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Bilal Ahmad



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AIMS & SCOPE

The **Journal of Tourism, Sustainability and Well-being (JTSW)** is an international open-access academic journal in the tourism field that publishes high-quality, refereed articles that advance science widely available so that tourism can serve the society, enhance a sustainable development of the destinations, and positively impact the well-being of stakeholders.

JTSW offers itself a multidisciplinary and all-inclusive bridge between theoretical and practical aspects of tourism and the emerging interdisciplinary aspects that can revolutionise the tourism and hospitality industries. While the JTSW maintains its traditional focus on original research, both conceptual and empirical, that clearly contributes to the theoretical development of the tourism field, it also has a far more inclusive and broadened scope to keep up with the new problems that challenge academics and practitioners working in private, public and non-profit organisations globally. JTSW encourages research based on a variety of methods, qualitative and/or quantitative, based on rigorous theoretical reasoning and supported by a strong methodology. Criteria for evaluation include significance in contributing new knowledge, conceptual quality, appropriate methodology, technical competence (of theoretical argument and/or data analysis), and clarity of exposition.

JTSW promotes research on a broad range of topics that explore major trends in the study of relationships between tourism, sustainable development of destinations and well-being of tourism-related stakeholders. Contributions can be from all disciplinary perspectives, with interdisciplinary approaches especially welcomed as far as they apply to the tourism research field. All policy, planning and management aspects of tourism are also encouraged.

The journal is published as a quarterly international review in open access, mainly composed of thematic special issues. The publishing schedule is the last working day of March, June, September and December. Any interested scholar can submit a proposal for the guest-edition of a special issue to the Editor-in-Chief. The proposal should follow the guidelines provided in the Guide for Guest Editors. Each article must follow the publication rules as in the Author Guidelines. The Guest-Editors and the Editor-in-Chief are responsible for the implementation of a double-blind review process. This method ensures that the author(s) and the reviewers remain anonymous to guarantee a fair and impartial review of the submitted manuscripts.

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EDITORIAL

This third issue of 2023 is composed of four articles that provide an overview of the sector from the perspectives of different stakeholders. The first article uses mixed methods to address the potentiality of Portugal as a thermal tourism destination by characterizing its history, supply and demand and providing the basis for the definition of strategies to develop the sector. The second article explores a still understudied tourism sector, the oleotourism. By interviewing different olive producers in the Trás-os-Montes region, Portugal, this study aims to identify sustainable tourism practices in this niche tourism and to understand better how these sustainable practices can contribute to the development of olive cultivation. The third article intends to contribute to the literature on the determinants of tourism development from the residents' perspective. By applying a quantitative approach, relying on a survey of residents of a historic town in the north of Portugal, this study explores the relationships among different determinants of residents' support for sustainable tourism development and residents' sociodemographic profile. The fourth article has the tourists' perspective and addresses how the COVID-19 pandemic impacted the travel intentions to Pakistan by applying the Theory of Planned Behaviour.

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Health and Wellness Tourism: An Overview of Thermal Tourism in Portugal

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ABSTRACT

Over the last decades there has been a growing concern about health, mainly from the population of more developed countries. Health and wellness tourism are growing exponentially and show a great potential worldwide, having also become a strategic product in Portuguese tourism. This study carries out a general approach to health and wellness tourism, its evolution and segmentation worldwide, with special attention to the case of thermal tourism in Portugal. The study object is the potentiality of Portugal as a thermal tourism destination, through the characterisation of its history, supply and demand and aims to evaluate the thermal resources present in the intervention area. The methodology adopted was based on an exploratory and mixed methods approach that integrates qualitative elements and quantitative research, specifically based on a bibliographical review and a case study based on a qualitative and quantitative analysis of secondary data concerning the subject. The findings allow an in-depth understanding of the evolution and current state of thermal tourism, providing a comprehensive basis for the development of strategies adapted to the present demand of thermal spas in Portugal.

KEYWORDS

Health and Wellness Tourism, Thermal Spas, Thermalism, Thermal User's Profile, Portuguese Thermal Tourism.

ARTICLE HISTORY

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1. Introduction

Interest in all aspects of health and wellness has grown exponentially all over the world. Consumers are now looking for new ways to achieve a healthy lifestyle, better quality of life and well-being, particularly after the COVID-19 pandemic. The sharp expansion of health and wellness tourism worldwide has led to a more intense competition among the sector's suppliers, as they strive to make the customers' experience more affordable and serve a broader spectrum of increasingly discerning clients.

From a scientific perspective, it is proven that thermal tourism contributes to a complete state of well-being, both physically and psychologically. Portugal has at its disposal not only a wide range of thermal resources, with a greater focus on therapy, but also several sophisticated spa and wellness facilities. These thermal resorts are present in a large part of the country, with special emphasis in the North and Centre regions, where a great hydrogeological wealth is concentrated. Over the last years, they have emerged as an alternative to sun and beach tourism, becoming a place not only for the cure of pathologies, but also as a refuge from the hectic daily life of the population. Given the importance of this topic to the image of Portugal as a health and wellness destination, this paper aims to conceptually examine the phenomenon of health and wellness tourism, focusing on the context of thermal spas in Portugal. The study follows the importance and evolution of health and wellness tourism worldwide to provide an overview of the thermal spa segment in the Portuguese context, thus providing important insights and cues for the development and promotion of thermal tourism products and services.

This paper follows the following structure: the introduction provides a framework for the whole paper. Then, the literature review provides a conceptual framework concerning the evolution of the health paradigm into a holistic one, followed by an analysis of the supply and demand of the sector worldwide. The third topic presents the methodology followed. The fourth part focuses on the Portuguese context, providing a conceptual overview of the thermal segment, particularly what concerns to the main steps in its evolution, the analysis of its supply and demand, and recent research on users' profile. Conclusions and future research recommendations close the study.

2. Literature Review

2.1 Health and Wellness: An Ever-Evolving Concept

Health has become a major concern in nowadays' society, with innovative health and wellness programs trying to fulfil the growing consumer demands for fitness level improvement, for healthy lifestyle education, for nutrition counselling, for healing, for preventive medicine, for solving personal problems like stress and depression, and for spiritual health (Didascalou, Lagos, & Nastos, 2009). The growing demand for health and well-being programs is closely linked to a change in the popular conception of health, particularly after World War II. In 1948 the World Health Organization defined health as a state of complete physical, mental, and social wellbeing and not merely the absence of disease or infirmity, reinforcing the evolution of the concept from a traditional view of health to a holistic wellness orientation (Bonfada, Bonfada, Gandara, & Brea, 2008; Gonçalves & Guerra, 2019). The issue of health goes beyond prevention. People have begun to take a more responsible attitude toward their health and their bodies, reinforcing a movement from the prevention of disease to the prevention of health. Consumers have become more health-conscious and aware that health is not to be taken for granted (Brandão, Liberato, Teixeira, & Liberato, 2021). Wellness may be defined as the active pursuit of activities, choices, and lifestyles that lead to a state of holistic health (Global Wellness Institute, 2021). This definition reinforces two underlying ideas of the concept: (i) it is not a passive or static state, but a pursuit associated with intentions, choices, and actions. This dimension reinforces the importance of lifestyle, self-responsibility for health, and the exploitation of a person's potential for a better quality of health (Didascalou et al., 2009; Global Wellness Institute, 2021); and (ii) health encompasses many different dimensions, including physical, mental, emotional, spiritual, social, and environmental dimensions, which reinforces its multidimensionality as opposed to the traditional health paradigm (Global Wellness Institute, 2021; Dini & Pencarelli, 2022). The impact of consumers' growing interest in wellness activities is obvious in economic terms. According to the Global

Wellness Institute (2021) global wellness economy grew from \$4.3 trillion in 2017 to \$4.9 trillion in 2019, or by 6.6% annually, a growth rate significantly higher than global economic growth (4.0%).

The multidimensionality of the wellness concept has also had an impact on the way activities related to it have evolved, particularly regarding tourism. Since health and wellness are crucial societal values, they significantly affect all aspects of life and increasingly influence tourism consumption and production patterns. The field of health and wellness tourism has developed in a significant way over the past two decades and is undoubtedly an emerging, complex and rapidly-changing tourism segment (UNWTO, 2018). Even though wellness tourism is one of the fastest-growing tourism subsectors, as it offers guests a wide range of opportunities and experiences, consistency in the literature regarding the concept is still lacking. As Voigt, Brown, & Howat (2011) point out, terms such as wellness tourism, health tourism, healthcare tourism, medical tourism, holistic tourism and spa tourism, even though sometimes used interchangeably, often describe different concepts. In fact, as demand grows and several sub-sectors or niches emerge, it may be difficult to supply a comprehensive definitional framework in English language which may also be suitable to global usage (Smith & Puczkó, 2015). Joppe (2010), following the International Spa Association categorisation, presents eight primary types of spas: day spa, resort/hotel spa, destination spa, medical spa, club spa, mineral springs spa, cruise ship spa, and cosmetic spa. The growth and diversity of the terms used to identify wellness-related products mirrors not only the growth of diverse businesses offering wellness-related services, as also the different experiences that these can appeal to. This also reflects different perceptions of spas and also differences based on geographical and linguistic characteristics and a wide range of cultural traditions (UNWTO, 2018), with Europeans tending to link them with medical hydrology and therapeutic treatments and Americans linking them to health and fitness (Mak, Wong, & Chang, 2009; Joppe, 2010), for example. In the same way, as a broad multidimensional concept, wellness tourism includes varied components in its offer system. In a recent study, Dini & Pencarelli (2022) identified ten components of wellness tourism: hot springs, spas, medical tourism, care of the body and mind, enogastronomy, sports, nature and environment, culture, spirituality and events. Each of the categories identified may represent a single touristic offer aimed at market segments or be a part of a set of components within an integrated mix of tourism products. Research in the field has also highlighted obstacles to a clear categorisation of the field, namely due to the need of confidentiality or the inability of researchers to gain access to tourists in spas, hotels, or clinics, which forces the field to rely on relatively small and isolated datasets, often derived from spas (Smith & Puczkó, 2015; UNWTO, 2018) and the paucity of empirical studies that allow in-depth information about who these tourists are, what exactly they are looking for, and what is worth to them (Voigt et al., 2011).

Health tourism is usually considered an umbrella term, encompassing other subsectors as wellness and medical tourism (Smith & Puczkó, 2009; Smith & Puczkó, 2015; UNWTO, 2018; Brandão et al., 2021). Health and wellness tourism can be divided into several types, considering the motivation of tourists. Medical tourism usually deals with people who are physically rather than mentally or socially unwell (Smith & Puczkó, 2015). This segment is divided into therapeutic medical tourism, rehabilitation, recovery and cure of diseases, surgical medical tourism, cosmetic surgeries, dentists, and surgeries in various areas. It involves the use of evidence-based medical healing resources and services (both invasive and non-invasive) and may include diagnosis, treatment, cure, prevention and rehabilitation (UNWTO, 2018). Wellness tourism is a tourism activity that aims to improve and balance all of the main domains of human life, including physical, mental, emotional, occupational, intellectual and spiritual (UNWTO, 2018). In this case there is an emphasis on prevention rather than cure and it aims to improve mental and spiritual well-being and increase the capacity of individuals to satisfy their own needs and function better in their environment and society (Smith & Puczkó, 2015). It is subdivided into holistic, spiritual, yoga and meditation, leisure, beauty treatments, and sports. There are also by-products that are associated with both segments of tourism. These are related to medical wellness, therapeutic recreation, rehabilitation, and occupational wellness.

To meet the diversified and integrated wellness needs of tourism demand, a broad holistic approach is necessary (Dini & Pencarelli, 2022), but the range of opportunities that a better understanding of the supply and demand of the health tourism market may bring are obvious: wellness travelers tend to spend much more per trip than the average traveler (Global Wellness Institute, 2021); it can help to tackle seasonality as it can be integrated all year long into destination strategies and it can contribute to tourism dis-

persal and local development, as many facilities can be located outside the main urban centers (Antunes, 2012; UNWTO, 2018; Gonçalves & Guerra, 2019).

2.2 Health and Wellness Tourism Worldwide

Many different reasons for the exponential growth of health and wellness tourism have been identified in the literature. One of the reasons is related to population ageing (García-Altés, 2005; Joppe, 2010) with baby boomers wanting to age while maintaining their quality of life; and the healthcare system particularities (García-Altés, 2005; Laborda, 2005; Joppe, 2010; UNWTO, 2018) often characterised by long waiting lists, high costs, lack of insurance, among others, and a focus on illnesses, which causes people to try to be proactive when it comes to preventing diseases from developing the first place. Also, lifestyle changes (that influence the growth on demand for cosmetic surgery, spas, fitness centers, etc.) and tourism alternatives (with consumers that are already well-traveled trying to find something new and different in a holiday experience) have also been pointed out (García-Altés, 2005). Also, urban living associated health condition and chronic diseases are leading to a growing need and demand for healthier trips, natural alternatives and escapism (UNWTO, 2018).

As far as medical tourism is concerned, and according to the available data, the outbound market is mostly located in the United States of America, Europe, and the Middle East. According to Garcia (2015), the most advanced countries regarding this type of tourism are India, Thailand and Malaysia, as they provide modern facilities and qualified and experienced health professionals. Medical tourism has been particularly driven by over-burdened healthcare and public health insurance systems, as well as lower prices, reduced waiting lists and access to qualified professionals. Long-term care expenditure has risen over the past few decades in many advanced economies, with ageing population requiring more health and social care (UNWTO, 2018). Even though there is a recognised difficulty to estimate the size and growth of medical tourism, due to limited, fragmented and often unreliable data, as well as varying definitions of health tourism, some estimates point to a market ranging from USD 45.5 billion to USD 100 billion, depending on the source.

There is an increasing concern for health and wellness, especially by the population of more developed countries. Today, consumers are placing increasing importance on wellness, and seeking to incorporate this into their lifestyles, thus causing businesses to have a need to insert wellness into their tourism offerings and sparking the growth of wellness tourism. Wellness services related to prevention and healthy behaviors can be considered crucial to solve several critical problems in society, not only physical but also mental, such as sedentary lives, unhealthy diets, smoking or even loneliness. Wellness has become a trend and a relevant tourist factor. To meet these needs, there has been an increase in leisure-related facilities, a greater variety of food products, and the creation of innovative products and services. Also, there is greater investment by businesses and regional governments in new strategies, products, experiences, and destinations. This increase in demand has become an opportunity for some companies and tourist destinations. Wellness travel is no longer a one-sided commercial transaction aimed at the consumption of a product or service, but there is now a greater focus on the relationship with the destination and, more specifically, with local communities.

The most recent available data shows that wellness tourism expenditures reached \$720.4 billion in 2019, then declining to \$435.7 billion in 2020 due to the pandemic. The sector presented an 8.1% annual growth rate from 2017-2019, which is more than 50% higher than the 5.2% growth rate for overall tourism (Global Wellness Institute, 2021). According to GWI data (2021), more than 936 million international and domestic wellness trips were made in 2019, 145 million more than in 2017, then falling to 601 million trips in 2020 because of COVID-19. Even so, wellness trips accounted for 6.5% of all business trips but represented 16.2% of all expenditures in 2020, as wellness travelers tend to spend much more per trip than the average tourist.

Domestic travel accounts for most wellness trips. Among the 601 million wellness trips taken in 2020, international/inbound trips accounted for only 11% (65 million trips), while domestic trips represented 89% (536 million). Even though international wellness trips were a bit lower in 2020 due to the pandemic and consequent border closures, it is clear from the period 2017-2019 that these already accounted for most overall wellness trips. Europe remains the region with the highest number of wellness trips, while

North America maintains the higher wellness tourism expenditures (Global Wellness Institute, 2021).

Wellness tourism is highly concentrated in North America, Europe, and Asia Pacific. The United States represent 19% of all trips and account for 37% of all expenditures. The top five countries (United States, Germany, France, China, Japan) account for 64% of the global market, and the top 20 countries represent 87%. Portugal ranks 18th in wellness destinations, showing 4 million wellness trips in 2020 and a wellness tourism expenditure of \$2.8 billion in the same year, following a \$4.4 billion record in the previous year (Global Wellness Institute, 2021).

What concerns to the user profile, research is very fragmented, but a few studies stand out in the literature review, which may provide some clues concerning the health and wellness tourist profile. Mak et al. (2009) examined the underlying factors that motivate travelers to search for spa experiences while traveling in the Asian market. Most spa-goers were female, aged 26-33 years and single. The top five motivating items identified were (i) to seek physical relaxation, (ii) to pamper oneself, (iii) to reward oneself, (iv) to seek mental peacefulness and (v) to get away from the pressures of work and social life. Voigt et al. (2011) found out that in the Australian context, most wellness tourists travelled alone and the three groups of wellness tourists (beauty spa visitors, lifestyle resort visitors, and spiritual retreat visitors) are looking for a psychological, spiritual, or physical transformation of the self. They also found that there may be a significant association between the highest level of education and the wellness tourist category. Smith & Puczkó (2015) study was based on primary data collected from 420 spa and wellness facilities in more than 50 countries. The study showed that 43% of all spa and wellness customers are tourists and they have a higher dedication to health in their everyday life. International tourists seem to be predominantly motivated by the treatments and services offered, as well as the brand and reputation of the wellness and spa facilities. They often visit wellness facilities, but do not tend to stay overnight. International wellness tourists seem to be primarily motivated by treatments and therapies that are somehow based on local assets, resources, and traditions (e.g., thermal water, mud).

3. Methodology

The main aim of this research is to study the evolution of health and wellness tourism and its segmentation, with special attention to the case study of spa tourism in Portugal. To study the potentialities of Portugal as a thermal tourism destination, this study characterises the history of thermal tourism in the world and in Portugal and characterises the supply and demand in the thermal sector and evaluates the thermal resources present in the intervention area, as well as its tourism potential. In this sense, this study aims to evaluate the importance of thermal tourism as an element of health and wellness tourism, especially in the context of the case study of Portugal.

The methodology followed in this study was based on a literature review and on a case study based on a qualitative and quantitative analysis of secondary data concerning the subject under study. Thus, given the research objectives, this research followed an exploratory, mixed methods approach that integrates qualitative elements and quantitative research seeking to capitalise on the complementary nature of both methods.

Specifically, in a first phase, this study uses a literature review and, additionally in a second phase, a qualitative and quantitative approach of secondary statistical data regarding thermal tourism in Portugal was adopted as research methodology.

4. Results

4.1 Health and Wellness Tourism in Portugal

Health and wellness tourism is steadily increasing and presents a strong potential worldwide. Due to this potential, evolution and importance, health and wellness tourism has become a strategic product to the development of Portuguese tourism (Ministério da Economia e da Inovação, 2007). Portugal has at its disposal not only a wide range of thermal resources, with a greater focus on therapy but also several sophis-

ticated spa and wellness facilities. These thermal spas are spread throughout the country, with a greater focus on the North and Center of Portugal as there is a great hydrogeological wealth in these regions.

Health and wellness tourism is seen as one of the areas with the highest tourism potential, especially in Portugal where the sea waters are appropriate to the practice of thalassotherapy, the climate is mild and there is a great diversity of thermal resources all over the country. In addition, the offer in Portugal is also seen as diversified and highly qualified, since in terms of medical tourism, Portugal has a modern and technologically well-equipped hospital network (Pereira, 2016). However, although there is a large offer, the thermal spas are not very competitive since the facilities have a “hospital” look, something that is not very attractive for tourists. In contrast, domestic spa and wellness centers have a wide variety of quality services and well-developed structures that can compete on a global level. However, they are still very few and do not differ greatly from competing destinations. In 2007, the first National Strategy Plan for Tourism (Ministério da Economia e da Inovação, 2007) included health and wellness tourism as one of the 10 strategic tourism products, which emphasises the relevance that this typology has acquired in tourist and economic terms. In the document, the spa segment is seen as one that, if properly designed and structured, can create an offer with great differentiation compared to other markets. Therefore, it is necessary to change the operating model based on treatments and have a greater focus on wellness throughout the country. Since then, and with the remodeling that was done in the spas to modernise and follow this global phenomenon, health and wellness tourism started to be sought not only by those who wanted to perform treatments, but also by those who wanted a more relaxed environment to obtain the greatest possible satisfaction during the experience. The Tourism Strategy 2027 (Ministério da Economia, 2017) also highlights the importance of this type of tourism in the Portuguese context and defines as priorities health and wellness tourism projects associated with the therapeutic properties of the sea, as well as actions to enhance tourism and promote lakes, inland waters, springs, and thermal waters.

Although there is an effort on the part of spas and organisations to try to change mentalities, there is still a large part of the population that associates spas with a hospital space and, subsequently, an aging population and unappealing facilities.

Like the main health and wellness destinations in Europe, 98% of spa users in Portugal are from the domestic market. Although still small, the external health and wellness market has been growing, with customers from countries like the UK, Germany, France, Russia, Belgium, Switzerland, and Spain, which is in line with the intentions of the National Strategy Plan for Tourism (Ministério da Economia e da Inovação, 2007), in which there is a greater preference for health and wellness tourism by Mediterranean countries and Northern European markets, especially Germany due to its strong consumption of classical thermal tourism. Regarding the countries that have a similar offer to Portugal, and that can be considered competitors, Spain, Italy, Austria, France, Germany, and Switzerland stand out.

4.2 An Overview of Portuguese Thermalism

Thermal/mineral springs industry may be defined as one encompassing revenue-earning business establishments associated with the wellness, recreational, and therapeutic use of waters with special properties (Global Wellness Institute, 2021). The Global Wellness Institute (2021) estimates that there are currently more than 34 thousand of these establishments operating in 130 countries, which obtained revenues of \$39.1 billion in 2017 and \$64 billion in 2019, being among the fastest-growing wellness sectors in this period with annual revenue growth of 6.8%. The sector is heavily concentrated in Asia-Pacific and Europe, which concentrate 96% of revenues and 94% of this type of establishments. Many European countries have a long history of using thermal/mineral waters for curative and therapeutic purposes, and this is often subsidised by government insurance systems.

Portugal is no exception to this long European tradition. The practice of thermal tourism is not only associated with its therapeutical benefits. As Cunha (2001) refers “taking the waters” during the 18th and 19th centuries became a fashion but also a way to spend time and rest to the upper classes of Europe, and so thermal centers were the real worldly tourist centers of the time. The people’s search for a certain natural water has been known for centuries, and often implied traveling to a certain geographical point to fulfil the desire to search for pain relief. It was from this practice that the first spas and support infrastructures began to emerge giving birth to thermalism as a social phenomenon (Amaral, 2010). The use of this

types of establishments as a predominant motivation for travel incites temporary stays, converting many thermal users into tourists. The historical evolution of thermalism is seen as a huge sequence of ups and downs. In the 70's, about 60 thousand people went to the national thermal spas, corresponding to 0.7% of the Portuguese population (Ramos, 2005), which is a low amount when compared to other European countries. That can be explained by the longer duration of the spa season in other countries, as well as the fact that treatments are more competitively priced. In addition, the geographical distribution of Portuguese spas is a factor that has always worked against thermalism in Portugal, since tourists tend to seek the coast and the south, while the spas are mostly located in the North and Center, and therefore the spas ended up abandoned and in need of the resurgence that has taken place in recent years.

The Decree-Law nº 142/2004 from 11 June introduced a new legal framework that would allow a dynamisation of thermal spas in Portugal. This decree establishes the rules for licensing thermal establishments, for the organisation, operation, and supervision of the sector, including the potentialities that wellness and leisure may bring to the revitalisation of the sector. There is a clear objective of giving thermal establishments the power to develop a diversified offer enhancing health, well-being, and tourism in a more effective way, overcoming the previous legislation (Decree Law No. 15 401 of April 20, 1928) that was clearly outdated and inadequate to the current reality of the tourism and wellness product (Gonçalves & Guerra, 2019).

Depending on its main purpose, two distinct segments can be identified: classic thermalism and wellness thermalism. In classic thermalism, after a detailed medical consultation, people are guided to treatments with therapeutic purposes and specific associated pathologies. Usually, as these are prescription treatments, they tend to be longer, to cure the associated pathologies. In wellness spas, for recreational and tourist purposes, the focus is on providing mental and physical balance to the person who uses them. Some of the services available to this type of thermal user include massages, saunas, and relaxation activities, among others. These programs are of short duration, and do not require a doctor's prescription. These two segments constitute two market niches with different characteristics and needs. The first is a mature niche market that needs intervention with a view to its rejuvenation and, the second, is an emerging niche market that needs intervention with a view to its consolidation (Gonçalves & Guerra, 2019).

4.2.1 Supply and Demand

Portugal is rich in natural mineral waters, with about 400 classified hydrothermal springs and more than 40 thermal spas, the majority concentrated in the North and Center regions, thus having great touristic potential, especially in the health and well-being segments. The link between thermal spas and tourism becomes even more evident through the inclusion of many spas in thematic routes of great touristic value (ATP, 2022).

In 2019 there were 47 thermal spas operating in Portugal, concentrated mainly in the North and Center zones. In 2019, thermal treatments restarted to be reimbursed by the National Healthcare System, after this funding had been suspended in 2011, with a maximum limit of 95 euros per user. According to the joint decree of the Ministries of Health and the Secretary of State for Tourism, the thermal treatments that are prescribed in primary health care of the SNS are covered by this support.

Based on data from the Direção Geral de Energia e Geologia (DGEG, 2021) the number of thermal spa registrations, despite having some oscillations, rose considerably from 2011 to 2019, reaching its highest point in 2016 at 138 981 visitors. Regarding the revenues, except for 2014 and obviously 2020, the revenues have constantly remained between 13 and 15 million euros, with its highest value in 2019, with 33 thousand euros more than in 2011 (Table 1).

Table 1. Number of Enrollments in Thermal Spas (2011-2020)

Year	No. of Enrollments	Var. (%)	Euros (€)	Var. (%)
2011	100 642	37,0	15 301 168	-17,3
2012	96 927	-3,7	13 556 949	-11,4
2013	90 621	-6,5	13 009 962	-4,0
2014	105 739	16,7	11 632 368	-10,6
2015	110 168	4,2	13 258 688	14,0
2016	138 981	26,2	15 257 137	15,1
2017	117 090	-15,8	13 350 685	-12,5
2018	133 762	14,2	13 184 238	-1,2
2019	135 259	1,1	15 334 995	16,3
2020	45 722	-66,2	5 378 985	-64,9

Source: Own elaboration, based on DGEG data (2021)

Regarding the distribution of the number of registered thermal spa users by classical and wellness thermalism (Table 2), except for 2011 and 2013, wellness thermalism figures were always higher. In the whole decade, wellness thermal tourism received 210 thousand more visitors than classical thermal tourism, which reinforces the growing demand for leisure and wellness purposes. This is supported by the variation in the number of registrations of each of the segments over the decade, with the classical thermal spas suffering a drop of about 10 thousand visitors from 2011-2019. On the other hand, wellness thermalism increased considerably throughout the decade, with the year 2018 standing out with more than 90 thousand registrations. This increase in the decade was so noticeable that in 2019 there were more than double the visitors of 2011 and even in a pandemic year, 2020, figures were close to the ones registered in 2011.

Table 2. Number of Enrollments in the Different Segments and Total Revenues (2011-2020)

Year	Classic thermalism		Wellness thermalism		Total		Total income	
	No. enrollments	Variation	No. enrollments	Variation	No. enrollments	Variation	Revenues	Variation
2011	57 603		43 039		100 642		15 301 168	
2012	48 337	-9 266	48 590	5 551	96 927	-3 715	13 556 949	-1 744 219
2013	46 603	-1 734	44 018	-4 572	90 621	-6 306	13 009 962	-546 987
2014	41 486	-5 117	64 253	20 235	105 739	15 118	11 632 368	-1 377 594
2015	42 314	828	67 854	3 601	110 168	4 429	13 258 688	1 626 320
2016	50 814	8 500	88 167	20 313	138 981	28 813	15 257 137	1 998 449
2017	41 069	-9 745	76 021	-12 146	117 090	-21 891	13 350 685	-1 906 452
2018	43 209	2 140	90 553	14 532	133 762	16 672	13 184 238	-166 447
2019	47 509	4 300	87 750	-2 803	135 259	1 497	15 334 995	2 150 757
2020	13 372	-34 137	32 350	-55 400	45 722	-89 537	5 378 985	-9 956 010

Source: Own elaboration, based on DGEG data (2021)

Most users (around 60% in both segments) chose establishments located in the Centre, followed by the North which received around 30% (TravelBI, 2021). As for the demand per quarter, in 2019, for these two segments (classic and wellness thermal spas), the users chose to use these services mostly in the 3rd quarter (months of July, August and September), with values around 17 thousand users of classic thermal spas and 30 thousand of wellness thermal spas. The first quarter showed the lowest demand with 3,595

customers in the classical spa and 10,730 in the wellness spa (TravelBI, 2021). On an economic level, it is also important to understand the turnover and the contributions that the thermal sector has to the national economy. The classical thermal spa registered a turnover of 11 532 100 euros, while the wellness spa had a turnover of 2 227 300 euros, a large but not surprising difference, considering the prices charged in classical thermal spa services, as well as the demand from the older population, in a country characterised as aging. As for the average stay for wellness spa clients, it is noticeable that most users only stay one day. As a rule, this type of segment has short programs, which do not need to be continuous since the clients enjoy a single program, but repeat this scenario several times a year or over the years, unlike what happens in classical thermalism (TravelBI, 2021).

There is a higher preference for wellness thermal services up to the 55-64 age group. From 65 on, there is a greater demand for classic spa services (TravelBI, 2021), which we can assume are people looking for a way to ease possible pains and the effects of certain diseases. The 5 main foreign markets of this sector are Spain, France, United Kingdom, Switzerland and the United States, which accounted for 12,4% of the overall demand (TravelBI, 2021).

4.2.2 User's Profile

There is a significant number of studies addressing the motivations of health and wellness tourists worldwide. However, what concerns to the profile of thermal spas users research is still scarce. In the last years a few studies concerning the users of these establishments in the Portuguese context stand out.

A research from Rodrigues, Brochado and Troilo (2020) focused on the factors affecting tourism satisfaction and dissatisfaction in thermal and mineral spas in Portugal. Aiming at identifying thermal and mineral spas attractiveness based on tourists' web reviews (2015-2019) in a post experience phase, the research identified five key categories of attributes driving customer satisfaction in the particular context of thermal and mineral spas, those being (i) thermal and spa attractiveness (which includes thermal spas, location, and mineral water pools, (ii) the importance of the facilities (in particular, private accommodation) and (iii) services provided by the staff.

The study from Brandão et al. (2021) analysed 201 thermal tourists in the thermal facilities of Chaves and São Pedro do Sul. 60% of users in these two thermal facilities were women and an average age of 55 years old. Concerning academic qualifications, the most significant group (30%) completed primary school, followed by 25% holding a higher education degree and 22.4% with high school. Nearly half were retired and around 42% employed. 95% of the respondents live in Portugal. The results highlight that most respondents practiced thermal tourism due to leisure and relaxation benefits, such as escaping daily stress, spending time with family, and being pampered. Relaxation is the most valued motivation, followed by the search for psychological and physical well-being.

Silvério, Fernandes, & Alves (2021), through a sample of 107 questionnaires to the thermal spa users of Chaves, found that 70% of the respondents were women and the average age 58 years old. 44% hold a higher education degree and most were inactive, mainly retired. 80% live in Portugal and from these 72% come from the Northern region, where the Termas de Chaves facilities are located.

Also from data obtained from 220 users of Chaves Thermal facilities during the 2021 thermal season, Vaz et al. (2022) were able to find the *persona* that uses these facilities, that being a Portuguese woman with an average age of 69 years old. She is married, attended just a basic level of education and lives nearby the thermal establishment. She lives with her husband and is retired, with a net monthly income 666-1300 euros. The user is familiar with the services and does not frequent other thermal spas. Therapeutic thermalism and medical advice is the primary motivation to attend the thermal spa. Users stay for an average of 14 days, mainly in the summer and autumn season and spend between 501-1000 euros. The most important attributes are the medicinal quality of the water and the quality of the facilities.

5. Conclusion

Health and wellness tourism is a growing trend worldwide, particularly motivated by a change in the health paradigm, which has clearly evolved from a narrow perspective based on physical health and well-being to a broad vision of holistic health. Thermal spa tourism, as a segment of health and wellness tourism that

uses mineral spring water as the main resource, is a growing sector that follows the global trend towards a search for products that increase quality of life. Despite the steady growth in previous years, wellness tourism and thermal/mineral springs were the economy sectors that were most severely hit by COVID-19, as they require a physical presence and/or full immersion for the actual experience. However, predictions point to a fast recovery, as pandemic has reframed wellness as an essential societal value. This new wellness paradigm is the basis for new opportunities for health and wellness tourism, which has now to adapt to this new demand and develop customer-oriented products and services.

In Portugal, health and wellness tourism is considered a strategic product to the development of the sector and the use of thermal spas is a centuries' old tradition. The demand trend that has been seen in recent years shows a range of new opportunities for the thermal spas, as a segment of health and wellness tourism, following the worldwide trend. However, studies on the profile, motivations and needs of thermal spa users in Portugal are still scarce. Recent research on the field shows that there is a higher preference for wellness thermal services up to the 55-64 age group, and a greater demand for classic thermal spa services from 65 on, which confirms previous research on the growing demand for wellness services by younger age segments. It also found that most users of thermal spa facilities live nearby the thermal facilities, with foreign markets accounting for just over 10%. This may indicate a need to offer new products and services that appeal to international tourists to take advantage of the full potential of thermal facilities and guarantee their sustainable development in the future.

In Portugal, thermal spas are mostly located in the North and Centre regions and may be an important factor of local development. With an historical evolution marked by ups and downs, the new wellness paradigm and the new market niches and consumers' demands may create a window of opportunity to their sustainable development.

As with all studies, also this research has found some limitations, the main one concerning the available data. As referred in the literature review, there is a paucity of studies concerning thermal spa users. The same verifies in the Portuguese context, which may undoubtedly limit the capacity of the sector to adapt to new market demands.

A recommended line of research would be to focus on the profile of international thermal tourists, to identify the profile, the needs and demands from this segment. Another line of research would be to develop a national survey on thermal spas in Portugal to overcome the paucity and fragmentation of available data on the sector.

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The Application of Sustainable Practices in Tourism: The Case of Olive-growing in the Region of Trás-os-Montes

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ABSTRACT

Several authors have argued that oleotourism can be associated with different niches that fall into this segment, such as gastronomic, cultural, rural, and health tourism. Furthermore, the development of activities such as oleotourism is carried out under the prism of sustainability, considering the economic, social and environmental components. This study had a double objective: to identify sustainable practices in tourism, in the case of olives, to understand better how sustainable practices contribute to the development of olive cultivation. Hence, a qualitative methodology used the MAXQDA program, consisting of a literature review and collecting preliminary information from different producers in the *Trás-os-Montes* region through semi-structured interviews. The results show that sustainability and tourism are intertwined in empirical contexts due to the intervention of other global institutions. The results indicate that the link between tourism and olive grove practices is important and could contribute to regional development. Also, sustainable practices are important for numerous reasons. It is impossible to streamline and develop an activity without considering its sustainability.

KEYWORDS

Sustainable Practices, Olive-Growing, Oleotourism, MAXQDA Analysis, *Trás-os-Montes*, Tourism Segmentation.

ARTICLE HISTORY

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1. Introduction

The new attitudes and motivations that tourists experience today mark the emergence of new tourist typologies that respond to these new needs. Various authors have argued that oleotourism can be associated with rural, nature-based, or gastronomic tourism. Furthermore, it also blends with cultural and health tourism and can be framed as thematic tourism, helping to generate sales of agri-food products linked to this activity. Different niches fit into this segment (Murgado, 2013; Orgaz-Agüera et al., 2017; Parrilla-González et al., 2020).

In this sense, this emergence of activities is increasingly framed in rural development areas, this migration being the main tourist activity for the area's socio-economic development. The development of activities such as oleotourism or gastronomic tourism is carried out under the prism of sustainability, considering the economic, social and environmental components (Moral-Cuadra et al., 2020).

This link between tourism and the context in which olive activities are oriented is based on sustainability criteria. This viewpoint has been analysed and developed worldwide, as seen in the Universal Agenda for Sustainability 2030 (Tregua et al., 2018).

In recent years, the entire community has paid attention to the environmental emergency, and tourism activities have begun to be considered as potentially harmful to the environment. Adopting a new approach is necessary since the concept of sustainability and tourism initiatives as a unique way to develop an eco-friendly form of tourism (Mowforth & Munt, 2015).

Considering this, the present study aimed to respond to the need to study the application of sustainable practices in the development of the olive groves of *Trás-os-Montes*, understanding their implication for oleotourism and their management.

Thus, in this perspective, this study had a double objective: on the one hand, to identify sustainable practices in tourism, in the case of olive; on the other hand, to contribute to a better understanding of how sustainable practices contribute to the development of olive growing. To achieve these objectives, the case of olive cultivation has been analysed in a Portuguese region, *Trás-os-Montes*. A qualitative methodology has been used, comprising a literature review and collecting preliminary information from different producers through semi-structured interviews. The study and analysis of these interviews were supported by the qualitative studies programme MAXQDA. The data collected contributes to the development and discussion of intervention proposals intended to stimulate the implementation of sustainable olive-growing practices.

The results of this study attempt, on the one hand, to make a brief analysis of the literature and the authors' discussion, and on the other hand, to respond to the research dimensions: characterisation and identification; the relationship between olive growing and tourism; economic development through tourism; sustainable practices, by interviewing 19 producers from the *Trás-os-Montes* region of Portugal.

2. Literature Review

According to studies, the term oleotourism originated in the 1980s and referred to the transformation of traditional olive oil into the form of olive oil in an attempt to boost tourism. This term is a set of tourist activities that revolve around olive oil. These activities include visits to olive groves - sometimes coinciding with the olive harvest - and olive oil mills, tasting the olive oils, and tasting typical regional dishes where olive oil is the star ingredient, along with other cultural and nature-related activities that allow visitors to engage with the environment of the region in question (Parrilla-González et al., 2020).

In 2018, a study showed some findings on oleotourism and its demand. They used different terms to define the relationship between tourism and olive oil and found that most studies have used the term oleotourism to refer to this relationship. They show that oleotourism can be an expression of sustainable gastronomic tourism since it has all the defining characteristics and serves as an effective tool for economic diversification in many olive oil-producing regions that depend on the primary sector. The results of these studies indicate that the degree of satisfaction of tourists visiting olive oil production areas is high and that olive oleotourism has a strong potential (Millán et al., 2018).

Several authors argue that oleotourism can be associated with rural, nature-based, or gastronomic tourism (Murgado, 2013; Orgaz-Agüera et al., 2017; Parrilla-González et al., 2020). In addition, it combines with cultural and health tourism and can be framed as thematic tourism, helping generate sales of agri-food products linked to this activity.

The current literature on oleotourism highlights its cultural and educational value. At the cultural level, it is a tourist practice, favouring the preservation of a unique heritage central to the social, human and cultural development of the Mediterranean peoples and which, under the pressure of globalisation and the demands of international markets, is exposed to gradual disappearance. Olive oil tourism adds value to this heritage and gives it a new commercial value, which allows it to last over time (Hernández-Mogollón et al., 2019).

From a business point of view, olive oleotourism is a way for olive oil companies to diversify their business. To this end, they should design experimental tourism products and collaborate with tourism entities in the destination, be it other olive oil mills, restaurants, or accommodation suppliers, thus facilitating the complete experience as a destination and special interest tourism. Furthermore, the companies must implement environmental conservation measures through integrated production techniques and participation in sustainable projects. The production of organic olive oils, all of which are closely aligned with olive oil, the awareness of tourists and the objective of supporting the “experience” dimension based on sustainable values (Parrilla-González et al., 2020).

Sustainability is a concept that drives actions due to the desire to counteract man’s impact and take a proactive approach to improve environmental and human conditions. It is understood that all industries are involved in this challenge to achieve these improvements. However, with the emphasis on tourism, it has been considered from a sustainability-based perspective as it concerns both traditional and new forms of tourism. The strict link between tourism and the context in which the activities are oriented draws on sustainability criteria. This viewpoint has been analysed and developed worldwide, as it is in the universal 2030 Agenda for Sustainability (Tregua et al., 2018).

The United Nations has identified the challenge of implementing sustainability in tourism, and the year 2017 has been designated the Year of Sustainable Tourism for Development. Tourism is embedded in goal number 8 of the 2030 Agenda, as it is considered one of the critical forces in achieving global economic growth; the call to action focuses on implementing new policies that promote sustainable tourism and foster job creation. These interventions should align with the objectives of creating new jobs and promoting local cultures and products (United Nations, 2017; World Farmers’ Organization, 2017).

In addition to the interest of international institutions in the links between tourism and sustainability, researchers have focused on these issues in recent years, highlighting the need to better define the role stakeholders contribute to the sustainable development of tourism (Tregua et al., 2018).

Some contributions to the topic provide evidence of the linkages between the olive oil sector and other industries, such as tourism (Souilem et al., 2017). Different opportunities arise along with the increasing trend of tourism-based initiatives concerning olive oil. The product can be considered a tool for marketing tourism. When discussing the use of natural resources as a lever to enhance economic development, it is impossible to avoid sustainability issues. Many researchers have debated the issue of the compatibility of tourism activities and olive oil production, focusing on the risks to the integrity of trees and the surrounding areas, leading in some cases to the incompatibility of these two activities.

Folgado-Fernández, Campón-Cerro and Hernández-Mogollón (2019) presented a study in which the main objective was to identify the areas for the development of “oleotourism” as a sustainable alternative for the territory based on the profile of the tourists. This study proves the importance and interest in creating a link between the territory, the experiences and the quality of food produced there. They assume that local quality products can find a new marketing channel with their sales to tourists during their visit to the destination and when they return to their places of origin.

Other studies also add the opportunities that may arise from merging these two activities, stating that tourism-oriented activities can be carried out alongside agriculture and even create new benefits for the local area (Flanigan et al., 2015).

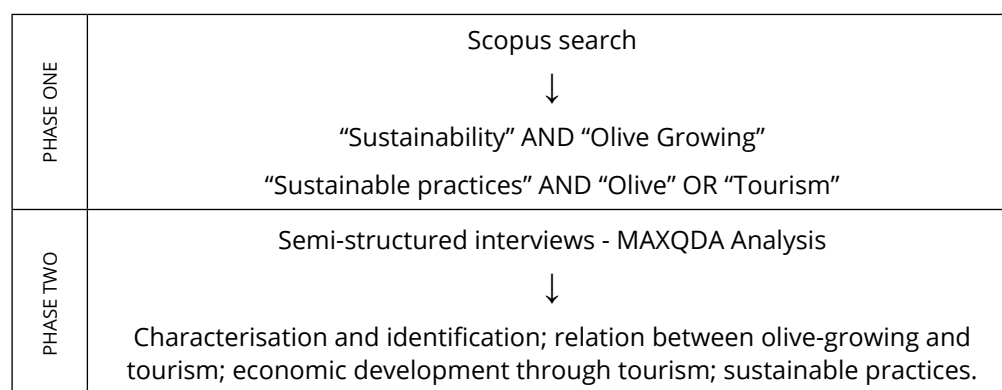
In this regard, Karray (2006) described tourism as the key instrument for developing the olive oil industry, as the integration of activities can promote a considerable increase in exports.

With its geographical characteristics, the region of *Alto Trás-os-Montes* is part of a larger whole, the province of *Trás-os-Montes*. An extreme climate characterises a region isolated by its mountains and deep valleys, the soil, as a rule not very fertile (Taborda, 2011). The region has always been divided into two climatic zones: “*Terra Fria Transmontana*” and “*Terra Quente Transmontana*”. This region stands out mainly for its contrasting landscapes and investment in endogenous products. The production of olive is one of its strong products. To the north is the *Montesinho* Natural Park, to the east is the International Douro Natural Park, which borders Spain, to the northwest is the *Peneda-Gerês* National Park, to the west are the *Marão* and *Alvão* mountains and to the south is the *Alto Douro* Wine Region, declared a World Heritage Site by UNESCO on 14 December 2001. The northeast of the region was declared a biosphere reserve by UNESCO under Meseta Ibérica (Neves et al., 2009).

3.2 Conducting the Data Collection

This study was done in two phases. In the first phase, the existing literature on the themes was consulted, using the Scopus platform, searching for some research equations. Specifically, the articles on sustainability and olive growing, sustainable practices in tourism or olive growing, and growth and development of olive growing were analysed. In a second phase, interviews were conducted with producers and mill owners to respond to this study’s objectives, as shown in Figure 2. The study and analysis of these interviews were supported by the qualitative studies programme MAXQDA. This program is academic software for qualitative data analysis and mixed methods research and is available for Windows and Mac operating systems. This program also assists in analysing all types of unstructured or semi-structured data, such as content analysis, i.e. interviews.

Figure 2. Conceptual Framework



Source: Own Elaboration

Given the objectives under study, the first phase analysed 73 open-access articles in English on sustainable practices and some articles on sustainability and olive growing.

For the second phase of the study, 19 producers were interviewed, aimed to respond to the research dimensions: characterisation and identification; the relation between olive-growing and tourism; economic development through tourism; sustainable practices.

These research dimensions aimed to respond to the objectives: (1) to identify sustainable practices in tourism, in the case of the olive tree; (2) to contribute to a better understanding of how sustainable practices contribute to the development of the olive tree culture.

In the first part of the interview, we sought to distinguish and recognise the producers interviewed through questions such as age, municipality of residence and when and how the opportunity arose to develop activity in the sector. Then, we studied the relationship between olive growing and tourism through questions such as: if they had ever received tourists to visit their olive grove, if yes, what was the origin of these visitors, if there is interest on the part of producers in receiving tourists to watch and participate in the activity; if they considered that their olive grove has infrastructures and accessibility; and if they consider important the tourist dynamic (visit, participation and interaction of people) for the development

of their activity. For the study of the aspect of economic development through tourism, questions were asked, such as: whether they understood that tourism practices contribute to the development of the olive tree row; what other benefits could be associated with this development in the sector; and in the producers' opinion, how could this endogenous product be sold as a tourism product. Finally, discussing the topics associated with sustainable practices, they were asked: if they considered sustainable practices in their olive production, if so, which practices they used, and if they considered it important, nowadays, to develop practices with sustainability in mind while trying to justify this practice. After collecting this information and studying the questions obtained by the 19 producers, some relevant results were analysed.

4. Results

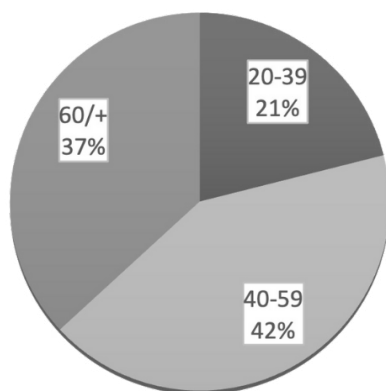
From the first phase of the study, according to the research highlighted above, the literature on oleotourism considers the most contributions concerning the link between olive oil production and the tourism industry. In synthesis, tourism can be developed sustainability if people experience a context through visits and tourism. Sustainability and tourism are intertwined in empirical contexts due to the intervention of other world institutions. Already UNESCO had highlighted the role of culture and natural elements in favouring the achievement of greater sustainability. Similarly, the World Farmers' Organisation took this opportunity to take into account and consider sustainability from a global perspective and to be the way to support the development of farmers who are still struggling for economic sustainability. As a result, tourism-oriented activities in a rural context relate to issues such as sustainable experience, impact on the natural context, and barriers to development. Consequently, even environmental sustainability is considered, as the World Tourism Organisation proposed measures for sustainable tourism. In addition, social sustainability was considered as tourism puts local populations at risk, or in some cases, tourism could favour the achievement of more viable conditions for local inhabitants.

The development of oleotourism as a new form of tourism should be achieved through the involvement of more actors, creating a shared sense of participation to spread knowledge about oleotourism, and sensitising local actors to the relevance of this business concerning the local context. Tourism development can never go without moving in parallel with sustainability.

During the study's second phase, 19 producers were interviewed to answer some topics, such as characterisation and identification, the relationship between olive growing and tourism, economic development through tourism, and sustainable practices.

The identification and characterisation of the interviewees, the age (Figure 3), and the location of residence of the producers (Figure 4) were verified, as well as when and how the opportunity arose to develop activity in the sector.

Figure 3. Age of the Producers Interviewed



Source: Own Elaboration

This analysis highlights that the majority of respondents are aged between 40 - 59 years, which means that they are working-age adults. Next, 37% of the respondents, producers, were interviewed in their 60s

or older, many of whom are already retired. It should also be noted that 21% of the producers interviewed are young and are starting their professional activity with the olive branch.

Regarding the respondents' local residence, the following graph (Figure 4) highlights the different municipalities of the Trás-os-Montes and Alto Douro regions. This graph shows that most producers belong to the municipality of *Macedo de Cavaleiros* (n=12). At the same time, in a smaller percentage, there are producers from the municipality of *Mirandela* (n=5), one producer from *Bragança* and another from *Valpaços*. All these municipalities belong to the district of *Bragança* and *Vila Real*, both belonging to the region of *Trás-os-Montes and Alto Douro*.

Figure 4. Local Residence of the Producers

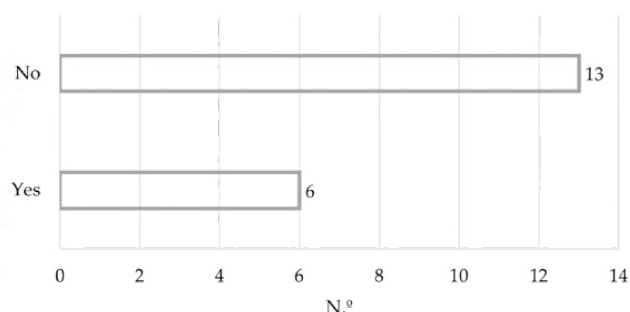


Source: Own Elaboration

Regarding the origin of their activities, all the producers interviewed assume that they started their professional careers linked to olive growing due to family legacies and family properties.

The study about the relationship between olive cultivation and tourism studied whether the producers had ever received people visiting their olive grove. If yes, which type of activities were carried out, and if not, it was questioned if it was interested in receiving people to assist and participate in the activity during the production and harvest process. To complement this dimension, the study also tried to understand if the producers interviewed considered their olive groves had infrastructures and accessibility to receive visitors. In addition, if they thought that the tourist dynamic (visit, participation and interaction of people) was necessary for developing their activity. From this analysis, it was observed that most respondents answered no to the question of whether they have ever received tourists to visit their olive grove, as shown in Figure 5.

Figure 5. Answer to the Question of whether the Respondents received Tourists in their Olive Mills



Source: Own Elaboration

The producers who answered yes explained that their visitors were national and international tourists from the United Kingdom, Spain, and France. A small proportion of those who answered no assume that they would be happy to receive tourists in the future. In contrast, others say that the space does not have sufficient infrastructure and accessibility to receive visits to their olive groves.

When asked if they considered the tourism dynamics (visit, participation and interaction of people) im-

portant for developing their activity, most respondents said yes, highlighting that it is important to share information because it is increasingly important to contribute to the development of the olive groves. In addition, some of the producers highlighted the development of new technologies as a support to the tourist dynamics in the olive sector, as a focus and an important point.

Regarding the economic development through tourism, the questions that were asked approached the understanding of the tourism practices as a contributor to the development of the olive grove, what other benefits could be associated with this development in the sector and what was the opinion of the respondents about the sale of the olive grove sector as a tourist product. Specifically, from the analysis of the results obtained, it was found that tourism practices contribute to the development of the olive sector, highlighting that tourism is always important for all sectors.

When asked what other benefits might be associated with this development in the sector, the producers interviewed assumed that local and rural tourism can benefit a lot. The development of the olive sector can improve the agricultural situation, and the more knowledge there is, the more opportunities there are. They also emphasise that the greater number of visitors, a more significant commercial business and the incentive to develop the agricultural activity further are significant. Nowadays, the population dedicated to agriculture is older, and young people must have more interest and motivation for agriculture. Here innovation can help and facilitate the process and give a different image, alleviating the physical burden and facilitating the process. To make available the product that is produced from the olive groves, it would be very important to work on other dynamics, such as tourism and marketing.

Regarding how this endogenous product could be sold as a tourist product, the producers state that implementing group trips, such as a holiday package, visits to farms, olive groves and mills, and the *zeitgeist* production process itself could be the most vital selling points. They add that participation in dissemination events and fairs and seeking customers outside our region are the current focuses of the producers. The existence of a dynamic olive oil route would also be an important topic. For *Trás-os-Montes*, this dynamisation would be very important, also to recover the production that has been lost over the years.

Finally, regarding the study of sustainable practices, the questions about sustainable practices in olive production and the current importance of developing practices with sustainability in mind were highlighted. It was emphasised that all the producers interviewed assume that they seek sustainable practices in their production. They emphasise that they do not use chemicals and seek the most organic production possible. Generally, they use the leftovers to burn in winter to heat the house, and if they do not use them, they let the soil be fertile. To fight pests, they use more sustainable ways (for example, codfish water to scare off insects). The results indicate that all the interviewees agree with the current importance of developing practices with sustainability in mind. Many producers assume that, besides the high price of olive, it is necessary to care and worry about the environment because future generations depend on it.

5. Discussion

In response to the objectives under study, in the literature review, it was understood that sustainability is a concept that drives actions to improve environmental and human conditions. All industries are involved in this challenge to achieve these improvements (Tregua et al., 2018). From the discussion of results, it was observed that sustainability and tourism are intertwined in empirical contexts due to the intervention of other world institutions. Tourism-oriented activities in a rural context relate to sustainable experience, impact on the natural context, and barriers to development. Social sustainability was considered as tourism puts local populations at risk, or in some cases, tourism could favour the achievement of more viable conditions for local inhabitants.

The development of oleotourism as a new form of tourism should be achieved through the involvement of more actors, creating a shared sense of participation to spread knowledge about oleotourism, and sensitising local actors to the relevance of this business concerning the local context. Reinforcing the perspective that in organic olive oil production, the awareness of tourists and the objective of supporting the “experience” dimension based on sustainable values are fundamental (Parrilla-González et al., 2020).

From an entrepreneurial perspective, the olive oil tourism relationship allows olive oil companies

to diversify their business. To do so, they should design experiential tourism products and collaborate with tourism entities in the destination, whether these are other mills, restaurants or accommodation providers, thus facilitating the whole experience as a destination and special interest tourism (Parrilla-González et al., 2020). The producers interviewed believe that the tourist activities associated with its olive oil production are essential and could make the region very dynamic. Most of those not used to receiving tourists in their productions assume that it would be fascinating to do so in the future and that they are willing to have this dynamic and interactive.

The study by Millán et al. (2018) shows that oleotourism can be an expression of sustainable gastronomic tourism since it has all the characteristics that define it and serves as an effective instrument of economic diversification in many olive oil-producing regions that depend on the primary sector. From this perspective, economic development through tourism is also understood as a tourist product associated with tourism, and olive groves can create significant regional benefits. In particular, from the analysis of the results obtained, it was found that tourism practices contribute to the development of the olive sector, stressing that tourism is always important for all sectors.

In the literature, different opportunities are emerging along with the growing trend of tourism-based initiatives related to olive oil. The product can be considered a tourism marketing tool (Souilem et al., 2017). The producers add that selling and marketing the olive groves as a tourism product could be done through a partnership with tour operators. As in other regions with other types of endogenous products, tourism sales strategies could be created, as well as events and activities associated with the olive groves and olive oil production.

From the perspective that in organic olive oil production, tourism and the objective of supporting the “experience” dimension based on sustainable values are fundamental (Parrilla-González et al., 2020), this study verified that the producers interviewed do not use chemicals and seek the most organic production possible.

The results indicate that both in the literature review and the interviews conducted, the current importance of developing sustainable practices associated with oleotourism is present and tends to increase.

6. Conclusion

This study sought to answer the need to study the application of sustainable practices in the development of olive groves in *Trás-os-Montes*, understanding their implications for olive tourism and its management.

In response to the objectives of identifying sustainable practices in tourism, in the case of olive growing, and contributing to a better understanding of how sustainable practices contribute to the development of olive growing, a qualitative study was carried out in the Portuguese region, *Trás-os-Montes*. This study reviewed the literature and collected preliminary information from different producers through semi-structured interviews.

For this, in the first phase, 73 open-access English-language articles on sustainable practices and some articles on sustainability and olive growing were analysed. In the study's second phase, 19 producers were interviewed to respond to the research dimensions: characterisation and identification, the relationship between olive growing and tourism, economic development through tourism, and sustainable practices.

From the first phase of the study, in summary, it was understood that tourism could be developed sustainably if people experience a context through visits and tourism. Moreover, sustainability and tourism are intertwined in empirical contexts due to the intervention of other global institutions.

Given the study's second phase, the interviews were able to answer some of the topics under study. From these interviews, it was understood that tourism practices contribute to the development of the olive sector, stressing that tourism is always important for all sectors.

Questions about sustainable practices in olive production and the current importance of developing practices with sustainability in mind were highlighted. The results indicate that all respondents agree with the current importance of developing practices with sustainability in mind. Furthermore, many producers assume that, beyond the high price of olives, it is necessary to care and worry about the environment because future generations depend on it.

The main theoretical contribution of this work is the fundamental role played by the tourism experience in the sustainable development of olive growing in the *Trás-os-Montes* region. On the one hand, this study contributes to expanding the literature on olive oil tourism. On the other hand, the study advances the knowledge of the main predictors of tourism and sustainable development in this context. The theoretical contributions observed in this study highlight the study of several authors who present oleotourism as a component of rural tourism based on nature or gastronomic tourism. Cultural and health tourism can be framed as thematic tourism, helping to generate sales of agri-food products linked to this activity. Companies in the sector should implement environmental conservation measures through integrated production techniques and participation in sustainable projects. Currently, the production of organic olive oils, the awareness of tourists and the objective of supporting the “experience” dimension based on sustainable values are highlighted in research trends. The study universe in tourism has been considered from a sustainability-based perspective as it concerns both traditional and new forms of tourism. The strict link between tourism and the context in which activities are oriented is based on sustainability criteria. In addition to the interest of international institutions in the links between tourism and sustainability, researchers have focused on these issues in recent years, highlighting the need to better define the role that stakeholders contribute to sustainable tourism development.

As a major limitation, this study presents some needs in applying the methodology, which recommends interviewing more producers at different times. Future studies should pursue to continue this theme, develop the sample of interviewees, and understand the reality of the impact of oleotourism in the region of *Trás-os-Montes*.

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Sustainable Tourism Development in Times of Pandemic: Correlational Analysis Applied to Residents of a Portuguese Historic Town

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ABSTRACT

This study explores the relationships between different determinants of residents' support for sustainable tourism development (STD) and certain sociodemographic profile variables. A quantitative approach was used, based on a questionnaire applied over the internet to residents of a historic town in the north of Portugal. 250 valid questionnaires were obtained. In data analysis, descriptive statistics and correlational analysis were used. The results show that the levels of perception regarding the concepts under study are relatively low to moderate. There is a greater community attachment than community involvement, a more intense perception of the benefits than the costs of tourism, moderate support for the STD and a low economic dependence on the tourism sector. The results of the comparisons between the concepts under analysis and the sociodemographic profile variables showed the existence of several significant associations.

KEYWORDS

Community Involvement, Community Attachment, Economic Dependence, Tourism Impacts, Sustainable Tourism Development.

ARTICLE HISTORY

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1. Introduction

Some antecedents of supporting sustainable tourism development (STD) are addressed in this study, associated with the role of residents in the tourism planning and development process in the context of historic towns. It is relevant to analyse the perceptions of this stakeholder group regarding community involvement, community attachment, economic dependency, the perceived risk associated with COVID, tourism impacts and STD. Furthermore, this study also explores how sociodemographic factors explain residents' perceptions, especially with regard to their socio-cultural and environmental impacts and their support for tourism.

There are some studies that show that residents' perceptions of tourism impacts and their support for tourism development can be influenced by residents' demographic and socioeconomic characteristics (Mason & Cheyne, 2000; Tosun, 2002; Huh & Vogt, 2008; Long & Kayat, 2012; Stojković, Tepavcevic, Tepavceviclvana, BlesicShow, & Šimon, 2020; Serhane, Foufa, & Neglia, 2021). Understanding how these characteristics influence the determinants of residents' support for STD can help increase the knowledge held about the heterogeneity of local communities and the differences between their perceptions and attitudes towards tourism and, therefore, can contribute to the adoption of measures more adjustable to their specificities, in terms of planning and management of destinations (Long & Kayat, 2012). The provision of answers to these questions represents a very important information base prior to any tourism development project, especially in low-density territories.

From a correlational perspective, we seek to understand the links between some antecedents of (residents') support for STD and certain profile variables, using as a context of analysis the residents of a historical town in northern Portugal. Specifically, this study has two objectives: 1) To know residents' perceptions of the concepts of community involvement, community attachment, economic dependence, perceived risk associated with COVID, perceived benefits and costs, and support for STD, determining their degree/level; and 2) To correlate the concepts under study and analyse the existence of differences in residents' perceptions of these concepts, according to certain sociodemographic variables (gender, age, number of years living in the community, education, employment status, family members involved in the tourism sector, income).

In addition to this introduction, this article is divided into five sections: a brief literature review is carried out, followed by an explanation of the methodology used and then the results obtained are presented and discussed; finally, the conclusions and implications of the study are highlighted.

2. Literature Review

The United Nations World Tourism Organization (UNWTO) defines sustainable tourism as "Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities" (UNEP & UNWTO, 2005, p. 12). Thus, the STD, due to its complexity, requires a transversal treatment with the development of projects and strategies that integrate the economic, social, cultural and environmental components (Kuvan & Akan, 2005; Cárdenas-García, Fernández, & Rivero, 2013). Both stakeholder involvement and strong political leadership are crucial for sustainable tourism development (Henriques, 2003; Ruhanen & Reid, 2014; Ferreira, Alén, & Liberato, 2018). It is a continuous system that implies permanent monitoring, adequate planning to local contexts and a fruitful and constant management of tourism activities.

The sustainable development of tourism activity and its relationship with local communities (and their support and attitudes towards tourism) have assumed increasing importance in the tourism literature. Residents of tourist destinations are the most affected by both policies and various tourism development measures, and this was especially felt during the pandemic caused by COVID-19. Residents' participation and support for such processes can go a long way in ensuring the sustainability of tourism.

In this context, the cooperation and participation of the local community are paramount for the success and sustainability of a tourism development project; thus, analysing residents' perceptions and engaging their support is of indispensable importance for local government, policymakers, and tourism businesses (Dyer, Gursoy, Sharma, & Carter, 2007; Lee, 2013; Styliadis, Biran, Sit, & Szivas, 2014). It is notable that the

participation of residents in destination planning is indispensable for sustainable development to subsist (Dyer, et al., 2007; Chen & Chen, 2010). It is, therefore, essential that the stakeholders of the process - local governments, politicians, heritage managers and companies involved understand the importance of this active involvement of the local population in this process (Gursoy & Rutherford, 2004; Soares, Emmendorfer, & Monteiro, 2013).

In view of the above, the study of the factors that influence the support (of residents) to STD is relevant in order to verify the implications that tourism activity provides to destination regions. The effects of tourism activity are multiple and are one of the most explored themes in the tourism literature (Gursoy & Rutherford, 2004; Nunkoo & Ramkisoon, 2010). In addition to perceived benefits and costs, the present study explores four factors that have also been studied in their association with residents' support for STD: community involvement, community attachment, economic dependence and perceived risk associated with COVID.

The support of residents and their levels of involvement and attachment to the community where they live are critical factors to ensure the success of the sustainable development of a given destination, as several studies have already concluded (Lee, 2013; Rodrigues, Vieira, Marques, & Teixeira, 2014; López, Virto, Manzano, & Miranda, 2018; Rodrigues, Vieira, Fernandes, & Pires, 2020). These studies have shown that residents who are involved and who have feelings of attachment towards their communities tend to have more positive perceptions towards the benefits of tourism and tend to act more actively to protect the sustainable development of destinations. On the other hand, when residents are economically dependent on the tourism sector, they also tend to emphasise the positive impacts over the costs associated with tourism, as well as support tourism development initiatives (Perdue et al., 1990; Ko & Stewart, 2002; García, Vázquez, & Macías, 2015).

Resulting from the pandemic situation caused by COVID-19 and its influence on the tourism industry, the residents' perception of risk during the pandemic has recently been the subject of academic interest (Vinerean, Opreana, Tileagă, & Popsa, 2021; Joo, Xu, Lee, Lee, & Woosnam, 2021), although there are still very few studies that analyse this issue (Vinerean et al., 2021). According to the authors, there is a large research gap on the impact of COVID-19 on the tourism industry overall and, more specifically, on tourists' behaviours and residents' perceptions of this difficult pandemic context.

Results of previous studies have been indicating that the sociodemographic profile (age, gender, education, income, employment status, etc.) of residents may (or may not) significantly influence their perceptions of tourism impacts and their support of tourism development (Long & Kayat, 2011), having presented mixed results in their findings. According to the authors, this inaccuracy can be attributed to the fact that different tourist destinations have different population characteristics and that tourism impacts are formed by community-specific conditions.

3. Methodology

A descriptive-correlational and cross-sectional study was conducted to achieve these objectives. As this is a descriptive research, we chose to use a questionnaire survey applied in an online format. In this study, the population/universe was composed of residents (for at least one year) of a historical town in northern Portugal. Due to cost and time constraints, the sample was based on the non-probability method, being selected by convenience (elements of the population with internet access and available to receive the questionnaire link).

Seven variables were assessed through the questionnaire: community involvement, community attachment, economic dependence, perceived risk associated with the COVID, perceived tourism benefits and costs, and support for STD. To this end, we selected previously used and tested scales, which were assessed using five-point Likert scales, from 1: totally disagree to 5: totally agree.

The concept of community involvement was operationalised based on Lee's scale (2013), with 5 items. Similarly, the concept of community attachment was measured based on the scale developed by Lee (2013), being composed of 11 items. The economic dependence was measured using the scale developed by Ribeiro, Pinto, & Silva (2017), which was composed of 4 items. The scale of perceived risk associated with COVID-19 was measured on a unidimensional scale with 4 items, based on the study of Joo et al.

(2021). The perceived benefits of tourism, with 12 items, and the perceived costs, measured through 8 items, were taken from the Látková & Vogt (2012) scale, based on the work developed by Perdue, Long and Allen (1990); Lankford and Howard (1994). One of the items of the tourism benefits scale was subdivided into two in adaptation to the context under analysis. Finally, support for STD was measured from Lee's (2013) 5-item scale, which was based on the work of Nicholas, Thapa and Ko (2009).

The measurement scales were translated and validated, and a pre-test was performed to check their adaptability to the study population. The questionnaire was applied online through an access link (sent by email and through social networks), and data collection took place between May and August 2021. A total of 250 valid questionnaires were obtained.

The analyses were performed using IBM SPSS (Statistical Package for the Social Sciences), version 26 for Windows. The following statistical tests were used to analyse the significance of the constructs' associations with the respondents' profile variables: Student's t-test (comparison of quantitative variables between two independent groups); ANOVA, followed by the Tukey HSD multiple comparisons tests (comparison of quantitative variables between more than two independent groups), Pearson's Correlation Coefficient (correlation between two quantitative variables), Spearman's Correlation Coefficient (correlation with ordinal variables). A 5% significance level was considered, that is, differences and associations were considered statistically significant when the significance value was less than 0.05 ($p < 0.05$).

4. Results

4.1 Sample Characterisation

The sample is composed by 250 residents in the town of Lamego for at least one year, aged between 18 and 68 years ($A = 38.3$, $SD = 14.9$). On average, they have lived in the municipality of Lamego for 27.7 years ($SD = 18.7$). The majority is female (63.6%) and has Higher Education (62.4%). The majority are employees (47.6%), students (32.0%) and self-employed (14.0%). With regard to the household, it is composed, on average, of 3.2 elements - 24.0% have a family member involved in the tourism sector. Of the 250 respondents, 18 (7.2%) belong to households with net monthly income up to 500 Euros, 65 (26.0%) from 501 to 1000 Euros, 56 (22.4%) from 1001 to 1500 Euros, 58 (23.2%) from 1501 to 2000 Euros and 53 (21.2%) with more than 2000 Euros (Table 1).

Table 1. Sample Characterisation

Variable		N	%
Genre	Female	159	63.6%
	Male	91	36.4%
Age	Min = 18, Max = 68, Mean value= 38.3, Standard deviation = 14.9		
Educational level	Primary education	8	3.2%
	Secondary education	86	34.4%
	Higher education	156	62.4%
Employment situation	Employee	119	47.6%
	Employee - self-employed	35	14.0%
	Domestic worker	6	2.4%
	Student	80	32.0%
	Retired	10	4.0%

Household's net monthly income	Up to 500 euros	18	7.2%
	From 501 to 1000 euros	65	26.0%
	From 1001 to 1500 euros	56	22.4%
	From 1501 to 2000 euros	58	23.2%
	More than 2000 euros	53	21.2%
Has a family member involved in the tourism sector	No	190	76.0%
	Yes	60	24.0%
Number of persons in household	Min = 1, Max = 6, Mean value = 3.2, Standard deviation = 1.0		
Number of years living in the municipality	Min = 1, Max = 68, Mean value = 27.7, Standard deviation = 18.7		

Source: Own Elaboration

4.2 Descriptive analysis: levels of perception of residents about the concepts under analysis

The following table shows the median, mean and standard deviation values, as well as the percentages above the mid-point (percentage of agreement with each statement - % of answers 4 and 5 - partial or total agreement) for the items of the concepts under analysis. The questions included in the questionnaire were presented with the possibility of response on a 5-point Likert scale: 1 = I totally disagree, 2 = I partially disagree, 3 = I neither agree nor disagree, 4 = I partially agree, 5 = I totally agree.

Table 2. Characterisation of the Items of the Scales of the Concepts under Analysis

Items ⁽¹⁾	% agrees ⁽²⁾	Median	Mean Value	SD
Community involvement		3.30	3.26	1.00
CI1. I participate in activities related to sustainable tourism	58.0%	4.00	3.49	1.32
CI2. I support research for sustainable development of this community	73.2%	4.00	4.05	1.20
CI3. I am involved in planning and managing sustainable tourism for this community	23.6%	3.00	2.63	1.32
CI4. I am involved in decision-making for sustainable tourism in this community	20.4%	2.00	2.43	1.33
CI5. I encourage residents of this community to invest in sustainable tourism	61.2%	4.00	3.68	1.30
Community attachment		3.90	3.65	1.02
CC1. The infrastructure and resources provided by this community are the best	37.6%	3.00	2.97	1.04
CC2. I prefer living in this community to other communities	63.2%	4.00	3.72	1.23
CC3. I like living in this community better than in other communities	62.8%	4.00	3.74	1.22
CC4. I can identify the way of life of this community	76.4%	4.00	4.04	0.99
CC5. I feel that this community is part of me	67.2%	4.00	3.87	1.18
CC6. Living in this community says a lot about who I am	57.2%	4.00	3.57	1.32
CC7. Living in this community means a lot to me	67.2%	4.00	3.89	1.17
CC8. I am very connected to this community	66.4%	4.00	3.84	1.26
CC9. I feel a strong sense of belonging to the community	64.0%	4.00	3.73	1.25
CC10. Many of my friends / family members prefer this community to other communities	59.6%	4.00	3.60	1.18
CC11. My friends/relatives would be disappointed if I went to live in another community	44.4%	3.00	3.21	1.33

Economic dependence		2.00	2.36	1.28
ED1. My family's economic future depends on tourism in this town	24.4%	2.00	2.33	1.36
ED2. Tourism in this town helps me to pay my bills	21.6%	2.00	2.22	1.36
ED3. I would benefit economically from more tourism in this town	31.6%	3.00	2.64	1.48
ED4. A part of my family's income is linked to tourism	24.4%	2.00	2.23	1.44
Perceived Risk		3.00	3.02	1.12
PR1. Incoming tourists increase my anxiety/stress related to COVID-19 prevention.	50.4%	4.00	3.12	1.37
PR2. Incoming tourists increase the risk of COVID-19 infection	59.6%	4.00	3.48	1.25
PR3. Incoming tourists increase inconvenience of town center activities	31.6%	3.00	2.82	1.26
PR4. Incoming tourists make me reduce my activity in the town center	30.0%	3.00	2.64	1.37
Perceived benefits		4.39	4.29	0.66
PB1. Improve the local economy	93.2%	5.00	4.56	0.74
PB2. Encourage the creation of more public infrastructure (e.g. roads, public facilities)	90.4%	5.00	4.43	0.83
PB3. Provide incentives for the creation of new green areas	85.6%	4.00	4.27	0.94
PB4. Provide jobs wanted by residents	82.4%	4.00	4.22	0.88
PB5. Encourage the protection and conservation of heritage resources	86.4%	5.00	4.40	0.86
PB6. To promote the restoration of historic buildings	88.8%	5.00	4.39	0.84
PB7. Help preserve cultural identity.	85.2%	5.00	4.38	0.91
PB8. Improve the offer of shopping, restaurants and entertainment areas	88.8%	4.00	4.30	0.86
PB9. Improving the quality of life	78.8%	4.00	4.16	0.96
PB10. Encourage the creation of more public spaces	83.6%	4.00	4.17	0.90
PB11. Increase the number of recreational/leisure activities for residents	80.8%	4.00	4.13	0.93
PB12. Contribute to increase income and quality of life	78.4%	4.00	4.10	1.00
PB13. Improve the physical appearance of the spaces	86.0%	4.00	4.29	0.83
Perceived costs		2.75	2.70	1.02
PC1. Lead to conflict between residents and tourists	30.4%	2.00	2.58	1.34
PC2. Cause a decrease in employment income in the tourism sector	26.0%	2.00	2.45	1.43
PC3. Increase the cost of living	38.4%	3.00	2.92	1.30
PC4. Cause more pollution	39.2%	3.00	2.80	1.40
PC5. Cause overcrowding in the community	27.6%	3.00	2.65	1.23
PC6. Increase property taxes unfairly	30.8%	3.00	2.64	1.38
PC7. Increase traffic problems	45.2%	3.00	3.01	1.44
PC8. Increase crime rates	28.0%	2.00	2.53	1.35
STD support		3.17	3.18	0.93
STDS1. I support the development of community-based sustainable tourism initiatives	76.8%	4.00	4.02	1.18
STDS 2. I participate in sustainable tourism-related plans	31.6%	3.00	2.82	1.27
STDS 3. I participate in cultural exchanges between (local) residents and visitors	26.4%	3.00	2.66	1.29
STDS 4. I cooperate in heritage tourism planning and development initiatives.	27.2%	3.00	2.62	1.30
STDS 5. I participate in promoting heritage education and conservation	33.6%	3.00	3.03	1.04
STDS 6. I comply with heritage protection standards to reduce the negative effects of tourism	70.8%	4.00	3.94	1.16

⁽¹⁾ Likert scale responses: 1 = Totally disagree, 2 = Partly disagree, 3 = Neither agree nor disagree, 4 = Partially agree, 5 = Totally agree;

⁽²⁾ percentage of response 4 and 5.

Source: Own Elaboration

The Community Involvement scale includes 5 items preceded by the sentence “Keeping in mind the UNESCO definition of sustainable tourism which states that sustainable tourism is “tourism that respects both the local population and travellers, as well as the cultural heritage and the environment”, how strongly do you agree with the following statements” (Table 2). More than half of the respondents stated (partially or totally agreed) that they participate in activities related to sustainable tourism (58.0% agreement, Median = 4.00, Mean value = 3.49, SD = 1.32), support research for sustainable development of this community (73.2% agreement, Median = 4.00, Mean value = 4.05, SD = 1.20) and encourage community residents to invest in sustainable tourism (61.2% agreement, Median = 4.00, Mean value = 3.68, SD = 1.30). Conversely, less than 1 in 4 respondents are involved in planning and managing sustainable tourism in the community (23.6% agreement, Median = 3.00, Mean value = 2.63, SD = 1.32) or in decision-making for sustainable tourism in the community (20.4% agreement, Median = 2.00, Mean value = 2.43, SD = 1.33).

With regard to the Community attachment scale, the answers to the scale questions show a strong connection to the community, with 9 of the 11 items having percentages of agreement higher than 50%, a median equal to 4 and a mean value greater than 3.5. The exceptions were the questions “The infrastructure and resources provided by this community are the best” (37.6% agreement, Median = 3.00, Mean value = 2.97, SD = 1.04) and “My friends/relatives would be disappointed if I went to live in another community” (44.4% agreement, Median = 3.00, Mean value = 3.21, SD = 1.33).

Regarding the Economic Dependence scale, 4 questions were included to assess the “dependence on the tourism industry”. The results show a low dependence on tourism with the percentages of agreement ranging from 21.6% (“Tourism in this town helps me pay my bills”) to 31.6% (“I would benefit economically from more tourism in this town”). Mean and median values close to 2 are also indicators of low dependence on tourism.

Perceived Risk included 4 items to assess the opinion on perceived risks in the face of the pandemic caused by COVID-19. The results show a higher risk perception on the items related to COVID-19 (50.4% agreed that tourist arrival increases anxiety/stress related to preventing COVID-19 and 59.6% that tourist arrival increases the risk of COVID-19 infection) and lower on the other items (31.6% agreed that tourist arrival increases inconvenience of town center activities and 30.0% that tourist arrival leads to reduced town center activity).

The Perceived Benefits scale includes 13 questions to assess the opinion on the economic, socio-cultural and environmental effects that tourism activity could bring to their community (place where they live). The results show a perception of high benefits from tourism activity with all questions having more than 75% agreement, a median equal to or greater than 4 and a mean greater than 4.

In relation to Perceived Costs, in general, there is a low perception of costs of the tourism activity, since all 8 questions on the scale had a percentage of agreement below 50%, with a median less than or equal to 3 and a mean less than 3. The increase in the cost of living (38.4% agreement, Median = 3.00, Mean value = 2.92, SD = 1.30), the increase in pollution (39.2% agreement, Median = 3.00, Mean value = 2.80, SD = 1.40) and the increase in traffic problems (45.2% agreement, Median = 3.00, Mean value = 3.01, SD = 1.44) were the most valued costs - they were the only ones with percentages of agreement close to 40% or higher.

Finally, Support for STD was assessed through the degree of agreement with 6 statements. The majority reported that they support the development of community-based sustainable tourism initiatives (76.8% agreement, Median = 4.00, Mean value = 4.02, SD = 1.18) and comply with heritage protection standards to reduce the negative effects of tourism (70.8% agreement, Median = 4.00, Mean value = 3.94, SD = 1.16). On the contrary, less than 35% participate in plans related to sustainable tourism (31.6% agreement, Median = 3.00, Mean value = 2.82, SD = 1.27), participate in cultural exchanges between (local) residents and visitors (26.4% agreement, Median = 3.00, Mean value = 2.66, SD = 1.29), cooperate in heritage tourism planning and development initiatives (27.2% agreement, Median = 3.00, Mean value = 2.62, SD = 1.30) and participate in promoting heritage education and conservation (33.6% agreement, Median = 3.00, Mean value = 3.03, SD = 1.04).

4.3 Correlations

In this subsection, a correlational analysis is carried out between the concepts under study and some sociodemographic variables of the residents who answered the questionnaire.

Community involvement (CI): The results in Table 3 show that the community involvement score increases with increasing age ($R = 0.225$, $p < 0.001$), number of years living in the municipality ($R = 0.210$, $p = 0.001$) and net monthly income ($R = 0.248$, $p < 0.001$). It was also found that the community involvement score is significantly higher for residents with Higher Education (Mean value = 3.39, SD = 1.00) than for those without Higher Education (Mean value = 3.03, SD = 0.95) ($p = 0.006$) and for residents who have family members involved in the tourism sector (Mean value = 3.57, SD = 1.01) compared to those without (Mean value = 3.16, SD = 0.97) ($p = 0.005$). Retirees (Mean value = 3.84, SD = 1.29) and the self-employed (Mean value = 3.78, SD = 1.12) had the highest community involvement scores - significantly higher than householders (Mean value = 2.53, SD = 1.09) ($p < 0.05$). There was no statistically significant association of Community Involvement with gender ($p = 0.263$).

Table 3. Associations with the Community Involvement (CI)

Variable		Mean value (SD)	p
Gender	Female (n = 159)	3.20 (0.95)	0.263 ⁽¹⁾
	Male (n = 91)	3.35 (1.07)	
Age	Pearson Correlation Coefficient	$R = 0.225$	< 0.001 ⁽³⁾
Number of years living in the municipality	Pearson Correlation Coefficient	$R = 0.210$	0.001 ⁽³⁾
Educational level	Primary/Secondary Education (n = 94)	3.03 (0.95)	0.006 ⁽¹⁾
	Higher Education (n = 156)	3.39 (1.00)	
Employment situation	Retired (n = 10)	3.84 (1.29) ^a	< 0.001 ⁽²⁾
	Employed - self-employed (n = 35)	3.78 (1.12) ^a	
	Employed - employee (n = 119)	3.26 (1.01) ^{ab}	
	Student (n = 80)	3.00 (0.73) ^{ab}	
	Domestic servant (n = 6)	2.53 (1.09) ^b	
Has a family member involved in the tourism sector	No (n = 190)	3.16 (0.97)	0.005 ⁽¹⁾
	Yes (n = 60)	3.57 (1.01)	
Household's net monthly income	Spearman Correlation Coefficient	$R = 0.248$	< 0.001 ⁽³⁾

⁽¹⁾ Student's T Test significance value; ⁽²⁾ ANOVA significance value; ⁽³⁾ significance value of the Pearson/Spearman Correlation coefficient.

^{a,b} no significant differences between groups with the same letter: $p > 0.05$ in the Tukey HSD multiple comparisons thesis.

Source: Own Elaboration

Community attachment (CA): Regarding the association of the Community Attachment score with the profile variables (Table 4), a positive correlation was observed with age ($R = 0.460$, $p < 0.001$), the number of years residing in the municipality ($R = 0.434$, $p < 0.001$) and household monthly net income ($R = 0.220$, $p < 0.001$). Community attachment is stronger among men (Mean value = 4.00, SD = 0.97) than women (Mean value = 3.56, SD = 1.01) ($p = 0.001$) and among residents with family members involved in tourism (Mean value = 4.00, SD = 0.85) compared to those without (Mean value = 3.63, SD = 1.05) ($p = 0.015$). The results also show that community attachment is weaker in students (Mean value = 3.04, SD = 0.88) - significantly lower ($p < 0.05$) than that recorded in the self-employed (Mean value = 4.33, SD = 1.00), retired (Mean value = 4.04, SD = 1.23) and employed (Mean value = 3.96, SD = 0.85). There was no statistically significant association between Community Attachment and education ($p = 0.526$).

Table 4. Associations with the Community Attachment (CA)

Variable		Mean value (SD)	<i>p</i>
Gender	Female (n = 159)	3.56 (1.01)	0.001 ⁽¹⁾
	Male (n = 91)	4.00 (0.97)	
Age	Pearson Correlation Coefficient	<i>R</i> = 0.460	< 0.001 ⁽³⁾
Number of years living in the municipality	Pearson Correlation Coefficient	<i>R</i> = 0.434	< 0.001 ⁽³⁾
Educational level	Primary/Secondary Education (n = 94)	3.67 (1.04)	0.526 ⁽¹⁾
	Higher Education (n = 156)	3.75 (1.00)	
Employment situation	Employed - self-employed (n = 35)	4.33 (1.00) ^a	< 0.001 ⁽²⁾
	Retired (n = 10)	4.04 (1.23) ^a	
	Employee (n = 119)	3.96 (0.85) ^a	
	Domestic servant (n = 6)	3.85 (0.99) ^{ab}	
	Student (n = 80)	3.04 (0.88) ^b	
Has a family member involved in the tourism sector	No (n = 190)	3.63 (1.05)	0.015 ⁽¹⁾
	Yes (n = 60)	4.00 (0.85)	
Household's net monthly income	Spearman Correlation Coefficient	<i>R</i> = 0.220	< 0.001 ⁽³⁾

⁽¹⁾ Student's T Test significance value; ⁽²⁾ ANOVA significance value; ⁽³⁾ significance value of the Pearson/Spearman Correlation coefficient.

^{a,b} no significant differences between groups with the same letter: *p* > 0.05 in the Tukey HSD multiple comparisons thesis.

Source: Own Elaboration

Economic Dependence (ED): Regarding the association of the profile variables with Economic Dependence (Table 5), the results show that the mean Economic Dependence score was significantly higher ($p < 0.001$) in residents who have family members involved in the tourism sector (Mean value = 3.58, SD = 1.19) than in residents who do not (Mean value = 1.97, SD = 1.06). A significant association was also found with work status ($p < 0.001$): the Economic Dependency score was higher in the self-employed (Mean value = 3.32, SD = 1.39) and lower in students (Mean value = 2.10, SD = 1.05) - the differences were significant between these two groups ($p < 0.05$), but not between the other groups. There was no statistically significant association of Economic Dependence with the remaining profile variables ($p > 0.05$).

Table 5. Associations with Economic Dependence (ED)

Variable		Mean value (SD)	<i>p</i>
Gender	Female (n = 159)	2.28 (1.24)	0.239 ⁽¹⁾
	Male (n = 91)	2.48 (1.35)	
Age	Pearson Correlation Coefficient	<i>R</i> = 0.102	0.106 ⁽³⁾
Number of years living in the municipality	Pearson Correlation Coefficient	<i>R</i> = 0.096	0.132 ⁽³⁾
Educational level	Primary/Secondary Education (n = 94)	2.47 (1.29)	0.278 ⁽¹⁾
	Higher Education (n = 156)	2.29 (1.28)	
Employment situation	Employee - self-employed (n = 35)	3.32 (1.39) ^a	< 0.001 ⁽²⁾
	Domestic servant (n = 6)	2.58 (1.06) ^{ab}	
	Employee (n = 119)	2.25 (1.27) ^{ab}	
	Retired (n = 10)	2.23 (1.55) ^{ab}	
	Student (n = 80)	2.10 (1.05) ^b	

Has a family member involved in the tourism sector	No (n = 190)	1.97 (1.06)	< 0.001 ⁽¹⁾
	Yes (n = 60)	3.58 (1.19)	
Household's net monthly income	Spearman Correlation Coefficient	$R = -0.077$	0.228 ⁽³⁾

⁽¹⁾ Student's T Test significance value; ⁽²⁾ ANOVA significance value; ⁽³⁾ significance value of the Pearson/Spearman Correlation coefficient.

^{a,b} no significant differences between groups with the same letter: $p > 0.05$ in the Tukey HSD multiple comparisons thesis.

Source: Own Elaboration

Perceived Risk (PR): Concerning Perceived Risk (Table 6), a significant association was only found with employment status ($p = 0.012$): the average score of this dimension was higher among the self-employed (Mean value = 3.54, SD = 1.13) and lower among the retired (Mean value = 2.58, SD = 1.50) - the differences were significant between these two groups ($p < 0.05$), but not between the remaining groups.

Table 6. Associations with Perceived Risk (PR)

Variable		Mean value (SD)	p
Gender	Female (n = 159)	3.09 (1.07)	0.194 ⁽¹⁾
	Male (n = 91)	2.90 (1.19)	
Age	Pearson Correlation Coefficient	$R = 0.088$	0.164 ⁽³⁾
Number of years living in the municipality	Pearson Correlation Coefficient	$R = 0.107$	0.092 ⁽³⁾
Educational level	Primary/Secondary Education (n = 94)	3.01 (1.14)	0.968 ⁽¹⁾
	Higher Education (n = 156)	3.02 (1.11)	
Employment situation	Employee - self-employed (n = 35)	3.54 (1.13) ^a	0.012 ⁽²⁾
	Domestic servant (n = 6)	3.42 (1.33) ^{ab}	
	Employee (n = 119)	3.02 (1.13) ^{ab}	
	Student (n = 80)	2.81 (0.94) ^{ab}	
	Retired (n = 10)	2.58 (1.50) ^b	
Has a family member involved in the tourism sector	No (n = 190)	2.96 (1.13)	0.136 ⁽¹⁾
	Yes (n = 60)	3.20 (1.04)	
Household's net monthly income	Spearman Correlation Coefficient	$R = 0.007$	0.909 ⁽³⁾

⁽¹⁾ Student's T Test significance value; ⁽²⁾ ANOVA significance value; ⁽³⁾ significance value of the Pearson/Spearman Correlation coefficient.

Source: Own Elaboration

Perceived Benefits (PB): With regard to Perceived Benefits (Table 7), there was only a significant association with age ($R = 0.198$, $p = 0.002$) and with the number of years living in the municipality ($R = 0.191$, $p = 0.002$): the tendency for perceived benefits to increase with increasing age and the number of years living in the municipality.

Table 7. Associations with Perceived Benefits (PB)

Variable		Mean value (SD)	p
Gender	Female (n = 159)	4.30 (0.63)	0.834 ⁽¹⁾
	Male (n = 91)	4.28 (0.72)	
Age	Pearson Correlation Coefficient	$R = 0.198$	0.002 ⁽³⁾
Number of years living in the municipality	Pearson Correlation Coefficient	$R = 0.191$	0.002 ⁽³⁾
Educational level	Primary/Secondary Education (n = 94)	4.20 (0.69)	0.101 ⁽¹⁾
	Higher Education (n = 156)	4.35 (0.65)	

Employment situation	Employed - self-employed (n = 35)	4.43 (0.54)	0.149 ⁽²⁾
	Employed - employee (n = 119)	4.35 (0.62)	
	Retired (n = 10)	4.34 (1.20)	
	Domestic servant (n = 6)	4.23 (0.53)	
	Student (n = 80)	4.14 (0.69)	
Has a family member involved in the tourism sector	No (n = 190)	4.29 (0.69)	0.905 ⁽¹⁾
	Yes (n = 60)	4.30 (0.58)	
Household's net monthly income	Spearman Correlation Coefficient	$R = 0.072$	0.254 ⁽³⁾

⁽¹⁾ Student's T Test significance value; ⁽²⁾ ANOVA significance value; ⁽³⁾ significance value of the Pearson/Spearman Correlation coefficient.
Source: Own Elaboration

Perceived Costs (PC): With regard to Perceived Costs (Table 8), significant differences were only found with regard to work situation ($p = 0.013$): residents working as "domestics" (Mean value = 3.52, SD = 0.66) were those with the highest average score and retired people (Mean value = 1.94, SD = 1.04) those with the lowest average - with significant differences between them ($p < 0.05$).

Table 8. Associations with Perceived Costs (PC)

Variable		Mean value (SD)	p
Gender	Female (n = 159)	2.65 (1.03)	0.361 ⁽¹⁾
	Male (n = 91)	2.77 (0.98)	
Age	Pearson Correlation Coefficient	$R = -0.040$	0.526 ⁽³⁾
Number of years living in the municipality	Pearson Correlation Coefficient	$R = -0.037$	0.558 ⁽³⁾
Educational level	Primary/Secondary Education (n = 94)	2.75 (1.02)	0.512 ⁽¹⁾
	Higher Education (n = 156)	2.66 (1.01)	
Employment situation	Domestic Worker (n = 6)	3.52 (0.66) ^a	0.013 ⁽²⁾
	Employee - self-employed (n = 35)	2.90 (0.98) ^{ab}	
	Employee (n = 119)	2.74 (1.02) ^{ab}	
	Student (n = 80)	2.57 (0.98) ^{ab}	
	Retired (n = 10)	1.94 (1.04) ^b	
Has a family member involved in the tourism sector	No (n = 190)	2.63 (1.01)	0.085 ⁽¹⁾
	Yes (n = 60)	2.89 (1.02)	
Household's net monthly income	Spearman Correlation Coefficient	$R = 0.028$	0.654 ⁽³⁾

⁽¹⁾ Student's T Test significance value; ⁽²⁾ ANOVA significance value; ⁽³⁾ significance value of the Pearson/Spearman Correlation coefficient.
^{a,b} no significant differences between groups with the same letter: $p > 0.05$ in the Tukey HSD multiple comparisons thesis.
Source: Own Elaboration

STD support (STDS): The results in Table 9 show that support for STD is stronger in residents who have family members involved in the tourism sector (Mean value = 3.59, SD = 0.92) than in residents who do not (Mean value = 3.05, SD = 0.90) ($p < 0.001$). Significant differences were also found with respect to work status ($p = 0.023$): the DTS Support score was highest in the self-employed (Mean value = 3.60, SD = 1.06) and lowest in the 'domestic' residents (Mean value = 2.53, SD = 0.99) - the differences were significant between these two groups ($p < 0.05$), but not between the other groups. There was no statistically significant association of DTS Support with the remaining profile variables ($p > 0.05$).

Table 9. Associations with STD Support

Variable		Mean value (SD)	p
Gender	Female (n = 159)	3.13 (0.91)	0.263 ⁽¹⁾
	Male (n = 91)	3.27 (0.97)	
Age	Pearson Correlation Coefficient	R = 0.095	0.135 ⁽³⁾
Number of years living in the municipality	Pearson Correlation Coefficient	R = 0.095	0.136 ⁽³⁾
Educational level	Primary/Secondary Education (n = 94)	3.11 (0.88)	0.331 ⁽¹⁾
	Higher Education (n = 156)	3.23 (0.96)	
Employment situation	Employed - self-employed (n = 35)	3.60 (1.06) ^a	0.023 ⁽²⁾
	Retired (n = 10)	3.30 (1.05) ^{ab}	
	Employee (n = 119)	3.15 (0.92) ^{ab}	
	Student (n = 80)	3.08 (0.82) ^{ab}	
	Domestic servant (n = 6)	2.53 (0.99) ^b	
Has a family member involved in the tourism sector	No (n = 190)	3.05 (0.90)	< 0.001 ⁽¹⁾
	Yes (n = 60)	3.59 (0.92)	
Household's net monthly income	Spearman Correlation Coefficient	R = 0.103	0.105 ⁽³⁾

⁽¹⁾ Student's T Test significance value; ⁽²⁾ ANOVA significance value; ⁽³⁾ significance value of the Pearson/Spearman Correlation coefficient.

^{a,b} no significant differences between groups with the same letter: $p > 0.05$ in the Tukey HSD multiple comparisons thesis.

Source: Own Elaboration

5. Discussion

In this study, there is a significant association between gender and community attachment, i.e. male residents showed a stronger attachment to the community where they live. Serhane et al. (2021) conclude that gender is a significant variable in explaining differences in support for tourism development and perception of tourism impacts, with males demonstrating higher perceptions than females. These results are in agreement with other studies available in the literature (Sheldon & Var, 1984; Mason & Cheyne, 2000; Tosun, 2002; Huh & Vogt, 2008). In addition, this result may have to do with the fact that we are dealing with a very traditional community with cultural rituals typical of this type of communities, where the experience of the public space is still very much linked to the male gender. Regarding age, the results show that the older the residents are, the more involved they seem to be in their community and the more attached they are with the community where they live. This result contradicts that obtained in the study by Serhane et al. (2021), in which it was concluded that residents between the ages of 19 and 30 tend to be more likely to participate in the development of tourist activities.

Several studies make reference to the relevant role that education plays in the perception of tourism impacts (McCool & Martin, 1994; Teye, Sönmez, & Sirakaya, 2002). In the case of the study conducted by Serhane et al. (2021) the same revealed that people with higher education tend to be less enthusiastic about the negative impacts of tourism on the environment than those with lower levels of education. The study by Long and Kayat (2011) on the other hand evidences that residents with higher education tend to appreciate the positive impacts of tourism and disapprove of its negative impacts. In the case of the present study the educational level variable only showed a statistically significant association with community involvement, i.e. such involvement tends to be stronger in respondents who hold higher education.

The results suggest that respondents who have lived longer in the town tend to be more involved, more attached and perceive the benefits of tourism more intensely. These results are in line with other studies (McCool & Martin, 1994; Nunkoo & Gursoy, 2012).

In this study, the two profile variables which obtained more significant associations with the concepts under analysis were the "employment situation" and the "existence of family members involved in the tourism sector". With regard to employment status, several positive and significant associations were found with:

- 1) Support for STD (stronger in the self-employed);
- 2) Perceived costs (domestic respondents tend to perceive costs more than retirees who tend not to value costs);
- 3) The perceived risk associated with COVID-19 (higher among the self-employed and lower among the retired). To our knowledge, this is the first study to address this concept in terms of its association with sociodemographic characteristics. Although there are no studies confirming this result, it nevertheless seems to make sense since the self-employed are the ones who most depend on this sector directly or indirectly. And, as is common knowledge, they were the first to feel the effects of the measures that were taken during the various phases of the pandemic;
- 4) Economic dependence (higher score for self-employed and lower score for students);
- 5) Community attachment [weaker in students, which may be related to residence time, since residence time is significantly lower in this category and, as observed in other studies (Lankford & Howard, 1994; McCool & Martin, 1994; Sheldon & Var, 1984), residence time is one of the factors that increases community attachment]; and
- 6) Community involvement (retired and self-employed people tend to be more involved in the community).

Regarding the existence of family members involved in the tourism sector, there is a positive and significant association with: 1) support for STD, i.e. residents who have family members involved in the tourism sector naturally tend to support its development more expressively than the other residents; 2) economic dependence; 3) community attachment; and 4) community involvement. Several studies corroborate this result (Perdue et al., 1990; Ko & Stewart, 2002; McDowall & Choi, 2010; Long & Kayat, 2011).

Finally, with regard to income, there was only a statistically significant relationship with community attachment, i.e. residents with higher monthly household incomes tended to be more attached to their community. The results of Long and Kayat's (2011) study suggest that residents with middle/higher incomes tended to favour tourism and support tourism development, while residents earning lower incomes were less supportive of tourism development.

6. Conclusion

One of the objectives of this study is related to the analysis of the perceptions of the residents of a historical town about the concepts of community involvement, community attachment, economic dependence, impacts of tourism, perception of risk associated to COVID and support for STD. The aim was to understand the perceptions of the residents of this historic town, located in a low-density territory, about these concepts and their specific evaluation of their support for STD. In summary, the results of this study suggest that the residents who responded to the questionnaire demonstrated a strong attachment to the community, and that they perceive, more intensely, the benefits than the costs associated with tourism. Moderate scores were found regarding support for STD, community involvement and perceived risk associated with COVID-19. Respondents showed low economic dependence on the tourism sector.

As for the second objective, which aimed at correlating the concepts under analysis and analysing the existence of differences in the residents' perceptions of these concepts according to certain sociodemographic variables, we tried to understand whether residents with different characteristics have different perceptions of certain antecedents of STD support. It was found that several sociodemographic characteristics of respondents significantly influence residents' perceptions of the concepts under study; however, there are differences in perceptions according to certain profile variables, as discussed in the previous section. In the context of this objective it was also possible to understand which profile variables contribute most to explain residents' support for the STD, specifically, employment status and the existence of family members involved in the tourism sector.

It is believed that this study contributes to the development of research in the field of STD, and, therefore inclusive in its application to historic cities in low-density territories. Research on the role of residents in STD is still relatively scarce, especially in cities where the tourism sector has not yet caused very significant negative impacts.

It is considered that the results of this study provide an additional contribution to local authorities, policymakers and managers of public and private companies, among other stakeholders, linked to this sector of activity. The results seem to suggest that the vast majority of respondent residents are not involved in the planning and management of their territory and are only moderately supportive of STD. This fact, in itself, represents a huge weakness since as is well known, participatory approaches through the “shared vision” are the only way for there to be STD.

This study has some limitations that may be addressed in future research. All variables under analysis were measured from the perceptions of the same key informant, so there are risks associated with the variance of the common method. Similarly, obtaining the perceptions of other stakeholders can be pointed out as a suggestion for future research. In this study, the results point to several significant associations between factors contributing to support for STD and certain variables of residents' sociodemographic profile, which should be taken into account in STD initiatives. In addition to being able to apply this study to other stakeholder groups, it is also suggested in future research that these relationships be explored using more complex statistical methods. A further limitation stems from the use of a convenience sample, which implies that the results are not generalisable to other towns and regions. On the other hand, the application of the questionnaire via the internet may have restricted the sample and may not be sufficiently adequate to cover higher age groups and those with lower qualifications.

In future studies, other profile variables could have been proposed, and their correlation with the concepts under analysis tested. Furthermore, in order to collect more insightful and complete information on residents' perceptions and attitudes and behaviours, considering their profile characteristics, it would be important that qualitative and extended in time studies be developed.

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Impact of Perceived Susceptibility of COVID on Travel Intentions of Outbound Tourists: Applying the Theory of Planned Behaviour

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ABSTRACT

The study examined the impact of perceived susceptibility of COVID-19 on travel intentions of Pakistani outbound tourists by applying the Theory of Planned Behaviour (TPB). For the purpose of investigation, the data from 170 respondents were analysed to study the mediating effect of subjective norms, attitude towards behaviour and perceived behavioural control between perceived susceptibility of COVID and the travel intention of tourists for international vacation trip during the pandemic. It was found that the mediating effects of subjective norms and attitude towards behaviour were significant while the role of perceived behavioural control was insignificant. The analysis further reveals that the perceived susceptibility of COVID negatively influences the subjective norms and attitude while positively influences the behavioural control. On the other hand, all the proposed mediating factors in the model positively influence the travel intentions with varying strengths. Moreover, among the three endogenous variables influencing the intentions, subjective-norms came out to be the strongest predictor of travel intentions during pandemic. This outcome was significantly different from the commonly found results in existing literature hence highlighting the novelty of this study. Finally, study-implications for variety of stakeholders in hospitality industry were underscored, limitations were acknowledged and recommendations for future research endeavours were also discussed.

KEYWORDS

Theory of Planned Behaviour, Perceived Susceptibility of COVID-19, Subjective Norms, Attitude Towards Behaviour, Behavioural Control, Travel Intentions.

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1. Introduction

Corona Virus Disease was emerged in December 2019 in Wuhan, China and was later named as COVID-19 (Ali et al., 2021). On January 11, 2020, China announced its first death due to COVID-19 and subsequently on 11 March 2020, World Health Organization (WHO) declared COVID-19 as pandemic (WHO, 2020). It quickly spread around the world and on 26 February 2020, Govt. of Pakistan confirmed the first COVID-19 patient in the country. By the end of March, Ministry of Health reported 1,235 verified cases in Pakistan and till the end of May, the amount of COVID cases was increased to 300,955 (Abbas et al., 2021).

Measures taken by the world's governments and health organizations to prevent the spread of this pandemic have adverse effect on global tourism (Yeh, 2020). The pandemic has no-doubt affected the world's economy (Rasoolimanesh et al., 2021), but the tourism has been one of the severely affected industries due to unprecedented travel restrictions (Gössling et al., 2021; Rastegar et al., 2021) as this global pandemic crisis had affected all the facets of tourism industry (Lu & Atadil, 2021). Tourism is vulnerable to natural disasters, terrorism and sudden crisis (Huan et al., 2004; Valencia & Crouch, 2008) and one such latest crisis is the COVID pandemic which posed severe challenges to the tourism industry (UNWTO, 2020).

In case of Pakistan, few famous tourist destinations for its outbound travellers are Maldives, Spain, Greece, Italy, Turkey, Malaysia, UAE, Azerbaijan, Thailand, Sri Lanka, Portugal, Hong Kong and Egypt (Raza, 2019). Till 28 February 2022, total COVID cases per million population are 305,925 in Maldives, 234,639 in Spain, 234,234 in Greece, 211,937 in Italy, 164,130 in Turkey, 104,157 in Malaysia, 87,226 in UAE, 76,348 in Azerbaijan, 41,551 in Thailand, 29,962 in Sri Lanka, 321,522 in Portugal, 27,084 in Hong Kong and 4,584 in Egypt (Worldometer, 2022). So, the risk associated with traveling internationally for leisure and vacation during pandemic becomes the cause of stress and fear (Rivera, 2020). The negative impact of such crisis on tourism is well established (Chew & Jahari, 2014). The similar case examples are of Africa and China where there was a significant decrease in tourism after the outbreak of Ebola (Cahyanto et al., 2016) and SARS respectively (Wen et al., 2005).

Most of the research in this area is focused on finding the post-pandemic travel intentions (Han et al., 2020; Li et al., 2020; Rastegar et al., 2021) while under this uncertain and restricted environment, understanding the travel behaviours during pandemic is also of vital importance for researchers and practitioners in tourism industry. This is because, many health experts and government officials claim that it will take years before the COVID-19 ends and travellers will have to travel under new restrictions (Rohisha & Jibin, 2021). Although, many studies were done in the past that focused on travelling during H1N1 pandemic (Leggat et al., 2010; Mukherjee et al., 2010; Warren et al., 2010; Lee et al., 2012; Neatherlin et al., 2013) yet, few were found in literature that analysed the travel intentions during COVID (Gibbs et al., 2020; Parady et al., 2020; Sharun et al., 2020) and even fewer were those that used the Theory of Planned Behaviour (Hamid & Bano, 2021; Ojo et al., 2022).

In the context of pandemic, many recent studies in different countries have adopted the theory of planned behaviour and health belief model to investigate the individuals' perceived susceptibility of COVID as an influencer on their intentions to get vaccinated (Patwary et al., 2021; Ullah et al., 2021; Wolff, 2021). As the perceived risk and perceived susceptibility of COVID-19 affect the behavioural intentions (Suess et al., 2022) which may also alter the travel intentions of tourists to have international vacation trips. So, the theory of planned behaviour may be applied to analyse the travel intentions of people in the context of COVID as it has been about more than two years and living with COVID is becoming the new normal (Ateljevic, 2020; Irawan et al., 2020).

2. Literature Review

2.1 Theory of Planned Behaviour

To predict human intentions and behaviours, Theory of Planned Behaviour (TPB) is one of the widely used sociopsychology theories in literature (Guerin & Toland, 2020; Guggenheim et al., 2020). Initial work on this theory was done by Ajzen (1985). Since then, it has been applied in various disciplines and its strength to anticipate human behaviours in diverse settings has been demonstrated in various studies (McEachan

et al., 2011). The importance of this theory is also already established in the tourism industry to understand the intentions, behaviours and decision-making process of travellers (Lam & Hsu, 2004; Hsu & Huang, 2012; Ulker-Demirel & Ciftci, 2020). Moreover, unlike its predecessor i.e., the Theory of Reasoned Action (TRA) which only considered the volitional aspect of human behaviour (Ajzen & Fishbein, 1980), the TPB explains both the volitional and non-volitional facets of individuals' behaviours (Ajzen, 2001).

This theory comprises of four components i.e., subjective norms, attitude, behavioural control and behavioural intention. First three are the predictors and the fourth one is outcome variable (Han et al., 2020). Intentions to perform behaviours of different kinds can be predicted with high accuracy with the help of these three predictors (Ajzen, 1991). Perceived subjective norm is defined as the perception of individuals about the social pressure that they face to perform or not to perform a specific behaviour; perceived behavioural control indicates the humans' perception about their capability to be involved or not to be involved in a particular behaviour; attitude towards the behaviour refers to the degree by which a person has favourable or unfavourable assessment of the behaviour in question; and the behavioural intention is based on the influence of a positive attitude, perceived social pressure and the ability to carry out that action (Ajzen, 1991; Han et al., 2020). Moreover, in TPB, behavioural control is the constituent of non-volitional process while subjective norms and attitude are the parts of volitional process (Ajzen, 2001; Demirel & Ciftci, 2020). TPB also suggests that the behavioural intention was the most proximate determinant of the actual behaviour (Eom & Han, 2019).

2.2 Expanding the Theory of Planned Behaviour in Tourism

While expanding the Theory of Planned Behaviour in tourism industry, the construct of risk is widely used in the literature (Cañizares et al., 2021). In tourism, the risk is defined as the potential danger that is associated with the travel (Fuchs & Reichel, 2006) and predicts the behaviour to avoid traveling to the countries or areas that have health crisis, terrorism or political instability (Sönmez & Graefe, 1998). In the context of pandemic, perceived susceptibility of a certain disease is a type of risk that is associated with traveling which is defined as the believes of individuals about their vulnerability to get infected (D'Souza et al., 2011). This perception may change the decision to travel in instances where the risk is likely to exceed an acceptable level for individuals (Cañizares et al., 2021). When in an actual situation, each individual may perceive risk as more or less than expected but anticipated risk is highly likely to negatively affect their attitude towards a particular behaviour (Lobb et al., 2007; Quintal et al., 2010) because it implies the expectation of loss (Cañizares et al., 2021).

2.3 Hypotheses

In the context of crisis when pandemic affect the tourism, TPB has been evolved and extended to incorporate perceived psychological risk (Han et al., 2020), willingness to adopt non-pharmaceutical interventions (Lee et al., 2012), willingness to pay higher for better safety measures (Cañizares et al., 2021), destination image (Chew & Jahari, 2014), perceived severity of the situation (Das & Tiwari, 2021) and perceived uncertainty (Quintal et al., 2010). This theory has also been used to analyse the impact of individuals' perceived susceptibility of the diseases on their intentions to adopt pharmaceutical interventions i.e., to get vaccinated (Patwary et al., 2021; Wolff, 2021). One study uses TPB to investigate the effect of perceived infectability on young adults' intentions to uptake COVID-19 vaccination via mediating role of subjective norms, attitude and behavioural control (Ullah et al., 2021).

In the similar context, Suess et al. (2022) investigated the indirect relation of perceived susceptibility of COVID-19 on individuals' willingness to vaccinate before travel and the current study have utilized the same predicting variable to analyse its impact on travel intentions. Han et al. (2020) analysed the moderating role of risk associated with COVID-19 for US tourists and expanded the theory of planned behaviour but the current study fills the gap by investigating the predicting role of perceived susceptibility on travel intentions by using the same theory for Pakistani tourists. Furthermore, as mentioned earlier, this perception may also alter the decision of tourists about their choice of destination and travel behaviours (Sönmez & Graefe, 1998) by playing a central role in tourists' decision-making process (Kozak et al., 2007). Therefore, the study incorporated the perceived susceptibility into TPB as the expected adverse outcome

of traveling may change the intention of traveling during COVID pandemic thus proposing the following hypothesis:

H₁: Perceived susceptibility of COVID-19 predicts the individuals' intentions to travel during pandemic through the mediating role of subjective norms.

H₂: Perceived susceptibility of COVID-19 predicts the individuals' intentions to travel during pandemic through the mediating role of attitude towards this behaviour.

H₃: Perceived susceptibility of COVID-19 predicts the individuals' intentions to travel during pandemic through the mediating role of perceived behavioural control.

H_{1a}: The perceived susceptibility of COVID during travel is negatively related to the individuals' perceived subjective norms of traveling during pandemic.

H_{1b}: The perceived subjective norms of traveling during COVID is positively related to the individuals' intention to travel during pandemic.

H_{2a}: The perceived susceptibility of COVID during travel is negatively related to the individuals' attitude towards this behaviour.

H_{2b}: The individuals' attitude towards behaviour is positively related to their intentions to travel during pandemic.

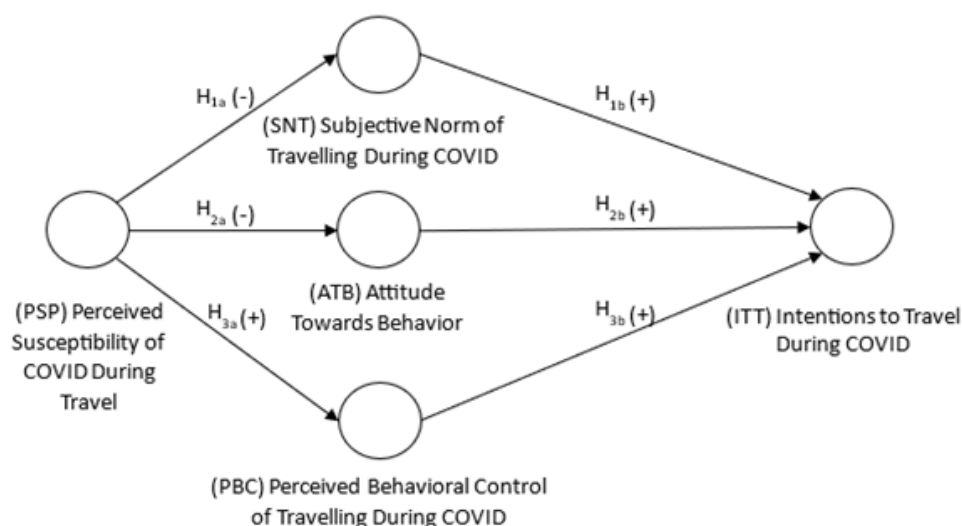
H_{3a}: The perceived susceptibility of COVID during travel is positively related to the individuals' perceived behavioural control.

H_{3b}: The individuals' perceived behavioural control is positively related to their intentions to travel during pandemic.

3. Methodology

This empirical study is based on the primary data collection through the use of a quantitative survey that is adopted to test the proposed hypothesis which is briefly summarized in the theoretical model in Figure 1.

Figure 1. Proposed Theoretical Model



Source: Own Elaboration

3.1 Survey Instrument

To ensure the validity, consistency and reliability, the survey scale was based on the previously published work in the related literature (Agag et al., 2020). According to the standard practice (Cañizares et al., 2021), each of the variable used in this study is adopted to the context of COVID-19, tourism and TPB. The research questions in the instrument are divided into five sections in accordance with the number of variables

studied in this research. Variable of Subjective Norms of Traveling during COVID-19 (SNT) comprises of three items; and Intentions to Travel during COVID-19 (ITT) comprises of four items. Both of them were adopted from Das and Tiwari (2021). Attitude Towards Behaviour (ATB) consists of three items which were taken from Han et al. (2020). Measurement of Perceived Behavioural Control on traveling during COVID-19 (PBC) was based on the study of Cañizares et al. (2021) and have two questions. Lastly, the scale of Perceived Susceptibility of COVID-19 during travel (PSP) contains three items and is borrowed from Suess et al. (2022). A seven-point Likert scale (where 1 is strongly disagree and 7 is strongly agree) was used for SNT, PBC, ITT and PSP while ATB uses seven-point semantic differential scale as (1 is bad, 7 is good), (1 is foolish, 7 is wise) and (1 is unpleasant, 7 is pleasant) for its three questions respectively. Choice of semantic scale to measure ATB was obvious because it is dominantly used to measure the attitude in wide variety of contexts (McCallon & Brown, 1971; Svidzinskaya et al., 2019; Taherdoost, 2019). Finally, one section of the questionnaire was designated to the demographics of respondents like gender, education and vaccination status to understand the profile of respondents of the research. Moreover, about 90% of study respondents have a university degree and English is the medium of instruction in the higher education institutions in Pakistan (Mahboob, 2017). Even in high schools and twelve grade education, English is taught as a compulsory subject (Khan & Khan, 2016). So, the questionnaire was administered in English language because all respondents were at least high school qualified.

3.2 Data Collection and Analysis

The population frame for this study were the residents of three metropolitan cities of Pakistan i.e., Karachi, Lahore and Islamabad, who were intended to take international vacation trip in near future during pandemic. A screening question was added in the start of the questionnaire stating 'I think, I have resources (money or sponsorship) to take an international vacation trip during COVID-19'. Respondents were asked only to continue the survey if their answer is 'Yes'. Convenience sampling technique was used and data was collected on the basis of self-administered questionnaire distributed in the form of online link on social media platforms i.e., Facebook, WhatsApp and LinkedIn which is similar to the other researchers in tourism and hospitality industries who use the online survey forms to reach broader population (Han et al., 2009; Kim & Ok, 2009). Total 170 valid responses were received between December 2021 and February 2022 which was the acceptable number according to Hair et al. (2006) considering the number of question items in this study. The data was analysed using SPSS21 for reliability, regression, correlation, factor analysis and mediation by using process function (Hayes, 2017).

3.3 Results

Descriptive analysis shows in Table 1 that male respondents outnumbered the females, most of the respondents were between 18-29 years of age, have at least a graduate degree and fully or partially vaccinated.

Table 1. Demographics

Variables	Categories	Frequencies	Percentage
Gender	Male	114	67.1%
	Female	56	32.9%
Age	18-29	120	70.6%
	30-59	45	26.5%
	60 and older	5	2.9%
Education	High school	2	1.2%
	Intermediate	14	8.2%
	Graduate	94	55.3%
	Postgraduate	60	35.3%

Vaccination Status	Not Vaccinated	5	2.9%
	Fully Vaccinated	159	93.5%
	Partially Vaccinated	6	3.5%

Source: Own Elaboration

To test the internal consistency of each of the five scales, Cronbach Alpha was calculated. As shown in the Table 2, for the constructs used in this study, the value of Cronbach ranges between 0.648 to 0.946 which is in the acceptable limits (Oh & Hsu, 2001). Table 2 also shows the results of confirmatory factor analysis which depicts strong factor loadings with all factors loaded above the level of 0.7 (Hair et al., 2006). As suggested by Schumacker and Lomax (2004), Kaiser-Meyer-Olkin (KMO) and Bartlett's tests were run to check adequacy of sample and sample variance respectively in which the value of KMO came greater than 0.5 while the Bartlett's test was also significant (See Table 2).

Table 2. Measurement Model

Factors and Items	Standard Loading	Mean	Standard Deviation	Cronbach's Alpha
PSP - Perceived Susceptibility to COVID				0.803
PSP1: I worry a lot about getting COVID-19 from international travel	0.864	4.465	1.778	
PSP2: The chances that I will get COVID-19 if I travel internationally are great	0.798	4.582	1.688	
PSP3: My physical health makes it more likely that I will contract COVID-19 if I travel internationally	0.826	3.953	1.852	
ATB - Attitude Towards Behavior				0.904
ATB1: Traveling internationally during COVID-19 outbreak for my next vacation trip is Bad (1) — Good (7).	0.862	3.694	1.754	
ATB2: Traveling internationally during COVID-19 outbreak for my next vacation trip is Foolish (1)—Wise (7).	0.863	3.476	1.603	
ATB3: Traveling internationally during COVID-19 outbreak for my next vacation trip is Unpleasant (1)—Pleasant (7)	0.858	3.753	1.671	
PBC - Perceived Behavioural Control of Travelling During COVID				0.648
PBC1: Whether or not to travel internationally during COVID for my next vacation trip is entirely up to me	0.879	5.106	1.830	
PBC2: I have the necessary resources to travel internationally during COVID for my next vacation trip	0.753	4.388	1.888	
SNT - Subjective Norm of Travelling During COVID				0.873
SNT1: Most people who are important to me think it is okay for me to travel during COVID-19 for my next vacation trip	0.828	4.053	1.834	
SNT2: Most people who are important to me understand my travel during COVID-19 for my next vacation trip	0.838	4.471	1.745	
SNT3: Most people who are important to me agree with me about traveling during COVID-19 for my next vacation trip	0.818	4.241	1.739	
ITT - Intentions to Travel During COVID				0.946
ITT1: I intend to travel during COVID-19 for my next vacation trip in the near future	0.854	4.218	1.779	
ITT2: I am planning to travel during COVID-19 for my next vacation trip in the near future	0.884	4.082	1.873	
ITT3: I will make an effort to travel during COVID-19 for my next vacation trip in the near future	0.895	4.182	1.880	
ITT4: I will certainly invest time and money to travel during COVID-19 for my next vacation trip in the near future	0.900	4.112	1.983	

KMO = 0.843

Bartlett's Test: $\chi^2 (105) = 1678.107, p < 0.05$

Scales: A seven-point Likert scale (where 1 is strongly disagree and 7 is strongly agree) was used for SNT, PBC, ITT and PSP while ATB uses seven-point semantic differential scale.

Source: Own Elaboration

Table 3 shows the correlation between latent variables where all of the correlations are significant at least at the level of 0.05. To examine discriminant validity, average variance extracted and composite reliability, values from the factor analysis were used. As can be seen in Table 3, discriminant validity of the constructs is established as the square root of each construct's average variance have a greater value than the correlations with other latent constructs (Hair, 2014; Ab Hamid et al., 2017) and greater than the square of correlations (Fornell & Larcker, 1981). Moreover, the average variance extracted for all constructs surpasses the minimum level of 0.7 while the value for composite reliability is greater than 0.5 (Hair et al., 2006).

Table 3. Correlation Matrix

Variables	PSP	ATB	PBC	SNT	ITT	DV ^a	AVE ^b	CR ^c
PSP	1					0.830	0.689	0.869
ATB	-0.297**	1				0.861	0.741	0.896
PBC	0.157*	0.315**	1			0.819	0.670	0.801
SNT	-0.188*	0.451**	0.344**	1		0.828	0.686	0.867
ITT	-0.180*	0.413**	0.270**	0.517**	1	0.883	0.780	0.934

* Correlation is significant at the 0.05 level (1-tailed); ** Correlation is significant at the 0.01 level (1-tailed)

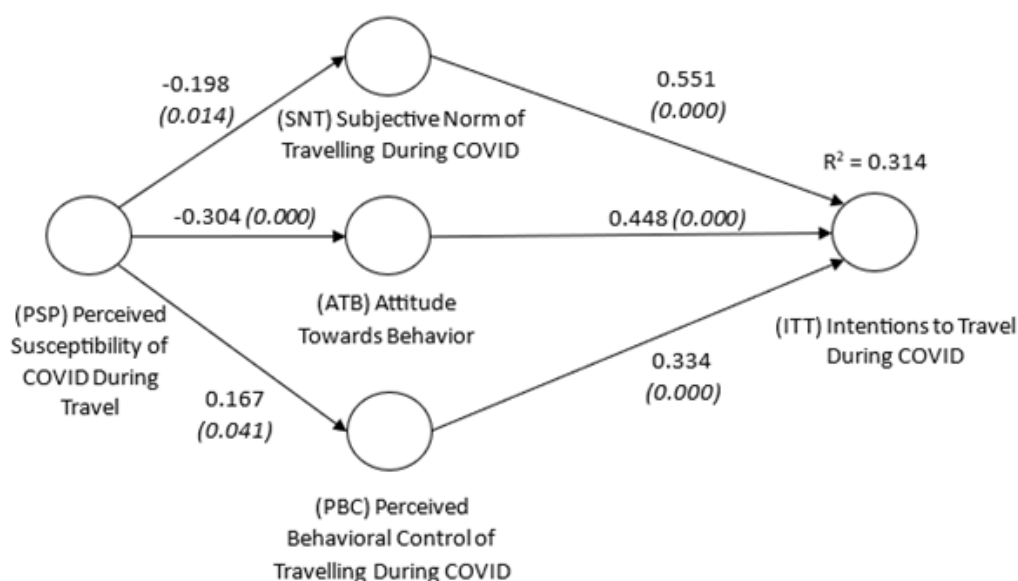
^a Discriminant Validity; ^b Average Variance Extracted; ^c Composite Reliability

Source: Own Elaboration

3.3.1 Hypotheses Testing

To test the proposed mediation model, series of regression analysis were done by using Model 4 of process of Hayes (Hayes, 2017) with level of significance as 0.05. As depicted in Table 4 and in Figure 2, all direct relations among the variables are significant as perceived susceptibility negatively relates to subjective norms and attitude towards behaviour while positively relates to perceived behavioural control.

Figure 2. Model and Values



Source: Own Elaboration

As shown in the Figure 2, PSP is negatively related to the individuals' attitude towards behaviour as $F(1,168) = 16.30, p < 0.05, R^2 = 0.08, \beta_{\text{PSP} \rightarrow \text{ATB}} = -0.304, t(168) = -4.04, p < 0.05$ which means that the ATB is a significant function of PSP. In a similar sense, PSP also negatively and significantly relates to the individ-

uals' subjective norms as $F(1,168) = 6.135, p < 0.05, R^2 = 0.035, \beta_{PSP \rightarrow SNT} = -0.198, t(168) = -2.477, p < 0.05$. On the other hand, increase in one's perceived susceptibility increases the perceived behavioural control of individuals hence depicting a positive relation as $F(1,168) = 4.257, p < 0.05, R^2 = 0.025, \beta_{PSP \rightarrow PBC} = 0.167, t(168) = 2.063, p < 0.05$ which is significant as well.

On the other hand, three predictor variables (subjective norms, attitude towards behaviour and perceived behavioural control) in the model are positively associated with intentions to travel internationally for vacation trip during pandemic ($\beta_{SNT \rightarrow ITT} = 0.551, t(167) = 7.454, p < 0.05; \beta_{ATB \rightarrow ITT} = 0.448, t(167) = 5.354, p < 0.05; \beta_{PBC \rightarrow ITT} = 0.334, t(167) = 4.175, p < 0.05$). Here R^2 for ITT is 0.314 which shows the combined effect of SNT, ATB and PBC on ITT.

Table 4. Hypothesis Testing – Direct Relation

Hypothesis		β -values	Results	Decision
H _{1a} : PSP is negatively related to SNT	PSP → SNT	-0.198	$p = 0.014 < 0.05$	Supported
H _{2a} : PSP is negatively related to ATB	PSP → ATB	-0.304	$p = 0.000 < 0.05$	Supported
H _{3a} : PSP is positively related to PBC	PSP → PBC	0.167	$p = 0.041 < 0.05$	Supported
H _{1b} : SNT is positively related to ITT	SNT → ITT	0.551	$p = 0.000 < 0.05$	Supported
H _{2b} : ATB is positively related to ITT	ATB → ITT	0.448	$p = 0.000 < 0.05$	Supported
H _{3b} : PBC is positively related to ITT	PBC → ITT	0.334	$p = 0.000 < 0.05$	Supported

Source: Own Elaboration

As stated earlier, the study expanded the theory of planned behaviour by analysing the predicting effect of perceived susceptibility of COVID on the intentions to take international vacation trip during pandemic. To test the proposed hypothesis, Model 4 for the simple mediation is opted by using the MACRO of Hayes incorporated in SPSS21 while number of bootstrap samples for bootstrap confidence intervals used for the analysis is 5000 with 95% level of confidence as used by Ferdous (2010) when applying TPB in marketing management. This method was used to estimate the proposed model as it does not depend upon the normality assumption (Hancock & Mueller, 2013).

Table 5. Hypothesis Testing – For Mediation

Hypotheses		Indirect Effect	CI ^a	Decision
			[BootLLCI, BootULCI]	
H ₁ : SNT mediates the relationship between PSP and ITT	PSP → SNT → ITT	-0.109	[-0.233, -0.003]	Supported
H ₂ : ATB mediates the relationship between PSP and ITT	PSP → ATB → ITT	-0.136	[-0.251, -0.047]	Supported
H ₃ : PBC mediates the relationship between PSP and ITT	PSP → PBC → ITT	0.056	[-0.014, 0.140]	Not Supported

^a Confidence Intervals

Source: Own Elaboration

The results of mediation related hypotheses are briefly expressed in Table 5. The relative indirect effect between perceived susceptibility of COVID and intentions to travel through subjective norm is significant as IE = -0.109, SE = 0.050, 95% CI [-0.233, -0.003]. In similar way, the indirect effect between perceived susceptibility of COVID and intentions to travel through attitude is also significant as IE = -0.136, SE = 0.052, 95% CI [-0.251, -0.047]. On the contrary, the indirect effect between perceived susceptibility of COVID and intentions to travel through perceived behavioural control is not significant as IE = 0.056, SE = 0.038, 95% CI [-0.014, 0.140]. Hence, based on the Bootstrap confidence intervals, H₁ and H₂ are supported while H₃ is not. This is in accordance with the standard as if the bootstrap confidence interval is entirely below zero, it concludes that this relative indirect effect is significant and negative (Hayes, 2017).

4. Conclusion

The model proposed in this research is based on the Ajzen's (1985) Theory of Planned Behaviour but it included a predictor variable in the form of perceived susceptibility of COVID to make addition into the existing literature hence highlighting its theoretical implication. The study also expanded the literature by using responses from Pakistani leisure travellers strengthening the validity of TPB in the context of tourism and pandemic hence adding another demographic group in existing literature as suggested by several studies on the related topics (Lam & Hsu, 2004; Hsu & Huang, 2012; Cañizares et al., 2021).

The study found that if individuals' perception about the susceptibility of COVID-19 during travel is high, their perceived subjective norms will less likely to support their traveling decisions which then decrease their intentions to travel during pandemic. Similarly, the increase in perceived susceptibility of COVID-19 among individuals will increase negative attitude towards their behaviour of traveling which ultimately decreases their intentions to take international vacation trip during this epidemic. Moreover, the indirect effect of PSP on ITT through PBC was not significantly proved which was anticipated as the perceived behavioural control is independent of the effect of the individuals' perceived susceptibility of COVID-19.

A relatively similar study in Spain by Cañizares et al. (2021) that focused on the predicting role of perceived risk of COVID-19 concluded that effect of behavioural control and attitude have influence on travel intentions with the magnitude higher than that of subjective norms but in the context of Pakistan, the effect of perceived subjective norms on travel intentions is greater following the attitude and behavioural control which may be the result of the social and cultural difference highlighting the significance of this research. Although the impact of risks associated with COVID-19 on travel intentions was previously studied (Gursoy et al., 2021; Perić et al., 2021; Boto-García & Leoni, 2022) yet, expanding the discussion beyond just analysing the direct relation between perceived susceptibility of this pandemic and travel intentions is another major contribution of this study. Moreover, previous literature found attitude to be a stronger predictor of travel intentions in comparison to the subjective norms (Ajzen, 1991; Terry et al., 1999; Armitage & Conner, 2001). But the results of this research provide evidence in which subjective-norms is the strongest determinant of intentions to travel during pandemic hence signifying its novelty.

On the other hand, study also provides practical implications for several stakeholders in hospitality industry and policy makers in government institutions. As evident by study results, perceived susceptibility is a predictor of travel intentions so, tourism operators should focus on providing and highlighting the safety measures at the tourist destinations. This may reduce travellers' perception of risks associated with traveling during this epidemic (Liu et al., 2021). To prevent potential tourists to develop an irrational fear of COVID-19 (Talwar et al., 2022), the results also suggest that government agencies are required to exert efforts to engage these tourists positively. To reduce this fear of COVID-susceptibility, governments may take strict actions to ensure that the safety protocols are being met at tourist destinations (Cahigas et al., 2022) and tour managers may need to focus on communicating the effectiveness of these measures to travellers. Finally, as the study results provide evidence that the perceived susceptibility of this disease is affecting travel intentions so tour companies may need to turn their focus on less congested destinations (Seong & Hong, 2021) and those with high level of hygiene standards (Perić et al., 2021).

4.1 Limitation and Future Recommendations

The research is not without its limitations. First, the convenient sampling used in this study may not be the representation of entire Pakistani population. The larger sample size with cluster sampling in future may reduce this error. Second, the study is done in Pakistan and the result cannot be generalized because of its specific context. So, the replication of this study is highly advisable in different demographical and geographical backgrounds. This type of replication studies will validate the model proposed in this study to expand the theory of planned behaviour. Finally, almost all of the respondents i.e., 97% are partially or completely vaccinated which may have impacted their perceived susceptibility of COVID-19 during traveling. Future research may analyse the non-vaccinated respondents and compare the results with the vaccinated ones. Another interesting study would be to incorporate the individuals past behaviour of traveling during pandemic and their perceived destination image in TPB in the context of COVID-19. Moreover, while applying TPB, health conscious people may behave differently while making travel deci-

sions (Pahrudin et al., 2021) so the moderating effect of this variable would be an interesting aspect to be explored in future studies.

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