery Management*, Emerald Publishing
- Valeri M. (2021b). *Organization Theories. Implications for the Strategic Management*, Springer
- Valeri, M. & Baggio R. (2020a). Social network analysis: organizational implications in tourism management. *International Journal of Organizational Analysis*, DOI: 10.1108/IJOA-12-2019-1971
- Valeri, M. & Baggio, R. (2020b). Italian tourism intermediaries: a social network analysis exploration. *Current Issues in Tourism*, <https://doi.org/10.1080/13683500.2020.1777950>
- Valeri, M. & Baggio R. (2020c). A critical reflection on the adoption of blockchain in tourism. *Journal Information Technology and Tourism*, DOI: 10.1007/s40558-020-00183-1
- Valeri M., & Baggio, R. (2021). Increasing the efficiency of knowledge transfer in Italian tourism system: a network approach, *Current Issues in Tourism* (in press)
- Valeri M., & Katsoni, V. (2021). Gender and tourism: challenges and entrepreneurial opportunities, Emerald Publishing
- Vareiro, L., Sousa, B.B. & Silva, S.S. (2020). The importance of museums in the tourist development and the motivations of their visitors: an analysis of the Costume Museum in Viana do Castelo, *Journal of Cultural Heritage Management and Sustainable Development*, Vol. 11 No. 1, pp. 39-57
- Watson, N. (2006). *The literary tourist: Readers and places in romantic and Victorian England*. Basingstoke: Palgrave.
- Watson, N. (Ed.). (2009). *Literary tourism and nineteenth-century culture*. Basingstoke: Palgrave.

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*SUBMITTED: APR 2021*

*1<sup>st</sup> REVISION SUBMITTED: JUN 2021*

*2<sup>nd</sup> REVISION SUBMITTED: AUG 2021*

*ACCEPTED: SEP 2021*

*REFEREED ANONYMOUSLY*

*PUBLISHED ONLINE: 18 OCT 2021*



## RESEARCH NOTE

# Health precautions while traveling after COVID-19

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## Abstract:

**Purpose:** The tourism industry needs to identify potential tourists' planned behavior after COVID-19 and prepare accordingly. This study was conducted in Israel during the initial outbreak of COVID-19. This research focused on different types of precautionary measures used by the tourists and how perceived risk of getting sick with COVID-19 while traveling abroad as well as risk perceptions and attitudes about travel abroad might affect tourists' intentions to adopt precautionary measures when planning future travel abroad.

**Methods:** This research is based on an online survey questionnaire distributed during March 2020 among four hundred and six Israeli participants.

**Results:** The analytical model show that people's with higher levels of attitudes toward traveling abroad and those that prefer to avoid destinations with higher levels of attitudes toward traveling abroad and those that prefer to avoid travel to destinations with various risks had higher intentions to take precautionary measures while traveling abroad.

**Implications:** The results of the current research can assist the tourism industry understand what precautionary measures are important to potential travellers and what health safety assurances the industry must provide to facilitate its recovery in the near future.

**Keywords:** COVID-19, tourism, health threat perception, future travel avoidance, precautionary measures

**JEL Classification:** I15, C38, I1

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## 1 INTRODUCTION

The year 2020 brought a new challenge to our lives with the outbreak of the COVID-19 pandemic. COVID-19 made its first appearance in China in December 2019 and by February 2020 had spread across the globe. Efforts to stop the virus from spreading, in particular through social distancing, have affected countries and markets around the world, including the tourism and hospitality sectors. In March 2020 more and more countries closed their borders to international travel, bringing the tourism industry to a complete halt. A research study conducted in China during the early stages of the epidemic exposed the devastating effects of COVID-19, specifically on China's tourism economy and international trade (Hoque, Shikha, Hasanat, Arif, and Hamid, 2020).

The current research was performed in March 2020, at the beginning of the outbreak of COVID-19 in Israel. At that time, only around 15 Israelis had been infected and none had

died. On January 30, 2020, the Israeli government limited the entrance of tourists from China, while all Israelis returning from China were required to remain in isolation for two weeks. Two weeks later, the isolation requirement was extended to tourists returning from all countries in the Far East. On February 26, the government recommended that Israeli citizens avoid all international travel. Like travelers around the world, many Israelis were forced to cancel their planned flights or reschedule them for a later date. The crisis brought on by the pandemic of COVID-19 naturally effected potential tourists' perceived susceptibility to infection by the new virus as well as on their risk perceptions regarding health hazards in destinations countries. Moreover, the new pandemic may affect potential tourists' general attitudes about traveling abroad. The current study seeks to test the effect of risk perceptions amongst potential Israeli tourists during the early stages of the pandemic on their intentions to take precautionary measures in planning future travel abroad.



## 2 LITERATURE AND HYPOTHESES

Previous studies have shown that various perceived risks, among them terrorist incidents, wars, political instability, natural disasters and epidemics, have had a negative effect on tourist numbers (Teitler-Regev, Shahrabani, and Goziker, 2014, Desivilya, Teitler-Regev, and Shahrabani, 2015, Baker, 2015, Avraham, 2015, Liu, and Pratt, 2017). Indeed, epidemics have a negative effect on economies that far exceeds the impact on health. For example, the SARS outbreak in 2003 resulted in 10,000 infected people, 1,000 deaths and economic damage ranging from 30 to 100 billion US dollars (Smith, 2006). According to Smith, an epidemic's effect on tourism specifically and on the economy in general is driven by the public's perception of the risk of being infected. As the effects of health crises and other disasters engender serious economic losses and major social costs, it is vital to understand the determinants that shape risk perceptions and attitudes regarding travel decisions and behavior.

A significant amount of research has examined the effects of health risk and health awareness on tourists' behavior. This research shows that individual tourists characteristics have a major effect on their risk perceptions. Specifically, the influence of risk perception was found to be associated with type of risk, tourist's culture or nationality, proximity to the country of origin and international media coverage (Baker 2015). A study in the USA that examined tourism after the SARS outbreak showed that people intended to increase domestic tourism, cut down on international and long distance trips, use private cars more often, and visit rural locations (Wen et al., 2005). Cai (2003) assumed that the effect of SARS on tourists would increase the number of independent tourists, family parties and corporate groups, the demand for destinations and attractions concerning fewer links with people, for example and ecotourism and natural tourism, would increase, and tourists would prefer open and well-ventilated facilities. In addition, Wen et al. (2005) found that the SARS epidemic increased the public's attention to hygiene. Therefore, the researchers predicted that hygiene and safety would become important factors in tourists' opinions regarding a destination's image.

Studies show that regarding health risks, tourists' perceptions about potentially dangerous areas are wider and more inclusive than in the case of other types of risks. Risks in general, and specifically health risks, motivate tourists to seek information that might help reduce risks and uncertainties, choose the favorite destination and improve the quality of their trip (Mansfeld, 2006; Fotiadis and Sigala, 2015; Milwood and Crick, 2021).

Perceptions regarding personal health and well-being affect protective and preventative behavior, like purchasing travel insurance or getting vaccinated prior to traveling abroad (Chien, Sharifpour, Ritchie, and Watson, 2017). Studies that focused on the general population concluded there is a strong to moderate positive relationships between perceived risks and protective health behaviors (Schmiede, Bryan, and Klein, 2009; Christou et al., 2021).

Chien et al. (2017) introduced a conceptual model in which perceived control over the situation, worry, and sensation-seeking affect travel risk perceptions, and in turn those

perceptions affect risk-protective behavior. A study that included 807 outbound tourists from Australia found that travel health risk perceptions mediated the correlation between risk-protective behavior and traveler experiences. That is, worry motivated protective behavior by means of increased health risks perceptions. Moreover, while sensation-seeking is negatively correlated with travel health risk perceptions, it is positively related to protective behavior. Those with high levels of sensation-seeking but no information regarding precautionary measures will avoid potentially hazardous situations. If, however, they have knowledge about preventative measures they will employ protective behavior and engage in the potentially risky activity.

The current study seeks to inspect the impact of risk perceptions and attitudes toward traveling abroad during the early stages of COVID-19 pandemic outbreak, as well as the effect of self-perception of risk of being infected by COVID-19 on travelers' intentions to take precautionary measures in planning future travel abroad. We are not aware of any previous studies that have examined this topic. The results of this research will add to the present literature concerning the implications of the COVID-19 pandemic on the tourism industry.

**Hypotheses**  
Building on the findings of Chien et al. (2017) and Schmiede et al. (2009) that perceptions regarding personal health and well-being affect preventative and protective health behavior, we hypothesize:

*H1: Individuals who have higher levels of perceived risk of being infected by COVID-19 while traveling abroad will have greater intentions to take precautionary measures in planning future travel abroad.*

Based on the findings of Chien et al. (2017) that individuals with high levels of sensation-seeking together with knowledge about preventative measures will adopt precautionary actions and engage in the potentially risk activity, we hypothesize:

*H2: Individuals who have higher levels of sensation-seeking will have greater intentions to take precautionary measures in planning future travel abroad.*

Based on the finding of Desivilya et al. (2015) that risk perceptions with respect to hazardous events in tourist destinations affect individuals' intentions and behavior regarding travel abroad, we hypothesize:

*H3: Individuals who have more definitive attitudes regarding the hazards of traveling abroad and more definitive attitudes with respect to avoiding destinations with various risks resolve in greater intentions to adopt precautionary measures in planning future travel abroad.*

## 3 RESEARCH METHODOLOGY

This study is based on a questionnaire completed by 406 participants during the period March 4-5, 2020. Ethics Committee at the higher education institution where the authors are associated permitted this study. The research was conducted by a polling company using an Internet survey. The respondents received a link to a questionnaire and decided whether or not to answers it.

The questionnaire, which included several sections, was based on an English version and translated into Hebrew by

the researchers using the back-translation method. All questions were based on a 7-point Likert type scale from 1 (“do not agree at all”) to 7 (“very much agree”). The details of the questions included in each section appear in appendix A. The sections were:

- Travel experience and plans: Questions regarding prior trips abroad and the effect of the outbreak of COVID-19 on future plans to travel abroad.
- Self-perceived risk of being infected by COVID-19 while traveling abroad: “During your vacation abroad you may be infected by the coronavirus” (self-perceived risk of COVID-19 while traveling abroad).
- Attitudes toward traveling abroad (e.g., “traveling abroad now is dangerous”): This section is based on Floyd et al. (2003), as tested and validated by Desivilya et al. (2015). Scores on this scale were averaged to form an independent variable. The internal consistency reliability (Cronbach's alpha) of this scale was 0.796.
- Attitudes toward avoiding travel to destinations with various risks: This section is based partially on Floyd et al. (2003), also tested and validated by Desivilya et al. (2015) and Shahrabani et al. (2019). A sample item is: “Travel to destinations with health hazards (e.g., infections, disease) should be avoided.” The internal consistency reliability (Cronbach's alpha) of this scale was 0.865.
- Precautionary travel measures: In this section we asked about precautionary measures the individual took in the past and intends to take such measures in the future (e.g., searching for information regarding health requirements for traveling to a particular country). Two independent variables were formed based on the averages. The internal consistency reliability measures (Cronbach's alpha) for these scales were 0.746 and 0.901, respectively.
- Sensation-seeking (based on the questionnaire in Chien et al. (2017): In this section, the participants received the statement: “I am willing to travel to unconventional destinations.” Since the internal consistency reliability (Cronbach's alpha) of this scale was low, we used only one item.
- The research included data regarding gender, age, education, number of trips abroad, income level and number of children at home and other socio-demographic, . In addition, the participants were asked “To what extent will the Ministry of Health's recommendation not to travel abroad for the next six months affect your travel plans?”

#### 4 FINDINGS AND ANALYSIS

During the survey (March 2020), 51% of the respondents had already booked a flight abroad prior to the pandemic and 49% had not, while 60.3% were planning to travel during the six months after the survey. Of those who had booked a flight, 37% decided to change their plans, while 63% stated they had not changed their plans. More specifically, 29.6% indicated they would postpone deciding whether to travel abroad,

20.9% stated they would cancel their vacation, 19% said they would postpone their vacation, 16% said they would not change their plans due to COVID-19, and 5.7% indicated they would change their travel destination.

Among the respondents, 41.9% showed a low level of worry about being infected with COVID-19 while traveling abroad (less than 4 points on a scale of 7), while 37.2% indicated a high level of concern (4 points and above). The majority of the sample (78.3%) indicated they intend to take precautionary measures while traveling abroad in the future. Table I shows the descriptive statistics of the sample. The socio-demographic characteristics are shown separately for those with low intentions to take precautionary measures (respondents who responded less than 4 points) and those with high intentions (more than 4 points) to take precautionary measures. Those who answered 4 were omitted to emphasize the distinction between the high and low intention groups.

*Table 1: Descriptive statistics of the sample: Socio-demographic characteristics by status of intention to take precautionary measures prior to and while traveling abroad*

Variable		N=406 (%)	Low intentions to take precautionary measures (%) N=88	High intentions to take precautionary measures (%) N=304
Gender	Male	49.5	61.4	46.4
	Female	50.5	38.6	53.6
Marital status	Unmarried	32	36.4	31
	Married	68	63.6	69
Income	Below average	34.2	39.3	35.8
	Average and above average	57.4	60.7	64.2
Education	12 years of school	28.1	35	26.3
	Higher education	71.9	65	73.6

Based on Table 1 it can be seen that the percentage of women reporting high intentions to take precautionary measures before and while traveling abroad was significantly higher than that of men (53.6% compared to 46.4%,  $p$  value <0.05 ). No significant differences were found between the two groups regarding the other demographic variables.

Table II shows the means and SDs of the explanatory variables—attitudes toward avoiding travel to destinations with various risks, attitudes toward traveling abroad, risk perception regarding being infected with COVID-19 while traveling abroad, sensation-seeking, and use of precautionary measures in the past—classified according to level of intentions to take precautionary measures before and during trips abroad.

*Table 2: Means and SDs of explanatory variables classified according to level of intention to take precautionary measures before traveling abroad*

	Low level of intentions to take precautionary measures N=88		High level of intentions to take precautionary measures N=304	
	Mean	SD	Mean	SD
COVID-19 self-risk while traveling abroad.	2.82	1.61**	4.17	1.18
Attitudes toward avoidance of travelling to destinations with various risks	3.78	1.16***	5.02	1.14
Attitudes toward traveling abroad	3.88	1.14***	5.3	.95
Sensation-seeking	4.43	1.82	4.71	1.87
Past precautionary measures	3	1.08***	4.56	1.52

Table 2 shows that those with high intentions to take precautionary measures before and during future trips abroad also have significantly higher perceived levels of personal risk of being infected by COVID-19 while traveling abroad, more definitive attitudes about avoiding travel to destinations with various risks, more definitive attitudes about traveling abroad, and a higher frequency of taking precautionary measures when traveling abroad in the past.

The analytical model included OLS regression analysis. In the regression, the dependent variable was the degree of intention to use precautionary measures while traveling abroad in the future. The independent variables included self-perceived risk of being infected by COVID-19 while traveling abroad, attitudes toward traveling abroad (travel attitudes), past precautionary measures (past measures), level of sensation-seeking, number of trips abroad for work or vacation (N\_vacations, N\_work), past travel to countries with travel advisories, attitudes toward avoiding travel to destinations with various risks, number of children at home (no. children), age, gender, and education. After several iterations, we chose the final version of the regression that has the best adjusted R square, as shown in Table 3.

*Table 3: Regression results, with intention to take precautionary measures while traveling abroad as the dependent variable*

Variable	B	Std. Error	Sig.
Constant	-.11	.29	.69
Self-perceived risk of COVID-19 while traveling abroad	0.08	.03	.02
Travel attitudes	.55	.06	.00
Past precautionary measures	.28	.08	.00
Sensation-seeking	.008	.03	.01
Attitudes toward avoiding travel to destinations with risks	.15	.05	.00
(adjusted R square 0.546 P=0.000)			

The results in Table 3 show the following significant variables that affect intentions to take precautionary measures before and during trips abroad: higher levels of perceived risks of being infected by the coronavirus, higher perceived risks of traveling abroad, higher levels of precautionary measures in the past while traveling abroad, more definitive attitudes about avoiding travel to destinations with various risks, and higher levels of sensation-seeking.

## 5 DISCUSSION

COVID-19 has dramatically changed the global tourism industry. No one knows when the tourism industry will recover and people will start traveling again. Nevertheless, it is important to understand the factors affecting people's intentions to take precautionary measures while planning their trips abroad after the global pandemic crisis ends.

The current study, conducted during the early stages of the outbreak of COVID-19 in Israel, examined whether and how perceived risk of being infected by COVID-19 while traveling abroad and attitudes toward traveling abroad are correlated with Israelis' intentions to adopt precautionary measures when planning future trips abroad.

The results of the analytical model show that people's intentions to take precautionary measures while traveling abroad were significantly related to higher levels of perceived risk of being infected by COVID-19 during their travels and more definitive attitudes about avoiding traveling to destinations with various risks. These results support hypotheses H1 and H3 and are in line with previous research by Chien et al. (2017), Schmiede et al. (2009) and Desivilya et al. (2015). Our findings are also in line with previous studies showing that perceived threat was one of the main factors affecting risk-averse behavior during the SARS pandemic (Smith, 2006; Varti et al., 2009).

Another interesting finding of this study is that during the COVID-19 pandemic those with higher levels of sensation-seeking also have greater intentions to take precautionary measures during future travel abroad (H2). This finding is compatible with those of Chien et al. (2017) showing that those who have high levels of sensation-seeking and are also aware of the preventative measures will adopt these measures and engage in the potentially risky activity. The findings of Turnšek et al. (2020) indicate that those with more travel experience in the past are less likely to avoid travel due to the COVID-19 pandemic. Our results add to this finding by showing that precautionary measures taken in the past while traveling abroad are also related to intentions to adopt precautionary measures in the future, such as buying a wider health insurance and flight cancellation insurance before traveling abroad.

## 6 CONCLUSIONS

What makes this study unique is that it was performed during the early stages of the COVID-19 outbreak and examined how the worldwide spread of this novel virus affected potential travelers' attitudes, risk perceptions and intentions to take precautionary measures during future travel. The findings of the current study may help the tourism industry understand what precautionary measures are important for potential travelers so as to facilitate the recovery of this industry in the near future. In addition, the pandemic has emphasized the need for public dissemination of health risk information to travelers (Abrams et al., 2020; Wang and Lopez, 2020; Krakover and Corsale, 2021; Chatzigeorgiou and Christou, 2021) and the need for the tourism industry to provide assurances regarding health safety (Zhang et al., 2020).

The study's limitations are that it was conducted in one country only and that the sample was relatively small. Despite these limitations, the findings can shed light on how the pandemic affects people's intentions to be more careful when traveling abroad in the future. Further research should examine this impact in other countries and at various points in time.

## REFERENCES

- Abrams, K. M., Leong, K., Melena, S., and Teel, T. (2020). Encouraging safe wildlife viewing in national parks: Effects of a communication campaign on visitors' behavior. *Environmental Communication*, 14( 2), 255–270.



- Avraham, E. (2015). Destination image repair during crisis: Attracting tourism during the Arab Spring uprisings. *Tourism Management*, 47, 224-232. doi: 10.1016/j.tourman.2014.10.003
- Baker, D. M. A. (2015). Tourism and the Health Effects of Infectious Diseases: Are There Potential Risks for Tourists? *International Journal of Safety and Security in Tourism and Hospitality*, 1(12), 1.
- Cai, J. (2003). Pay attention to the influences of SARS on the psychological changes of tourists. *China Tourism News*.
- Chang, E. C., Maydeu-Olivares, A., and D'Zurilla, T. J. (1997). Optimism and pessimism as partially independent constructs: Relationship to positive and negative affectivity and psychological well-being. *Personality and Individual Differences*, 23(30), 433-440.
- Chatzigeorgiou, C., and Christou, E. (2020). Adoption of social media as distribution channels in tourism marketing: A qualitative analysis of consumers' experiences. *Journal of Tourism, Heritage & Services Marketing*, 6(1), 25-32.
- Chien, P. M., Sharifpour, M., Ritchie, B. W., and Watson, B. (2017). Travelers' health risk perceptions and protective behavior: a psychological approach. *Journal of Travel Research*, 56(6), 744-759.
- Christou, E., Fotiadis, A. & Alexandris, K. (2021). Restarting tourism, travel and hospitality: The day after. Thessaloniki, Greece: International Hellenic University, ISBN: 978-618-84798-9-0. <https://doi.org/10.5281/zenodo.5159065>
- Del Chiappa, G., Bregoli, I., & Fotiadis, A. (2021). The impact of COVID-19 on the Italian accommodation sector and related response actions: A supply-perspective using a mixed method approach. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 13-22
- Desivilya, H., Teitler-Regev, T. and Shahrabani, S. (2015). The effects of conflict on risk perception and traveling intention of young tourists. *EuroMed Journal of Business*, 10(10), 118-130.
- Fernandes, N. (2020). Economic effects of coronavirus outbreak (COVID-19) on the world economy. Available at SSRN 3557504.
- Floyd, M.F., Gibson, H. and Pennington-Gray, L. (2003). The effects of risk perceptions on intentions to travel in the aftermath of September 11, 2001. *Journal of Travel and Tourism Marketing*, 15(2-3), 19-38.
- Fotiadis, A. (2018). Modelling wedding marketing strategies: An fsQCA Analysis. *Journal of Tourism, Heritage & Services Marketing*, 4(1), 23-26.
- Fotiadis, A., & Williams, R. (2018). "TiCoSa" a 3d matrix conceptual model to investigate visitors' perceptions in an athletic event. *Journal of Tourism, Heritage & Services Marketing*, 4(2), 32-36.
- Fotiadis, A. K., & Sigala, M. (2015, 6/). Developing a framework for designing an Events Management Training Simulation (EMTS). *Journal of Hospitality, Leisure, Sport & Tourism Education*, 16, 59-71.
- Gössling, S., Scott, D., and Hall, C. M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of Sustainable Tourism*, DOI: 10.1080/09669582.2020.1758708
- Hoque, A., Shikha, F. A., Hasanat, M. W., Arif, I., and Hamid, A. B. A. (2020). The effect of Coronavirus (COVID-19) in the tourism industry in China. *Asian Journal of Multidisciplinary Studies*, 3(1), 52-58.
- Jonas, A., Mansfeld, Y., Paz, S., and Potasman, I. (2011). Determinants of health risk perception among low-risk-taking tourists traveling to developing countries. *Journal of Travel Research*, 50(1), 87-99.
- Krakover, S., and Corsale, A. (2021). Sieving tourism destinations: Decision-making processes and destination choice implications. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 33-43.
- Liu, A., and Pratt, S. (2017). Tourism's vulnerability and resilience to terrorism. *Tourism Management*, 60, 404-417.
- Milwood, P. A., and Crick, A. P. (2021). Culinary tourism and post-pandemic travel: Ecosystem responses to an external shock. *Journal of Tourism, Heritage & Services Marketing*, 7(1), 23-32.
- Shahrabani, S., Teitler-Regev, S., Syna, H. D., Tsoukatos, E., Ambrosio, V., Loureiro, S. M. C., and Voulgaris, F. (2019). The effects of socio-political context on Tourism. *EuroMed Journal of Business*.
- Scheier, M. R., Carver, C. S., and Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the life orientation test. *Journal of Personality and Social Psychology*, 67(6), 1063-1078.
- Schmiede, S. J., Bryan, A., and Klein, W. M. (2009). Distinctions between Worry and Perceived Risk in the Context of the Theory of Planned Behavior. *Journal of Applied Social Psychology*, 39(1), 95-119.
- Smith, R. D. (2006). Responding to global infectious disease outbreaks: lessons from SARS on the role of risk perception, communication and management. *Social Science & Medicine*, 63(12), 3113-3123.
- Teitler-Regev, S., Shahrabani, S., and Goziker, O. (2014). The effect of economic crises, epidemics and terrorism on tourism. *UTCC International Journal of Business and Economics*, 5(2), 19-32.
- Turnšek, M., Brumen, B., Rangus, M., Gorenak, M., Mekinc, J., & Štuhec, T. L. (2020). Perceived Threat of COVID-19 and Future Travel Avoidance: Results from an Early Convenient Sample in Slovenia. *Academica Turistica-Tourism and Innovation Journal*, 13(1).
- Vartti, A.-M., Oenema, A., Schreck, M., Uutela, A., de Zwart, O., Brug, J., and Aro, A. R. (2009). SARS knowledge, perceptions, and behaviors: A comparison between Finns and the Dutch during the SARS outbreak in 2003. *International Journal of Behavioral Medicine*, 16(1), 41.
- Wang, F., and Lopez, C. (2020). Does communicating safety matter? *Annals of Tourism Research*, Vol. 80, 102805. <https://www.doi.org/10.1016/j.annals.2019.102805>.
- Wen, Z., Huimin, G., and Kavanaugh, R. (2005). The Impacts of SARS on the Consumer Behaviour of Chinese Domestic Tourists. *Current Issues in Tourism*, 8(1), 22-38, DOI: 10.1080/13683500508668203.
- Zhang, L., Li, H., and Chen, K. (2020). Effective risk communication for public health emergency: Reflection on the covid-19 (2019-ncov) outbreak in Wuhan, China. *Healthcare*, 8(1), p. 64. <https://doi.org/10.3390/healthcare8010064>.

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SUBMITTED: MAY 2021

REVISION SUBMITTED: JUL 2021

ACCEPTED: AUG 2021

REFEREED ANONYMOUSLY

PUBLISHED ONLINE: 18 OCT 2021

*Appendix A*

Variable name		Cronbach's alpha
Attitudes toward traveling abroad	I do not feel comfortable traveling abroad now.	0.8
	Traveling abroad now is dangerous.	
	Visiting crowded places abroad should be avoided because of COVID-19.	
	Traveling to the Far East (Asia) on vacation is safe (reversed).	
	Security is an important issue when choosing a vacation destination abroad.	
	Extra security measures at airports makes traveling abroad safer.	
	I am not comfortable traveling abroad because of the risk of being infected by viruses at airports and on airplanes.	
Precautionary travel measures - past	I search for information regarding traveling advisories for certain countries.	0.75
	I search for health information about my destination (vaccines, medicines).	
	I purchase extended health insurance.	
	I purchase travel cancellation insurance.	
Precautionary travel measures - future	I avoid traveling to countries with traveling advisories issued by the Health and Foreign Ministries.	0.90
	I search for health information about my destination (vaccines, medicines).	
	I purchase extended health insurance.	
	I purchase travel cancellation insurance (if possible).	
	I take protective measures such as wearing face masks and using alcohol-based hand sanitizers at airports and on trains abroad.	
	I wear masks in public places abroad.	
	I avoid crowded places.	
Attitudes toward avoiding travel to destinations with various risks	Travel to destinations where there were terrorist incidents during the current year should be avoided.	0.87
	Travel to destinations with health hazards (e.g., infections, disease) should be avoided.	
	Travel to destinations with unstable economic conditions should be avoided.	
	Travel to destinations that are risky for Israelis should be avoided.	



## BOOK REVIEW

# Tourism, terrorism and security: Tourism security-safety and post conflict destinations

Korstanje, M. and Séraphin, H. (eds) (2020). Bingley: Emerald Publishing Limited.

ISBN 978-1-83867-906-4.

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**JEL Classification:** L83, F52, H12

**Biographical note:** Karen Cripps (karen.cripps@winchester.ac.uk) is the University of Winchester Business School's UN Principles of Responsible Management Education (PRME) Champion, and is committed to embedding responsible management education into teaching and research, and to support students' self-discovery and development in the sense-making called for in 21st-century business leadership. Karen holds a BA (Hons) and MSc in Tourism and Environmental Management and later pursued a PhD in Sustainable Supply Chain Management in UK Tour Operations. She is a Fellow of the Higher Education Academy, and acts as a teaching mentor. Driven by a strong practitioner focus in research activities, she is currently researching teaching pedagogies to equip students with the mindset and competences to effectively balance the requirements of responsible management.

## 1 BOOK REVIEW

This book is of interest to anyone concerned by tourism consumption patterns, global policy, and tourism management/marketing responses at a time of increasing threats and risk to tourism security. These are important issues that need to be examined to ensure better policy and management responses to global threats. As an edited book by Maximiliano Korstanje and Hughes Séraphin, who are renowned authors in tourism safety and security, it brings fresh perspectives to critical issues in the future of tourism. Collectively, the authors convey behavioural and supply-side aspects of tourism security and provide both the novice and specialist reader with an in-depth understanding in the field of tourism security and safety and features of tourism in post-conflict destinations.

A key feature of this book is that the dichotomies of tourism are presented as an industry which in common with terrorism seeks to target (often international) visitors, and its actions are highly influential on economic development. Paradoxically, while the industry can be destroyed by terrorist acts, through post-disaster 'dark tourism', it can be re-built. The combined contribution of each author provides empirical and theoretical insight to psychological issues of tourist behaviour and demand, supply-side actions, policy-making and media perspectives. The discussion is grounded

in culturally and historically influenced contexts and what stands this book apart from other texts, is the clear thread that runs through the book of sociological analysis of the tourist gaze on the 'other' (as victims of terrorism and security related disasters). This is seen to perpetuate Westernised consumption patterns through what might be seen as a form of 'entertainment' which is both morally questionable and can inadvertently feed terrorism and conflict. This argument resonates throughout the chapters and leaves the reader with a clear impression of the role of tourism in perpetuating political instability (which can lead to terrorist and security threat), against its potential to enable peacebuilding and reduce conflict, juxtaposed with the 'ethics' and implications of dark tourism.

The foreword (by Peter Tarlow) and preface by the editing authors set the context for an all-encompassing sense of the complexities of the relationship between tourism and terrorism. International perspectives in a range of post-conflict and post-disaster destinations enable differing ideologies and discussion of cross-cultural comparisons of risk and threat. The limitations of tourism security-safety are presented in a thought-provoking way which highlights the uncertainties in which the industry operates, with implications for researchers to help navigate this urgent field of tourism management. It can also be said to illuminate critical issues of responsible tourism development in both how tourism activities are managed, and the role of tourism



in re-building economies and communities as part of the Sustainable Development Goals of the United Nations. Within an overall sociological approach to terrorism and security threat, the layout and content of the book are aimed at analysing different types of security problems as well as finding managerial responses to address them.

The opening chapter (Korstanje) provides a contextual overview of studies into tourism security since 9/11 and implications on tourism discourse with a new era of no global 'safe space'. It highlights the limitations that arose from the application of precautionary principle rational planning concepts to risk prevention and management, such as the tensions for destinations to mitigate and manage risks while not causing undue alarm among tourists. Paradoxes are also drawn out of how the tourist gaze in these destinations, can present a threat through large numbers of tourists as targets, and Korstanje poses the question of how, in such contexts, tourism security can be most effectively approached and measured. It highlights that tourism "never stops" but "diverts towards more secure destinations", and the insights into the potential applications and limitations of differing schools of thought on risk perception offer can be usefully applied to inform current research into post-pandemic tourism recovery.

In chapter 2, Seraphin's discussion of over-tourism and tourism phobia conveys the conflicting views towards tourism as a vehicle for peace versus one of generating local conflict and resentment. Destinations experiencing over-tourism present an issue of risk (through the loss of local stakeholder support and engagement) and security (through anti-tourism movements) which is contended needs to be examined as part of a 'safe' tourism system. Analysing over-tourism through a security perspective represents a fresh perspective on the current literature on over-tourism which focuses on social, environmental and economic dimensions, without consideration of security.

Seraphin also discusses the role of tourism in peacebuilding, which is further discussed concerning Colombian tourism in chapter 3. Oliveros-Ocampo et al present the results of a quantitative analysis of the Colombian tourism market within a context of armed conflict. In the context of risk, it is interesting to note the use of the marketing slogan 'The risk is that you want to stay. Perhaps indicating a national level tolerance of risk, and as the authors note is a pattern found in Thailand, the study found that despite the conflict, Colombians continue to travel domestically, although it did influence the selection of destination. The chapter shows how tourism was directly developed by State policy to reduce conflict in particular regions through enabling security and economic generation. Particular focus is given to Colombian Natural National Parks which were privatized as natural areas for tourism development, yet at the same time were controlled by armed groups and uses from a sustainability perspective were 'inappropriate' leading the authors to conclude that tourism development in these areas will not ever be effective under times of conflict.

Chapter 4 takes another destination-based perspective, this time focusing on tourism security in the Russian Federation. Afansiev et al. open with a discussion on tourists' propensity for risk, motivations for dark tourism, perceptions of security and vulnerability, and the various risks that can influence international tourism. It underlines the limitations of studying

terrorism from the perspectives of policymakers and tourists alone. A main contribution of the chapter is a discussion of how stereotypes of countries, which are often historically and culturally determined, affect tourist perceptions of safety. Through a review of differing countries' governing body advice on safety travel risks, it is also suggested that political and competitive factors shape the safety rating advice. The lack of a universal method to assess risk, and other limitations in the data, is said to results in subjective information on risk levels. Case information from Chechnya is used to demonstrate a new method for the application of criteria and safety indicators to enable a more objective rating.

The fifth chapter by Korstanje and George examines the role of security in reducing risk for worshippers, especially in religious sites that are popular with tourists and can also represent targets for terrorism and violence. They point to many psychological factors with perceptions of risk and safety such as the paradoxical link between increased emotional vulnerability to safety fears, which is difficult to deter through communication and marketing, strengthens the terrorism logic. They posit that a sense of safety is culturally conditioned and perceptions of risk are often dependent on the degree of control that society has over that event. These in turn shape how we cognitively assess risk, based on our experiences and cultural conditioning. In particular, the authors highlight the subjectivity of methodologies and the need to examine terrorism risk from a terrorists' viewpoint in for example understanding which victims have more 'value' as targets. It is suggested that terrorists targeting some sites is for impact on first world states, and in a developing country as a way of undermining the dependency of those economies of the tourism trade.

The sixth chapter aims to make sense of the evolving literature and conceptualisation of dark tourism. It provides a comparison with the sister term 'thanatourism' and shows that this is more focused on 'death' experiences rather than the more encompassing focus on 'tragedy' as part of dark tourism interests.

Mitchel et al note that most of the literature focuses on attitudes and motivations for visiting dark tourism sites, along with studies into the attitudes of residents who live in dark tourism destinations. This chapter offers an insight into how the motivation to experience fear and terror as dark tourists differs from the avoidance of fear as a security concern for most tourists. From a psychological perspective, the authors suggest that such a perspective may enable dark tourists to act more calmly in crises, but the question at which cost such tourism enjoyment should be gained.

Chapter 7 continues with the theme of dark tourism, applying it to the potential for growth of the tourist market to the island of Saint Helena in Africa. Apleni et al. reinforce earlier messages in the book around the impact of terrorism on destination image and the challenges for developing countries to recover. Analysis of the impacts from terrorist crimes in Kenya, in which the industry has been decimated over the past decade through terrorism and security concerns, is used to demonstrate the criticality of policymakers to improve safety and security in tourism destinations. This chapter also picks up on the concept of tourism as a tool for peace and reminds us that this requires the absence of conflict.

In chapter 8, Korstanje explores the controversies and challenges of dark tourism, from a postmodern viewpoint of tourist motivations to gaze upon, and consumer others' pain. This is based upon the Netflix documentary *The Dark Tourist* to discuss the main elements of dark tourism theory. Through the 'edu-tainment' side of dark tourist attractions, the question is raised of to what extent dark tourists are genuinely interested in the other's suffering, or if they are just moved by the pleasure-maximization logic. A compelling argument is made that those dark tourists are unable to create empathy with victims.

In the ninth and final chapter, Cyril examines the duty of care for the tourism and hospitality industry to carry out regular and robust staff safety and security checks. This is developed through a qualitative, interpretive study among hospitality businesses in New Zealand. Aside from the safety benefits which he aligns to guest and employee assurance, Cyril highlights the risks faced by hotels and other hospitality operations as 'soft targets' since they are not fortified, are likely to contain multiple nationalities and can paralyse economies.

It is recommended here that this is an area of business practice that merits further investigation of the role of international tour operators and online providers in supporting suppliers with such security measures. In the wake of high-profile cases such as the attack on a Tunisian beach in 2015, which led to legal action against high profile global tour operators. This aligns with Oliveros-Ocampo et al.'s contention on national travel advice since the UK Foreign and Commonwealth Office underwent significant review in communications. With the world poised to re-start travel, through package and independent travel, the issues raised in this book from terrorism through to pandemic, alert us to the pressing need for continued action and research.

All in all, the scale and structure of the book make it appropriate for practitioners, policymakers, academics, undergraduate or postgraduate students undertaking research and applying research to practice in the field of tourism, terrorism and safety. It shows the limitations of tourism security in an ever-changing world, further underlining the need for contributions of knowledge through empirical insight into tourist behaviours and destination responses, alongside the thought-provoking methodological implications of connecting knowledge to the behaviours and mindsets of the perpetrators of safety risks.

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*SUBMITTED: MAY 2021*

*PUBLISHED ONLINE: 18 OCT 2021*



## BOOK REVIEW

# Turismo de Eventos e Incentivos [Event and incentive Travel]

Ramirez Millares. (eds) 2020. La Habana, Editorial Felix Varela.  
ISBN 978-959072188-5

Reviewed by: Maite Echarri Chavez  
University of La Habana, Cuba

**JEL Classification:** G14,L8

**Biographical note:** Maite Echarri Chavez (maite\_echarri@tur.uh.cu) is Adjunct Professor of Tourism Faculty, University of la Habana, Cuba. She holds a Ph.D. in Geography.

## 1 BOOK REVIEW

Event and incentive travel industry, a new segment of the tourism industry known as MICE [meeting, incentives, congresses and exhibitions], seems to be a new niche widely desired by stakeholders not only because of the multiplication effects generating further profits but also making longer stays at the destination. Having said this, the recently-given interest in this new segment leads academic publishers to coordinate efforts to release further guidebooks revolving around Event and incentive travel worldwide. In the 90s decade, Cuba successfully situated as a leading tourist destination in the Americas, but unfortunately, after a combination of countless and complex factors, all devoted efforts that put Cuba in this idealized position are jettisoned. In the mid of this grim context, the present book, which was elegantly written by Professor Secundino Eulogio Ramirez Millares, explores in eight chapters the ebbs and flows of MICE (or Event and incentive travel industry) as well as its main global tendencies without mentioning its next potentialities and challenges for Cuba. The goals of this academic book are twofold. On one hand, it serves our pre and post-graduate students at the Tourism department (in la Habana University, Cuba). On another, it gives to policy-makers and tour operators fresh material to understand -if not the applications- the dynamics of MICE.

The introductory chapter lays the foundations to the topic, which will be discussed in the eight chapters that form this book, which includes professional working conditions, and performance, leader markets, current economic situation, regional integration process, challenges and limitations of MICE (only to name a few). The successive chapters focus on the contribution of MICE to enhance local development as well as expands the current understanding for policy-makers to conduct their future course of actions. As Ramirez Millares puts it, tourist satisfaction plays a crucial role in the successful articulation of Event and incentive travel

destinations. What is more than important, incoming tourism organizations take direct intervention in creating high-quality products. Unlike other classic tours, those employees who are benefited from incentive tourism are not involved in their travel planning. Their goals, needs, and expectations are met by the company which -offering the trip- rewards the employee for its performance. In this vein, the tour operator tailors a specific tour-package for meeting the employers' needs. In so doing, creativity, innovation and empathy are vital to better the labor relationships. Following this reasoning, the author holds the thesis that MICE is based on specific forms of negotiations to engage with the offering and the demands. In this way, MICE not only distinguishes itself from other classic tours but also adopts its international corporations, which legally draw the rules of operation globally. Otherwise, MICE would never prosper to the levels and dimensions the segment shows today. It is not otiose to say that the success of MICE does not rest in the marketing campaign or promotion, but in the possibility to design tailored tours for a great variety of segments. Besides, the turning point of the text leads readers to imagine the opportunities for Cuba to develop this type of tourism taking advantage of the human capital. Centered on the tourism industry, the Cuban economic model is a fertile ground for MICE. The lack of competitiveness of Cuba -at least in comparison with other islands- has nowadays reversed the achieved advances of the past. One of the troubling aspects of the tourism decline associates with what experts dubbed as the massification of tourism in Cuba offering sun and beach as the only product. Hence, Professor Ramirez Millares reminds us that MICE, which delves into the experiential features of visitors, should take part in a sustainable agenda for 2030. MICE not only opens the doors for the creation and sharing of unique experiences but also transforms the local values while reaching personal and group maturation. The book gives a snapshot of good practices revolving around the applications of MICE in a different context. Of course, these





applications cannot be homogenized or extrapolated to other universes, but very well they represent an interesting description of the benefits of MICE and island destinations. Once again, this must-read book illustrates the potentialities, strengths as well as opportunities to apply for this type of tourism to recycling the current Cuban infrastructure. As he eloquently observes, it is time to adopt a new ethic code for tourism to create a fluid dialogue with the potential customers. The return to events and conferences allow a flow of information for the market trends to be updated. Last but not least, in his epilogue, Ramirez Millares refers to the tourism professional staff or the future tourism bachelors to find in MICE new modalities to improve the current (stagnated) situation of tourism in Cuba. This book is for this reviewer a more than interesting text highly recommendable to students, professionals, scholars and policymakers interested in MICE and tourism development.

Translated to English by Professor Maximiliano E. Korstanje

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*SUBMITTED: AUG 2021*

*PUBLISHED ONLINE: 18 OCT 2021*

# Aims & Scope

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## AIMS

The *Journal of Tourism, Heritage & Services Marketing* is an open-access, international, multi-disciplinary, refereed (double blind peer-reviewed) journal aiming to promote and enhance research in all fields of marketing in tourism, heritage and services management. The journal is intended for readers in the scholarly community who deal with different marketing sectors, both at macro and at micro level, as well as professionals in the industry. The *Journal of Tourism, Heritage & Services Marketing* provides a platform for debate and dissemination of research findings, new research areas and techniques, conceptual developments, and articles with practical application to any tourism, heritage, and services marketing segment. Besides research papers, the journal welcomes book reviews, conference reports, case studies, research notes and commentaries. The *Journal of Tourism, Heritage & Services Marketing* aims at:

- Disseminating and promoting research, good practice and innovation in all aspects of marketing in tourism, heritage and services to its prime audience including educators, researchers, post-graduate students, policy makers, and industry practitioners.
- Encouraging international scientific cooperation and understanding, and enhancing multi-disciplinary research across various marketing sectors.

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## SCOPE AND PEER-REVIEW POLICY

The scope of the journal is international and all papers submitted are subject to an initial screening by a member of the journal's Senior Advisory Board, and subsequently by strict blind peer review by 3 anonymous international reviewers. The journal features conceptual and empirical papers, and editorial policy is to invite the submission of manuscripts from academics, researchers, post-graduate students, policy-makers and industry practitioners. The Editorial Board will be looking particularly for articles about new trends and developments within different sectors of marketing and the application of new ideas and developments that are likely to affect tourism, heritage and services in the future. *Journal of Tourism, Heritage & Services Marketing* also welcomes submission of manuscripts in areas that may not be directly tourism or heritage-related but cover a topic that is of interest to researchers, educators, policy-makers and practitioners in various fields of services marketing.

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- Contribution to the promotion of scientific knowledge in the greater multi-disciplinary field of marketing.
- Adequate and relevant literature review.
- Scientifically valid and reliable methodology.
- Clarity of writing.
- Acceptable quality of English language.

*Journal of Tourism, Heritage & Services Marketing* is published twice per year (in Spring and in Autumn). Each issue includes the following sections: editorial, full papers, research notes, case studies, book reviews, conference reports, industry viewpoints, and forthcoming events.

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## OPEN ACCESS POLICY

*Journal of Tourism, Heritage & Services Marketing* is an Open Access journal, conforming fully to the Budapest Open Access Initiative (BOAI). *Journal of Tourism, Heritage & Services Marketing* has adopted the BOAI policy of "free availability on the public internet, permitting its users to read, download, copy, distribute, print, search, or link to the full texts of its articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, is to give authors control over the integrity of their work and the right to be properly acknowledged and cited".

# About JTHSM

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## ABOUT JTHSM

Journal of Tourism, Heritage & Services Marketing is an open access, international, multi-disciplinary, refereed (double blind peer-reviewed) journal aiming to promote and enhance research at both macro-economic and micro-economic levels of tourism, heritage and services marketing. The journal's ISSN is: 2529-1947.

The journal is published twice per year (in Winter and in Summer) and is owned and co-managed by two academic units of the School of Economics & Business of the International Hellenic University: the Program of Postgraduate Studies in Tourism Management & Organisation and the Research Laboratory in Tourism "Tourlab". The International Hellenic University is the third largest public (state-owned) university in Greece.

For more information and for any editorial enquiries, please contact with the Journal manager at: Mr. Panagiotis Papageorgiou, International Hellenic University, JTHSM Editorial Office, Program of Postgraduate Studies in Tourism Management, School of Economics & Business, P.O. Box 141, GR-57400, Thessaloniki, Greece. Phone: +30-2310-013450, E-mail: [editorial-office@jthsm.gr](mailto:editorial-office@jthsm.gr). For any other questions or for inquiries regarding submission of manuscripts, please contact with the Editor-in-Chief at: Prof. Evangelos Christou, International Hellenic University, School of Economics & Business, P.O. Box 141, GR-57400, Thessaloniki, Greece. Phone: +30-2310-013193, E-mail: [echristou@ihu.gr](mailto:echristou@ihu.gr)

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## SAN FRANCISCO DECLARATION ON RESEARCH ASSESSMENT

JTHSM has signed the Declaration on Research Assessment (DORA). DORA recognizes the need to improve the ways in which the outputs of scholarly research are evaluated. It is a worldwide initiative covering all scholarly disciplines and all key stakeholders including funders, publishers, professional societies, institutions, and researchers. JTHSM encourage all individuals and organizations who are interested in developing and promoting best practice in the assessment of scholarly research to sign DORA.

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## PUBLICATION ETHICS POLICY & MALPRACTICE STATEMENT

JTHSM is committed to maintaining the highest standards of publication ethics and to supporting ethical research practices and adheres to the COPE Code of Conduct for Journal Publishers. The journal editors follow the COPE Code of Conduct for Journal Editors.

This journal has adopted a comprehensive publication ethics and publication malpractice statement, composed using the publishing ethics resource kit and in compliance with Elsevier recommendations and COPE guidelines.

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## PLAGIARISM

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JTHSM evaluates submissions on the understanding that they are the original work of the author(s). We expect that references made in a manuscript or article to another person's work or idea will be credited appropriately. Equally we expect authors to gain all appropriate permissions prior to publication. JTHSM systematically run all submitted papers through plagiarism-detection software (using iThenticate by Turnitin plagiarism checker) to identify possible cases; JTHSM accepts and publishes manuscripts that score as "Green" in Similarity Report by Turnitin.

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## ORCID

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All submissions should include author's (and all co-authors') ORCID (compulsory for all submissions since volume 5, issue 1, 2019).

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## PUBLICATION EXPENSES, FEES & REVENUE SOURCES

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JTHSM does not charge authors fees for submitting, processing, or publishing papers. The journal's expenses are fully covered by the publisher (International Hellenic University), the third largest state-owned (public) university in Greece.

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The authors who may have a complaint against any of the aspects of their interaction with JTHSM should, in the first instance, write/e-mail to the Associate Editor. In case it does not resolve the issue, the complaint should be forwarded to the Editor-in-Chief. The Associate Editor and the Editor-in-Chief aim to acknowledge the complaint within 7 days after receiving it. In addition, they should explain to the author the procedure which they will be undertaking to resolve the matter.

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## ARTICLE RETRACTION AND CORRECTION POLICY

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Corrections are published if the publication record is seriously affected, for example with regard to the scientific accuracy of published information, or the reputation of the authors, or the reputation of the journal. Corrections that do not affect the contribution in a material way or significantly impair the reader's understanding of the contribution (e.g. a spelling mistake or grammatical error) will not be published. When an amendment is published, it is linked bi-directionally to and from the article being corrected. A PDF version of the correction is added to the original article PDF so that the

original article PDF will remain the same as the printed page and readers downloading the PDF will receive the original article plus amendment.

Amendments are published in the article category "Addenda and Errata" and will be further classified as an "Erratum", "Corrigendum", "Addendum" or "Retraction". All such amendments should be as concise as possible, containing only material strictly relevant to the contribution being corrected. In very rare circumstances, JTHSM also reserves the right to remove articles

**Errata** concern the amendment of mistakes introduced by the journal in editing or production, including errors of omission such as failure to make factual proof corrections requested by authors within the deadline provided by the journal and within journal policy. Errata are generally not published for simple, obvious typing errors, but are published when an apparently simple error is significant (for example, a greek mu for an 'm' in a unit, or a typing error in the corresponding author's email address).

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**Corrigenda** submitted by the original authors are published if the scientific accuracy or reproducibility of the original paper is compromised. JTHSM will publish corrigenda if there is an error in the published author list, but not usually for overlooked acknowledgements.

Readers wishing to draw the journal's attention to a significant published error should submit their comments as a "Letter to the Editor". Such "Letters to the Editor" will be carefully reviewed by unrelated and neutral referees. On editorial acceptance, the paper will be sent to the authors of the original paper to provide an opportunity for their early response.

**Addenda** are judged on the significance of the addition to the interpretation of the original publication. Addenda do not contradict the original publication, but if the authors inadvertently omitted significant information available to them at the time, this material will be published as an addendum after peer review.

**Retractions** are judged according to whether the main conclusion of the paper is seriously undermined as a result, for example, of subsequent information coming to light of which the authors were not aware at the time of publication. In the case of experimental papers, this can include e.g. further experiments by the authors or by others which do not confirm the main experimental conclusion of the original publication.

Readers wishing to draw the editors' attention to published work requiring retraction should first contact the authors of the original paper and then write to the journal, including copies of the correspondence with the authors (whether or not the correspondence has been answered). The editors will seek advice from reviewers if they judge that the information is likely to draw into question the main conclusions of the published paper.

Infringements of professional ethical codes, such as multiple submission, bogus claims of authorship, plagiarism, fraudulent use of data, or the like, will also result in an article being retracted.

All co-authors will be asked to agree to a retraction. In cases where some co-authors decline to sign a retraction, the editors reserve the right to publish the retraction with the dissenting author(s) identified.

**Article removal:** in very rare circumstances it may be necessary to remove an article from JTHSM. This will only occur where the article is clearly defamatory, or infringes others' legal rights, or where the article is, or there is good reason to expect it will be, the subject of a court order, or where the article, if acted upon, might pose a serious health risk.

In these circumstances, while the bibliographic information (title and authors) will be retained online, the text will be replaced with a page indicating that the article has been removed for legal reasons.

# Journal Sections

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## EDITORIAL

The Editorial addresses issues of contemporary interest and provides a detailed introduction and commentary to the articles in the current issue. The editorial may be written by the Editor-in-Chief, the Associate Editor, or by any other member(s) of the Editorial Board. When appropriate, a “Guest Editorial” may be presented. However, the Journal of Tourism, Heritage & Services Marketing does not accept unsolicited editorials.

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## FULL (RESEARCH) PAPERS

For the Research Papers section, the Journal of Tourism, Heritage & Services Marketing invites full-length manuscripts (not longer than 8,000 words and not shorter than 4,500 words) excluding references, from a variety of marketing disciplines; these papers may be either empirical or conceptual, and will be subject to strict double blind peer review (by at least two anonymous referees). The decision for the final acceptance of the paper will be taken unanimously by the Editor and by the Associate Editor. The manuscripts submitted should provide original and/or innovative ideas or approaches or findings that eventually push the frontiers of knowledge. Purely descriptive accounts are not considered suitable for this section. Each paper should have the following structure: a) abstract, b) introduction (including an overall presentation of the issue to be examined and the aims and objectives of the paper), c) main body (including, where appropriate, the review of literature, the development of hypotheses and/or models, research methodology, presentation of findings, and analysis and discussion), d) conclusions (including also, where appropriate, recommendations, practical implications, limitations, and suggestions for further research), e) bibliography, f) acknowledgements, and g) appendices.

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## CASE STUDIES

Case Studies should be no longer than 3,500 words and not shorter than 2,000; these articles should be focusing on the detailed and critical presentation/review of real-life cases from the greater marketing sector, and must include – where appropriate – relevant references and bibliography. Case Studies should aim at disseminating information and/or good practices, combined with critical analysis of real examples. Purely descriptive accounts may be considered suitable for this section, provided that are well-justified and of interest to

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## RESEARCH NOTES

Research Notes should be no longer than 3,000 words and not shorter than 1,000; these papers may be either empirical or conceptual, and will be subject to blind peer review (by at least two anonymous referees). The decision for the final acceptance of the paper will be taken unanimously by the Editor and by the Associate Editor. The manuscripts submitted may present research-in-progress or may focus on the conceptual development of models and approaches that have not been proven yet through primary research. In all cases, the papers should provide original ideas, approaches or preliminary findings that are open to discussion. Purely descriptive accounts may be considered suitable for this section, provided that are well-justified and of interest to the readers of JTHSM. Each paper should have the following structure: a) abstract, b) introduction (including an overall presentation of the issue to be examined and the aims and objectives of the paper), c) main body (including, where appropriate, the review of literature, the development of hypotheses and/or models, research methodology, presentation of findings, and analysis and discussion), d) conclusions (including also, where appropriate, recommendations, practical implications, limitations, and suggestions for further research), e) bibliography, f) acknowledgements, and g) appendices.

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## BOOK REVIEWS

Book Reviews should be no longer than 1,500 words and not shorter than 1,000; these articles aim at presenting and critically reviewing books from the greater field of tourism, heritage, services and marketing. Most reviews should focus



on new publications, but older books are also welcome for presentation. Book Reviews are not subject to blind peer review; the decision for the final acceptance of the article will be taken unanimously by the Editor-in-Chief and by the Book & Conference Reviews Editor. Where appropriate, these articles may include references and bibliography. Books to be reviewed may be assigned to potential authors by the Book & Conference Reviews Editor, though JTHSM is also open to unsolicited suggestions for book reviews from interested parties.

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#### **CONFERENCE REPORTS**

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Conference Reports should be no longer than 2,000 words and not shorter than 1,000; these articles aim at presenting and critically reviewing conferences from the greater field of tourism, heritage, services and marketing. Most reports should focus on recent conferences (i.e., conferences that took place not before than three months from the date of manuscript submission), but older conferences are also welcome for presentation if appropriate. Conference Reports are not subject to blind peer review; the decision for the final acceptance of the article will be taken unanimously by the Editor-in-Chief and by the Book & Conference Reports Editor. Where appropriate, these articles may include references and bibliography. Conference reports may be assigned to potential authors by the Book & Conference Reports Editor, though JTHSM is also open to unsolicited suggestions for reports from interested parties.

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#### **INDUSTRY VIEWPOINTS**

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Industry Viewpoints should be no longer than 1,500 words and not shorter than 500; these articles may have a “commentary” form, and aim at presenting and discussing ideas, views and suggestions by practitioners (marketing industry professionals, marketing planners, policy makers, other marketing stakeholders, etc.). Through these articles, JTHSM provides a platform for the exchange of ideas and for developing closer links between academics and practitioners. Most viewpoints should focus on contemporary issues, but other issues are also welcome for presentation if appropriate. Industry Viewpoints are not subject to blind peer review; the decision for the final acceptance of the article will be taken unanimously by the Editor-in-Chief and by the Associate Editor. These articles may be assigned to potential authors by the editor, though JTHSM is also open to unsolicited contributions from interested parties.

# Notes for Authors

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## MANUSCRIPT SUBMISSION

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Manuscripts should be written as understandably and concisely as possible with clarity and meaningfulness. Submission of a manuscript to the Journal of Tourism, Heritage & Services Marketing represents a certification on the part of the author(s) that it is an original work and has not been copyrighted elsewhere; manuscripts that are eventually published may not be reproduced in any other publication (print or electronic). Submissions are accepted only in electronic form; authors are requested to submit manuscripts (full research papers, case studies, research notes and all other types of manuscripts) through Easy Chair online submission system used by JTHSM, accessible at: <https://easychair.org/conferences/?conf=jthsm1>

All submissions should include author's and co-authors' – if any – ORCID (compulsory for all submissions since volume 5, issue 1, 2019).

Feedback regarding the submission of a manuscript (including the 3 anonymous reviewers' comments) will be provided to the author(s) within six weeks of the receipt of the manuscript. Submission of a manuscript will be held to imply that it contains original unpublished work not being considered for publication elsewhere at the same time. If appropriate, author(s) can correct first proofs. Manuscripts submitted to JTHSM, accepted for publication or not, cannot be returned to the author(s).

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## MANUSCRIPT LENGTH

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Full research Papers should be not longer than 8,000 words and not shorter than 4,500 words (excluding references). Research Notes should be no longer than 3,000 words and not shorter than 1,000. Case Studies should be no longer than 3,500 words and not shorter than 2,000. Book Reviews should be no longer than 1,500 words and not shorter than 1,000. Conference Reports should be no longer than 2,000 words and not shorter than 1,000. Industry Viewpoints should be no longer than 1,500 words and not shorter than 500. Manuscripts that do not fully conform to the above word limits (according to the type of the article) will be automatically rejected and should not be entered into the reviewing process.

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## MANUSCRIPT STYLE & PREPARATION

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All submissions (research papers, research notes, case studies, book reviews, conference reports, industry

viewpoints, and forthcoming events) must have a title of no more than 10 words.

Manuscripts should be double-line spaced, and have at least 2,5 cm (one-inch) margin on all four sides. Pages should be numbered consecutively.

The use of footnotes within the text is discouraged – use endnotes instead. Endnotes should be kept to a minimum, be used to provide additional comments and discussion, and should be numbered consecutively in the text and typed on a separate page at the end of the article.

Quotations must be taken accurately from the original source. Alterations to the quotations must be noted. Quotation marks (“ ”) are to be used to denote direct quotes. Inverted commas (‘ ’) should denote a quote within a quotation. If the quotation is less than 3 lines, then it should be included in the main text enclosed in quotation marks. If the quotation is more than 3 lines, then it should be separated from the main text and indented.

The name(s) of any sponsor(s) of the research contained in the manuscript, or any other acknowledgements, should appear at the very end of the manuscript.

Tables, figures and illustrations are to be included in the text and to be numbered consecutively (in Arabic numbers). Each table, figure or illustration must have a title.

The text should be organized under appropriate section headings, which, ideally, should not be more than 500-700 words apart.

The main body of the text should be written in Times New Roman letters, font size 12.

Section headings should be written in Arial letters, font size 12, and should be marked as follows: primary headings should be centered and typed in bold capitals and underlined; secondary headings should be typed with italic bold capital letters; other headings should be typed in capital letters. Authors are urged to write as concisely as possible, but not at the expense of clarity.

The preferred software for submission is Microsoft Word.

Authors submitting papers for publication should specify which section of the journal they wish their paper to be considered for: research papers, research notes, case studies, book reviews, conference reports, industry viewpoints, and forthcoming events.

Author(s) are responsible for preparing manuscripts which are clearly written in acceptable, scholarly English, and which contain no errors of spelling, grammar, or punctuation. Neither the Editorial Board nor the Publisher is responsible for correcting errors of spelling or grammar.

Where acronyms are used, their full expression should be given initially.

Authors are asked to ensure that there are no libelous implications in their work.

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## MANUSCRIPT PRESENTATION

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For submission, manuscripts of research papers, research notes and case studies should be arranged in the following order of presentation:

**First page:** title, subtitle (if required), author's name and surname, author's ORCID (compulsory for all submissions since volume 5, issue 1, 2019), affiliation, full postal address, telephone number and e-mail address. Respective names, affiliations, emails and addresses of co-author(s) should be clearly indicated. Also, include an abstract of not less than 100 and not more than 150 words and up to 5 keywords that identify article content. Also include a short biography of the author (about 25 words); in the case of co-author(s), the same details should also be included. All correspondence will be sent to the first named author, unless otherwise indicated.

**Second page:** title, an abstract of not more than 100 words and up to 5 keywords that identify article content. Do not include the author(s) details, affiliation(s), and biographies in this page.

**Subsequent pages:** the paper should begin on the third page and should not subsequently reveal the title or authors. In these pages should be included the main body of text (including tables, figures and illustrations); list of references; appendixes; and endnotes (numbered consecutively).

The author(s) should ensure that their names cannot be identified anywhere in the text.

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## GUIDANCE ON WRITING ABSTRACTS

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*JTHSM* provides the following guidance to help authors write an abstract of maximum value to readers. Authors are encouraged to follow this guidance. An abstract is a concise summary of a larger work, typically written in one paragraph of 100 to 200 words. Its purpose is to help readers quickly discern the purpose and content of the work. Manuscripts submitted to *JTHSM* must include an abstract written in English, of not less than 150 and not more than 200 words. Accuracy, brevity, and clarity are the ABCs of writing a good abstract. Writing style: a) Use a who, what, when, where, why, how, and "so what" approach to addressing the main elements in your abstract; b) Use specific words, phrases, concepts, and keywords from your paper; c) Use precise, clear, descriptive language, and write from an objective rather than evaluative point of view; d) Write concisely, but in complete sentences; e) Use plain language, do not use jargon, and do not use acronyms except for commonly used terms (then define the acronym the first time used); f) Write in the third person; do not use "I" or "we"; g) Use verbs in the active voice. A well-written abstract generally addresses four key elements:

- **Purpose:** describes the objectives and hypotheses of the research.
- **Methods:** describes important features of your research design, data, and analysis. This may include the sample size, geographic location, demographics, variables, controls, conditions, tests, descriptions of research

design, details of sampling techniques, and data gathering procedures.

- **Results:** describes the key findings of the study, including experimental, correlational, or theoretical results. It may also provide a brief explanation of the results.
- **Implications:** show how the results connect to policy and practice, and provide suggestions for follow-up, future studies, or further analysis.

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In the text, references should be cited with parentheses using the "author, date" style – for example for single citations (Ford, 2004), or for multiple citations (Isaac, 1998; Jackson, 2003). Page numbers for specific points or direct quotations must be given (i.e., Ford, 2004: 312-313). The Reference list, placed at the end of the manuscript, must be typed in alphabetical order of authors. The specific format is:

- For journal papers: Tribe, J. (2002). The philosophic practitioner. *Annals of Tourism Research*, 29(2), pp. 338-357.
- For books and monographs: Teare, R. & Ingram, H. (1993). *Strategic Management: A Resource-Based Approach for the Hospitality and Tourism Industries*. London: Cassell.
- For chapters in edited books: Sigala, M. and Christou, E. (2002). Use of Internet for enhancing tourism and hospitality education: lessons from Europe (pp. 112-123). In K.W. Wober, A.J. Frew and M. Hitz (Eds.) *Information and Communication Technologies in Tourism*, Wien: Springer-Verlag.
- For papers presented in conferences: Ford, B. (2004). Adoption of innovations on hospitality. *Paper presented at the 22nd EuroCHRIE Conference*. Bilkent University, Ankara, Turkey: 3-7 November 2004.
- For papers published in conference proceedings: Jackman, F. (2008). Adoption of innovations on hospitality. *Proceedings the 26th EuroCHRIE Conference*. Dubai, United Arab Emirates.
- For unpublished works: Gregoriades, M. (2004). The impact of trust in brand loyalty, *Unpublished PhD Thesis*. Chios, Greece: University of the Aegean.
- For Internet sources (if you know the author): Johns, D. (2003) The power of branding in tourism. [Http://www.tourismabstracts.org/marketing/papers-authors/id3456](http://www.tourismabstracts.org/marketing/papers-authors/id3456). Accessed the 12 th of January 2005, at 14:55. (Note: always state clearly the full URL of your source)
- For Internet sources (if you do not know the author): Tourism supply and demand. [Http://www.tourismabstracts.org/marketing/papers-authors/id3456](http://www.tourismabstracts.org/marketing/papers-authors/id3456). Accessed the 30 th of January 2004, at 12:35. (Note: always state clearly the full URL of your source)
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# Publication Ethics & Malpractice Policy

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