

---

Articles

---

2023

## Estimate tourism model choice for Pilgrim in the Way of St. James: The Portuguese Way

Rosa Conde

*European Business School and Research Center in Business Sciences and Tourism* (, rosa.conde@isag.pt

Ana Pinto Borges

*European Business School and Research Center in Business Sciences and Tourism* (, anaborges@isag.pt

Isabel Neira Gómez

*Universidad Santiago de Compostela*, isabel.neira@usc.es

*See next page for additional authors*

Follow this and additional works at: <https://arrow.tudublin.ie/creaart>



Part of the [Tourism and Travel Commons](#)

---

### Recommended Citation

Conde, Rosa; Borges, Ana Pinto; Gómez, Isabel Neira; and Viera, Elvira, "Estimate tourism model choice for Pilgrim in the Way of St. James: The Portuguese Way" (2023). *Articles*. 190.

<https://arrow.tudublin.ie/creaart/190>

This Article is brought to you for free and open access by ARROW@TU Dublin. It has been accepted for inclusion in Articles by an authorized administrator of ARROW@TU Dublin. For more information, please contact [arrow.admin@tudublin.ie](mailto:arrow.admin@tudublin.ie), [aisling.coyne@tudublin.ie](mailto:aisling.coyne@tudublin.ie), [vera.kilshaw@tudublin.ie](mailto:vera.kilshaw@tudublin.ie).



This work is licensed under a [Creative Commons Attribution-Share Alike 4.0 International License](#).

Funder: Northern Regional Operational Program (NORTE 2020)

---

**Authors**

Rosa Conde, Ana Pinto Borges, Isabel Neira Gómez, and Elvira Viera

# *Estimate tourism model choice for Pilgrim in the Way of St. James: The Portuguese Way*

**Rosa Maria Riveiro Conde.** ISAG – European Business School and Research Center in Business Sciences and Tourism (CICET-FCVC), Porto.

[rosa.conde@isag.pt](mailto:rosa.conde@isag.pt)

**Isabel Neira Gómez.** Universidad Santiago de Compostela, Spain. [isabel.neira@usc.es](mailto:isabel.neira@usc.es)

**Ana Pinto Borges.** ISAG – European Business School and Research Center in Business Sciences and Tourism (CICET-FCVC), Porto. COMEGI (Research Centre in Organizations, Markets and Industrial Management). [anaborges@isag.pt](mailto:anaborges@isag.pt)

**Elvira Vieira.** ISAG – European Business School and Research Center in Business Sciences and Tourism (CICET-FCVC) and IPVC- Polytechnic Institute of Viana do Castelo and UNIAG – Applied Management Research Unit. [elvira.vieira@isag.pt](mailto:elvira.vieira@isag.pt)

## **Abstract**

The purpose of this study is to examine how the characteristics of the pilgrims and the attributes of travel influence the choice of the Portuguese. It is important to understand the choices tourists make. This study identifies the factors that influence the tourists' choice of way. The analysis is based on the official statistics of the Portuguese Way of Santiago between 2003 and 2020.

The study provides several important findings concerning tourism's model choice. Understanding the tourists' modal choice behavior help public and private organizations to develop appropriate marketing strategies.

The probit model is used to model a relationship between a dependent variable and the independent variables: Sex, Age and Continent. The independent variables are assumed to affect the choice of Portuguese Way. The model has been estimated by the maximum likelihood method. The estimated coefficients and standard errors disclose the factors that influence Choice of Portuguese.

Discrete choice experiments are used for measuring and predicting individuals' preferences and choices of alternatives and provide quantitative measures of the relative importance of attributes of chooses of the Portuguese way.

The study provides several important findings concerning the pilgrim's modal choice.

The social stratum, family cycle, origin country, start city are key elements in explaining the tourist modal choice decision.

The results of the estimate model reveal that the variables social stratum has a significant and positive impact in the choice of Portuguese way, but the life cycle doesn't have an impact on the dependent variables. Finally, the religious motivations are a significant and negative effect in the Portuguese Way.

Understanding the tourists' modal choice behavior may help tourism organizations to develop appropriate marketing strategies.

**Keywords:** Tourism, Portuguese Way of St. James, Tourism Behavior, Decision Making.

## 1. Introduction

Santiago de Compostela is a tourism destination in Galicia, in the Northwest of Spain. The number of pilgrims arrivals to Santiago has increased consistently in the last decade. Today pilgrimage attracts large numbers of people. According to World Tourism Organization (UNWTO) estimates, 300 to 330 million tourists visit the world's key religious sites every year, with approximately 600 million national and international religious voyages in the world, 40% of which take place in Europe (UNWTO, 2016).

Pilgrimage was the first tourism mobility to come into existence thousands of years ago. Historically, people's religious desire to visit a holy site or destination resemble what is nowadays one of various forms of tourism activity. Specifically, it refers to religious tourism, the most common motivations for travel and religiously motivated pilgrimage, which remains one of the world's oldest and most basic forms of population mobility, is emerging as a major tourism phenomenon in the twenty-first century (Collins-Kreiner & Wall, 2015; Božić et al., 2016)

Religious tourism distinguishes itself, as do all other types of tourism, by a dynamic element – movement in space, a journey – as well as a static element – a temporary stay at a place other than the place of residence (Rinschede 1992).

Pilgrimage has become so widespread that it is one of the most pervasive forms of human mobility in the world today (Nyaupane et al., 2015). Religious tourism has become some of the most visited and appreciated destinations in the world for tourists and an important tourism product.

Pilgrimage tourism describes people who follow something religiously, but not necessarily with a religious experience (Collins-Kreiner, 2010).

Tourism and pilgrimage are two social phenomena with related dynamics; indeed, modern tourism is considered as a metamorphosis of pilgrimage (Lopez, 2013).

The Portuguese way is one of the spiritual routes to Santiago de Compostela with medieval origin and is the second most popular Way of St. James after the Frances way. The total distance of the Portuguese way from Porto to Santiago depends on the route you choose; the Coastal Route is 280 km, and the Central Route is 260 km. The Portuguese Route has received recognition from the Cathedral of Santiago de Compostela, based on the data provided by the Pilgrim's Office, which shows a relevant growth since 2011 (Oficina del Peregrino, 2020).

It is essential in tourism manager to understand the way in which consumers make decisions and the factors that influence the tourists to make purchases or a decision for purchase an in this case, the factors that influence the choose a Santiago Way.

In the last years, research investigating consumer behaviour (CB) and how their decision-making process has advanced and has become an important topic in the literature.

The CB has always been an important topic, since knowing how and why consumers act in a certain way making their buying decisions helps companies improve their marketing strategies and be more successful on the market (Stankevich, 2017).

Thus, today's challenge is how to influence the purchase behaviour of consumers in favour of their products or services, in the case of the Pilgrimage, what are the factors that influence the choice of a way.

The decision-making process leading to the final choice of a travel destination is a very complex process, and understanding what influences a traveller to choose a destination is important in developing appropriate marketing strategies

The behaviour of tourists is the most important indicator or predictor of future tourist behaviour. In an increasingly competitive industry, understanding the behaviour and decision-making process of tourists is crucial for the sector.

All tourists make decisions including, whether to travel or not, destination choice, travel mode choice, trip duration choice, travel party choice, accommodation choice, and what activities to undertake while they are at a destination (Kemperman, 2021)

They are many factors that influence and individual's behaviour: Destination, air travel, travel distance and travel advertising)(Moutinho, 1987).

The behaviour of tourists/pilgrims has undergone major changes in recent decades. They are more demanding, better informed, with different and differentiating needs and experiences.

Understanding consumer behavior is important for developing new tourism products and services because it offers a clearer view of what consumers are looking for and the manager can reflect them in the development process (Fratu, 2011)

An important question is why a pilgrim prefers the Portuguese Way to alternative a other ways. The response to this question would enable the tourism organizations in

especial the St. James to predict with greater certainty which way will be chosen by pilgrim.

This paper presents a conceptual decision-making framework based on behavioral models and analysis the variables that influence pilgrim behavior when choosing the Portuguese way to Santiago, using discrete choice analysis, especially multinomial probit model. In the tourism, the use of discrete choice analysis, especially multinomial probit model, for modal choice of tourists to a destination has not been paid much attention by research.

This paper is organized as follows: chapter 2 literature review about the concept religious and pilgrimage, the consumer behavior in specific applied to tourism, chapter 3 describes the methodology, chapter 4 data analysis while chapter 5 presents the results of the analysis of the pilgrim behavior in relation to choose the Portuguese way. Finally, chapter 6 provides conclusions and implications.

## **2. Literature Review**

### **2.1 Religious and Pilgrimage**

Pilgrimage, a common religious and cultural phenomenon in human societies and an important feature of the world's major religions, has been defined as a journey resulting from religious causes, externally and internally for spiritual purposes and internal understanding' (di Giovine, 2011).

Religious tourism is one of the oldest forms of tourism and represents a significant, evolving, growing, and increasingly diverse sector of the global tourism market (Collins-Kreiner, 2016, 2018, Collins-Kreiner & Wall, 2015; Collins-Kreiner & Kliot, 2000; Božic et al., 2016 ; Iliev, 2020 ).

Religious tourism includes a range of spiritual sites and associated services, which are visited for both secular and religious reasons. Research interest in religious tourism is steadily increasing (Durán-Sánchez et al., 2018; Durán-Sánchez et al., 2018).

Religion, as a research concept in science, existed before the 1990s. A several concepts and theories were primarily developed by scholars in geography's literature. During the early stage of concept development, literature was mainly focused on pilgrimage, ritual process, and experience. In period before 1990, some authors are incorporated the relationship between pilgrimage and tourism (Iliev, 2020).

In the early 1990s, new approaches and concepts of religious tourism emerged. There is much evidence that religion is a motivation for activities related to tourism (Rinschede, 1992; Iliev, 2020). Generally, in the 1990s new concepts of religious tourism were introduced.

In the 2000s, many concepts and theories were developed in the literature(Collins-Kreiner, 2015,2016,2000; Iliev,2020). Religious tourism is linked to other types of tourism, especially holiday, cultural, social, and group tourism, which causes it to be

linked to seasonality (Rinschede, 1992; Collins-Kreiner, 2016; Solla, 2006; Oviedo et al., 2014; Nyaupane et al., 2015).

At the beginning, religious tourism were always multifunctional trips, even when religious factors are predominated. Today, religious motivation seems to be less important than in ancient societies (Rinschede, 1992).

*Table 1 Pilgrimage and Tourism*

<i>Year</i>	<i>Author</i>	<i>Definition</i>
1969	Victor and Edith Turner (1969)	The pilgrimages typically involve a stage of liminality, resembling that in which novices find themselves in the transitory stage between two established social statuses.
70s	Brandon (1970)	Pilgrimage involves three factors: a holy place; attraction of individuals or crowds to this place; a specific aim, i.e., to obtain some spiritual or material benefit.
	MacCannell's (1973)	Assertion that the tourist was a pilgrim in search of something different: authenticity.
	Turner (1973)	The term pilgrimage is used in at least three senses. (1) There is first the "interior pilgrimage," the "journey of the soul" in a lifetime of growth from spiritual infancy to maturity. (2) There is, second, the literal pilgrimage to some sacred place as a paradigm of the intent of religion itself.
	MacCannell (1973) Graburn (1977)	Tourist as pilgrim was searching for something different. Characterized tourism as a kind of ritual, suggesting the existence of parallel processes, in both formal pilgrimage and tourism, that could be interpreted as "sacred journeys."
80s	Dictionary of Tourism	Pilgrimage is defined as: "Travel to and for the purpose of visiting a location regarded as sacred by the traveller
	Crim (1981)	Pilgrimage in miniature insofar as it acts out on a small scale some transition or growth and experience of the sacred and new community which pilgrimage in general affords
90s	Smith (1992)	Pilgrimage connotes a religious journey, one of a pilgrim, particularly to a shrine or another type of sacred place. Contemporary terminology that identified the "pilgrim" as a religious traveller and the "tourist" as a vacationer was a culturally constructed polarity that veiled or blurred the travellers' individual motives.
	Cohen (1992)	Pilgrimage and tourism differ with regard to the direction of the journey. The "pilgrim" and the "pilgrim-tourist" peregrinate toward their socio-cultural centre, while the "traveller" and the "traveller-tourist" move in the opposite direction.
	Barber, (1993)	A journey resulting from religious causes, externally to a holy site, and internally for spiritual purposes and internal understanding.
20s	Collins-Kreiner (2010)	Pilgrimage is defined differently, as a traditional religious or modern secular journey"

Today, one of the most discussed issues in this area is the distinction between tourism and pilgrims in the religious tourism industry. The three concepts: pilgrimage, religious tourism and spiritual tourism are used together in the scientific literature, although they mean different things

Pilgrimage has often been defined as a journey resulting from religious causes, externally to a holy site, and internally for spiritual purposes and internal understanding what it supposes the journey of a religious devotee to a sacred religious site (Durán-Sánchez et al., 2018) what it supposes the journey of a religious devotee to a sacred religious site (Turner 1973). Others, such as Collins-Kreiner (2010), define pilgrimage as a journey to a site that embodies the highly valued, the deeply meaningful, or a source of core identity for the traveler, Hyde & Harman (2011) in an increasingly secular world, many non-religious people undertake journeys to sites of deep personal meaning.

The oldest concept of pilgrimages includes journeys to the gravesites and memorials of celebrities (Digance, 2003).

According to Hyde and Harman (2011) pilgrimage is not just a religious phenomenon, and the old paradigm of pilgrimage, predicated on religious elements, no longer holds

Pilgrimage is nowadays defined by it into two integrated components: traditional religious journey and a modern secular journey. Collins-Kreiner (2010, 2018) define pilgrimage as a journey to a site that embodies the highly valued, the deeply meaningful, or a source of core identity for the traveler (Hyde & Harman, 2011).

In this context, tourism and pilgrim are two different concepts and have been considered separately as a religious tourism (Cohen et al., 2014). Religious and pilgrimage tourism are considered as a subset of cultural tourism (Rinschede, 1992), so that pilgrims and tourists share the same external and physical space. The relevant differences concern the following aspects:

- (i) pilgrimage is more mandatory and tourism which has the characteristics of leisure;
- (ii) The pilgrimage follows norms and rituals and tourism is related to fun and entertainment;
- (iii) pilgrimages change according to sanctuaries and regions. Tourism can take place at any time according to the desire of tourist;
- (iv) pilgrims use travel for spiritual reasons, while tourists prefer secular ones;
- (v) pilgrimage requires an existential mode, as pilgrims' behaviour is bound to rules and schemes. Tourism follows a recreational scheme (Lopez, 2013; Cohen et al., 2014). However, for author authors is not clear that these two concepts are totally different.

According to Hyde and Harman (2011) the pilgrim seeks to touch the sacred, that is, to visit the singular physical location they imagine embodies their deep religious values, want an encounter with the divine (Digance 2003; Turner, 1973), or is a culturally or social obligation (E. Cohen, 199; Smith, 1992).

The pilgrim can be motivated by religious issues (Turner, 1973; Cohen 1992; Digance 2003) or for a cure a disease or resolution their problems (Turner, 1973; Smith, 1992).

Current tendencies of religion tourism, as generate a new definition of pilgrimage and its contextualization in sceneries where the human being decides to move in order to satisfy his or her inner anxiety (Lopez, 2013).

According Durán-Sánchez et al., (2018) religious tourism will be in the middle, in turn, between a traveler who is more a pilgrim than tourism, a traveler who is as much pilgrims as a tourist who is more a tourist than a pilgrim, depending on whether his faith or the profane predominate in his motivations and activities.



Today, there are no great differences between pilgrim and tourist, because: (i) the new approach of the pilgrimage; (ii) the term pilgrimage is used in broader contexts and then just religious motivations; (iii) religious destinations are like any other tourist destination, products with numerous attributes that can satisfy the needs of both religious believers and other holidaymakers (Bond et al., 2014). Thus, two main subgroups: pilgrimage tourists who travel to these sites for spiritual fulfilment, and other tourists, who visit these sites for non-religious (Piramanayagam et al., 2020).

## 2.2 Consumer Behaviour in Tourism

Consumer behaviour (CB) and consumer decision-making have become prominent research topics in the various fields of consumer science in recent years.

The objective of the consumer behaviour models is to provide an explanation of the factors that lead consumers' buying decision making process and give a simplified version on the relationship of the factors that influence consumer behaviour (Horner & Swarbrooke, 2007). Consumer behaviour (CB) involves certain decisions, activities, ideas, or experiences that satisfy consumer needs and wants (Solomon, 2008), it is concerned with all activities directly involved in obtaining, consuming, and disposing of products and services, including the decision processes that precede and follow these actions (Engel et al., 1968).

The past 50 years have witnessed an explosion in academic research about consumers. Studies have yielded substantial knowledge about consumer choice, attitude and satisfaction judgments, consumption meanings, consumer brand relationships (MacInnis & Folkes, 2010) CB is the process of selecting, purchasing, and using a product or service to satisfy one's needs and desires (Juvan et al., 2017) is the process of acquiring and organizing information in the direction of a purchase decision and of using and evaluation products and service (Moutinho, 1987 ; Moutinho et al., 2011).

Erasmus et al., (2010) consider that it is necessary for the study of consumer behaviour to adapt to the specific situations or products that are the subject of purchase.

Fratu (2011) define tourism consumer behaviour as the ensemble of its acts, attitudes, and decisions regarding choosing, buying and consuming tourism products and services, and also its post-consuming reactions. CB remains one of the most researched areas in tourism fields, with the terms 'travel behaviour' or 'tourist behaviour' typically used to describe this area of inquiry (Cohen et al., 2014).

The behaviour of tourists is the most important indicator or predictor of future tourist behaviour and the most attractive research fields, with growing interest in recent years (Juvan et al., 2017; Ulker-Demirel & Ciftci, 2020). Consumer behaviour is a dynamic and complex process. When applied to tourism, this process becomes even more complex by the intangibility of the product and by the discontinuity and accumulation of purchasing power (Correia & Pimpão, 2008).

In the investigations about the travel behaviour have been verified: (1) individual studies replicating the CB concepts from marketing and management fields to the tourism; (2) many studies investigate the same effect (satisfaction, loyalty), but the results cannot be compared on different tourist types or destinations; (3) quantitative approaches dominate CB research but the use of experimental designs that quantify the effects of independent stimuli on behavioural responses remains in its infancy, leading often to erroneous causality effects; and (4) few studies use longitudinal and/or holistic approaches to understand the behaviour or processes being investigated (Cohen et al., 2014).

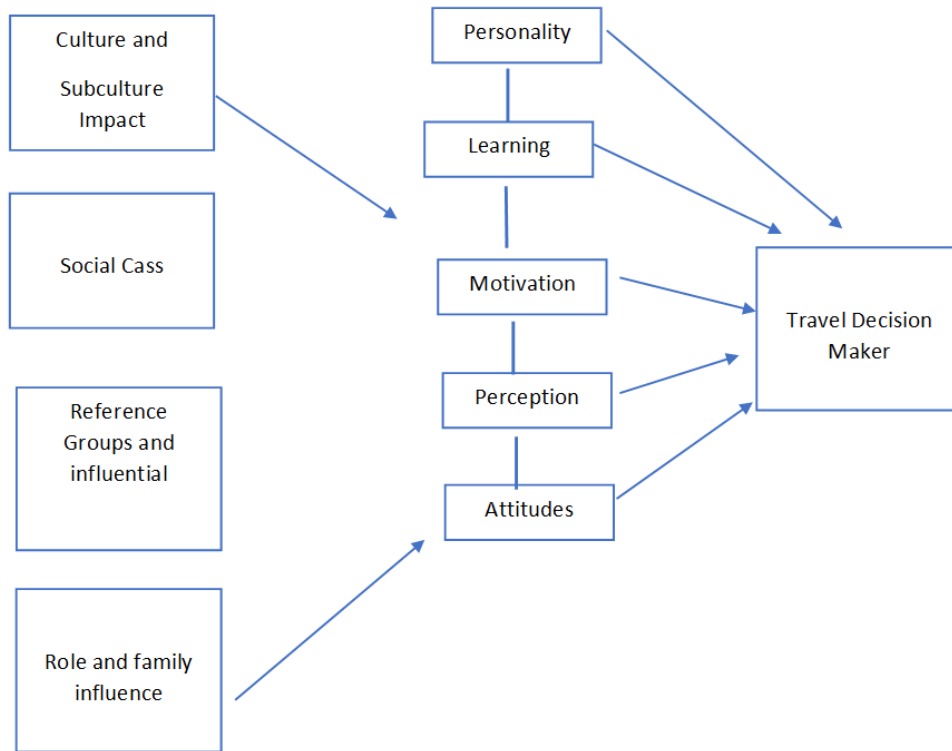
The tourism behaviour focuses on the activities people undertake for obtaining, consuming, and evaluating tourism and travel service. The most tourist behaviour models consist of three stages: Pre purchase; Consumption and post consumption: In the first stage, potential tourists recognize the need and feel some motivations to go on holiday. In this phase, the tourist search information about different destination and evaluate the different alternatives, for choose one destination (Decrop, 2017). In this stage, hare several sub decisions that the tourists need to consider where to go, when to go, what to do in vacation and choosing a destination (Björk & Jansson, 2008).

The investigate in travel decisions has centred on destination choice, where the travel decision behaviour is equal to the choice of where to go on holidays and assumed to be a trade-off process among different destination attributes (Björk & Jansson, 2008)

Cohen et al. (2014) divided the investigation in tourist behaviour into four categories: (1) studies that apply one or more concepts of consumer behaviour from marketing or management and applying them to tourism, (2) many studies investigate the effect of the variable (e.g. satisfaction to loyalty), but results cannot be compared due to differences in the context of research; (3) quantitative research dominate the consumer behaviour, but the use of experimental designs that quantify the effects of independents stimuli on behavioural responses leading often to erroneous causality effects; (4) many studies use the longitudinal holistic approach to understand the consumer behaviour .

The consumer behaviour is influenced by many factors: psychological factors, social factors, cultural factors, and even natural factors. These factors can be grouped in three main categories: (i) the psychological factors consisting of personal factors such as tourists personality, self-image, attitudes, motivations, perceptions, lifestyle, age, family lifestyle, profession; (ii) the second category consisting of social factors include the culture, family, social class, reference group; (iii) the third category consisting of situational factors such a time, physical ambiance, social ambiance, state of mind (Fratu (2011:120). The consumer and understanding the complex purchasing behaviour. This complex process are many elements with different stage, from arousal to the decisions, as well as from purchase to post-purchase (Moutinho, 1987).

*Figure 1 Major Influences on Individual Travel Behaviour*



Source: Bernini & Cracolici (2015)

**Hypothesis H1: The demographic factors have impact on the consumer behaviour.**

In the study (Jang & Ham, 2009) the variable age is a significant effect in the travel decisions of the old people.

According to Huang et al., (2014) demographic factors such age, gender and education level play a very important role in CCB.

In the context of religious there are socio-demographic differences in demand for travel products. In pilgrims to Lourdes (France) the most pilgrims are women, owing to the special feminine sentiments associated with Marian shrines (Nyaupane et al., 2015).

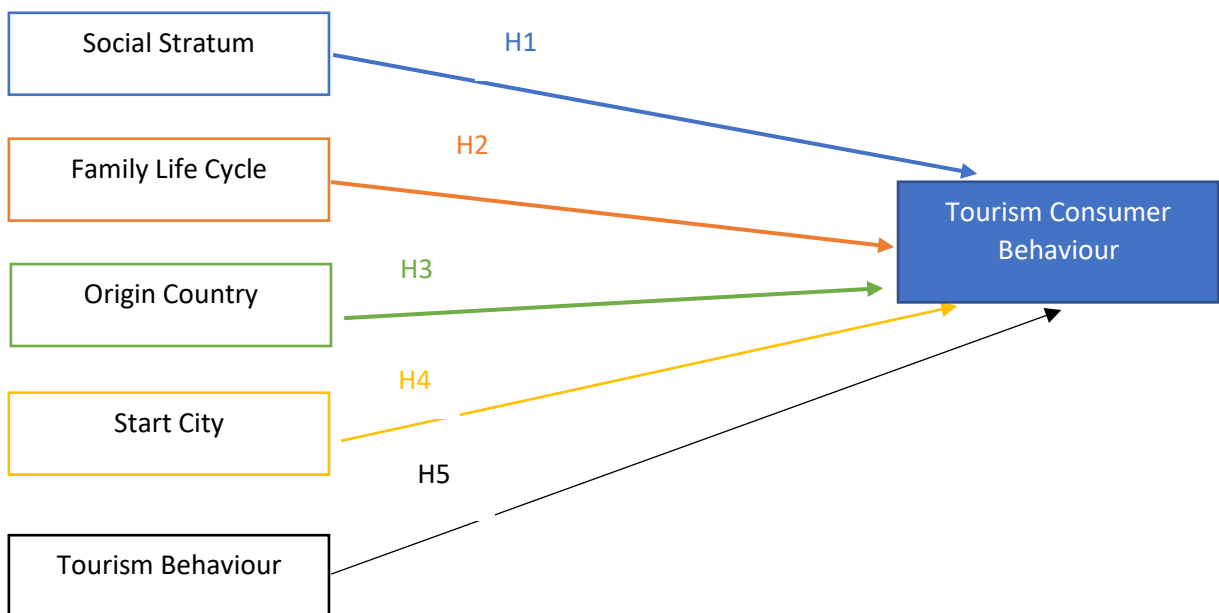
**Hypothesis H2. The family life cycle has impact on the consumer behaviour**

Jang & Ham, (2009) and Bernini and Cracolici (2015) are conclude that geographical variables are significant to the tourism participation decision.

**Hypothesis H3. The origin country has impact on the consumer behaviour**

**Hypothesis H4. The star City has impact on the consumer behaviour**

*Figure 2 Model of Consumer Behaviour in Portuguese Way*



**4. Results and Discussion**

**4.1 Pilgrimage profile**

The profile of the pilgrims on the Portuguese Way of St. James are summarizes in the table 2.

*Table 2 – Profile of the Pilgrims on the Portuguese Way of S. James*

Variable	Categories	%
Sex	Male	50.3%
	Female	49.7%
Age	< 25	16.3%
	26-35	19.6%
	36-50	27.3%
	51-55	28.4%

	> 55	8.4%
	Mean	43.22 years
	Std	16 years
Modes of transport	<b>By foot</b>	<b>88.5%</b>
	Bicycle	11.3%
	Horse	0.1%
	Wheelchair	0%
Nationality (Top 3)	<b>Portugal</b>	<b>27.4%</b>
	German	16.7%
	Spain	13.8%
Place of origin (Top 3)	<b>Porto</b>	<b>51.1%</b>
	Valença do Minho	21.7%
	Ponte de Lima	5.1%
Motivation	Only religious	39.9%
	<b>Religious and other</b>	<b>51.2%</b>
	No religious	8.0%

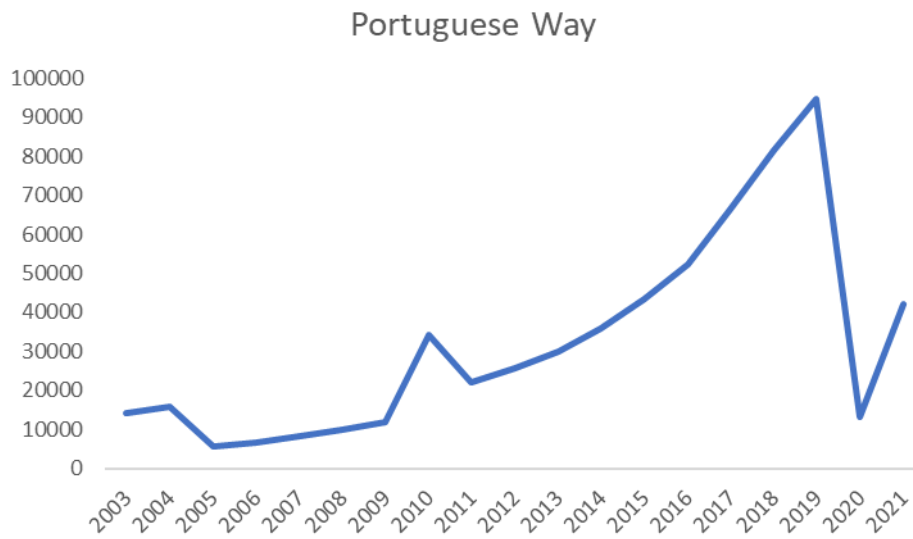
Source: The Pilgrim Office in Santiago de Compostela

The gender of the Portuguese pilgrims on the Portuguese Way of St. James 50.3% male and 49.7% female. Their highest pilgrims are aged between 51-55 years (28.4%) and the mean age was 43.22 years (std: 16 years). The most make the way on foot (88.5%). Over the period considered, the majority of the pilgrims came from Portugal (27%), followed by the German (16.7%) and Spain (13.8%), and quent point of departure is from Porto (51.1%) followed by Valença do Minho (21.7%).

Regarding the reasons for the pilgrimage, we identify the major manifestation of religious motivation and other (51.2%). This situation affects the pilgrims' motivation because only the pilgrims' who make the Way of Santiago for religious and other received the *Compostela*. Only 8% had travelled for no religious reasons (Table 2).

Data from the *Oficina del Peregrino* (Statistical Report 2003-2021) show that a total 324.093 pilgrims complete the Portuguese Way.

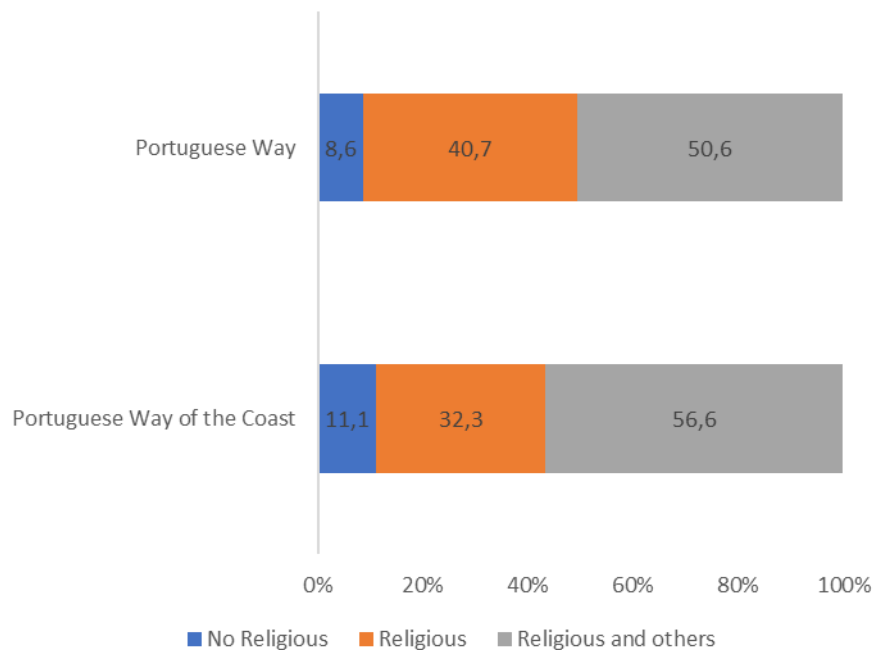
*Figure 3 The evolution of the number of pilgrims in the Portuguese Way (2003-2021)*



Source: The Pilgrim Office in Santiago de Compostela

The Figure 3 shows the continued growth in the recent years of the Portuguese Way, since 2011 the number of pilgrims has increased. In 2010, in Jacobeo year are 10.894. Since 2011 we observe repetitive tendencies to increase except for 2010 and 2020 due to the issue of the pandemic.

*Figure 4 Motivations in the Portuguese Way*



Source: The Pilgrim Office in Santiago de Compostela

In general, the main motivations are religious and others, 56.6% for the Portuguese Way of Costa and 50.6% for the Portuguese Way. The no religious motivation it's most important for the pilgrims in the Portuguese Way of Cost.

#### 4.2 Structure and Process theory of travel decision making

Modeling consumer decision making is complex because several antecedents affect the process. Some decisions are cognitive and require considerable planning and some weighing of features of alternatives, but the travel decision involves both elements (Martin & Woodside, 2012).

#### 4.3 Probit Model

Before constructing the model, a frequency analysis is calculated to detect outliers and numerical problems that can occur in the multivariate analysis. The findings indicated that there were no outliers or numerical problems.

In Table 3 demonstrates the results estimated from probit model using maximum likelihood method. The dependent variable revisit Portuguese Way. The probit model is used to model a relationship between a dependent variable and the independent variables: Sex, Age and Continent. The independent variables are assumed to affect the choice of Portuguese Way. The model has been estimated by the maximum likelihood

method. The estimated coefficients and standard errors disclose the factors that influence Choice of Portuguese.

*Table 3 Estimates of the probit model*

Variable	Coefficient	Std.error	Wald	Sig
<b>Social Stratum</b>				
Ocu1	0.330*	0.111	8.840	0.003
Ocu2	0.270*	0.122	4.909	0.027
Ocu3	0.516*	0.097	28.306	0.001
Ocu6	0.733*	0.222	10.908	0.001
Ocu7	1.182*	0.310	14.488	0.001
Ocu8	0.785*	0.137	33,478	0.001
Ocu9	0.638*	0.169	14.280	0.001
Ocu10	1.389*	0.426	10.6	0.001
Ocu11	0.457	0.247	3.426	0.064
<b>Family Life Cycle</b>				
Sex	0.036	0.057	0.396	0.529
AGE1	-0.045	0.188	0.057	0.811
AGE2	-0.068	0.167	0.166	0.684
AGE3	0.064	0.163	0.156	0.692
AGE4	0.126	0.158	0.630	0.427
<b>Country</b>				
Coun1	-0.833*	0.114	53.765	0.001
<b>Start City</b>				
Star1:Barcelos	14.627	64.961	0.051	0.822
Star2:Braga	8.722*	1.005	75.303	0.001
Star3:Caminha	-25.965	1337.490	0.0	0.985
Star4:Coimbra	16.456	117.141	0.020	0.888
Star5: Fatima	16.185	118.453	0.019	0.891
Star6: Guimarães	17.721	133.623	0.018	0.894
Star7: Lisboa	9.391*	1.005	87.3	0.001
Star8: Lisboa Costa	-25.745	1375.108	0.0	0.985
Star9: Porto	7,840*	0.225	1213.152	0.001
Star10: Porto Costa	-13.873*	1.002	191.658	0.001
Star11: Ponte de Lima	13.923	40.772	0.117	0.733
Star13: S.Pedro Rates	17.729	80.072	0.041	0.839
Star15: Viana do Castelo	-25.970	943.217	0.001	0.978
Star16: Aveiro	17.779	783,264	0.001	0.982
Star18. Esposende	-24.473	4895	0.000	0.996
Star19. Faro	17.951	977.094	0.000	0.985
Star21: Viseu	-25.388	1092.939	0.000	0.987
<b>Tourism Behavior</b>				
M1	-2.023	1.262	2,570	0.109
M2	2.911*	1.257	5.359	0.021
M4	3.129*	1.611	3.770	0.052
Mot 1Religious	0.030	0.058	0.269	0.604
Mot 2No Religious	-0.280*	0.094	0.269	0.003
Cox e Snell	0.452			
Nagelkerke	0.953			
McFadden	0.935			

Note: \* represents the null hypothesis with a significance level of 5% and a coefficient of 0.

The results of the estimate models are presented in Table 3. The Wald test (Table 3) reveal that the variables for the social stratum have a significant and positive impact in the choose of the Portuguese Way of Santiago, supporting hypotheses H1. The family



life cycle was not a significant impact in the choose of the Portuguese Way. The H2 is not supporting. The gender is not a significant predictor of modal choice. The same results are fund about the age.

The country, Portugal versus foreign are a significant and negative effect in the choose the Way of Santiago, supporting the H3. Braga, Lisboa, Porto and Porto Costa have a significant effect in the choose of Portuguese Way, supporting the H3.

The pilgrims who make the Portuguese Way on foot and in sailing boat are a significant effect.

The no religious motivations are a significant and negative effect in the Portuguese Way.

Regarding the individual variable, we fist observed the impact of the variable for the social stratum on the choose of the Way of Santiago. There is a positive relationship between the Occupation and the intention to choose the Portuguese Way with the coefficients of the variables for the occupation being significantly different from zero, of which the Housekeeper (Ocu7) and the Religious (Ocu10) has the highest intention to use the Portuguese Way. The results related the occupation variables are consistent with previous studies (Jang and Ham 2009; Bernini and Cracolici 2015). The Portuguese have a significant positive impact on the intention to use the Portuguese Way.

About the star city, the pilgrimage who begin in Braga, Lisboa and Porto have a intention to choose the Portuguese way. For those who star in Porto Costa have a negative impact in the choose the Portuguese Way.

In terms of the tourism behaviour, the variables coefficients for the variable Foot and Sailboat and the no religious motivation are significantly different from zero.

## **5. Conclusion and Future Research**

This study has given a detailed picture of tourists' modal choice behavior for the Portuguese Way.

This study aimed to understand a complex phenomenon to travel decisions has centered on destination choice in a specific pilgrimage destination – the Portuguese Way of Saint James.

With this research it is expected to understand on pilgrims' different motivations to choose a specific route.

As for the consumption decision regarding to the choose the Portuguese Way, the social stratum, country and the tourism behaviour are variables with significant influence. The research hypothesis H1 and H3 are supported.

This research result is in line with the research findings by Jang & Ham (2009), Bernini & Cracolici (2015).

This study employs a probit model to discuss the factors influencing Portuguese Way.

According to the empirical results, the participation decision to choose the Way of Santiago is influenced by three categories of variables, namely, the social stratum, country, start city and tourism behavior.

In terms of the individual variables, Housekeeper and the Religious have a highest intention to choose the Portuguese Way, whereas the Leaders and Specialists and Intellectuals have the lowest intention.

About the start city, the pilgrimage who begin in Braga, Lisboa and Porto have a intention to choose the Portuguese way. For those who start in Porto Costa have a negative impact in the choose the Portuguese Way.

In terms of the tourism behavior, the variables coefficients for the variable Foot and Sailboat and the no religious motivation are significantly different from zero.

The principal academic contribution of this study is conceptualized model of structure and process theory of choose a St. James Way decision making. This study investigations the attributes (social stratum, family cycle, origin country, start city and tourism behavior) that affect consumer intention to choose a Portuguese way.

Governmental organizations can use these results these conclusions for develop appropriate strategies for better manage of Santiago route.

This research has some limitations. First, the model was developed and validated with data from one area. The research should be replicated to test the proposed model and hypotheses of the present research using samples from other way and other datasets. The second limitation is that the list of variables may not be exhaustive, and could explore other variables, namely, income, education level, marital status, days of the way. Third, the dataset provided by the Pilgrim Office is interesting but very limited despite improvements. The findings are not generalizable. Data collection is restricted to the two pilgrimage routes.

Finally, the findings of this study are based on a sample of tourist who make Santiago Way.

### **Acknowledgements**

The authors are deeply grateful to ISAG – European Business School and Research Center in Business Sciences and Tourism (CICET-FCVC) for all support. This work was supported by the Foundation for Science and Technology under grant UID/GES/04752/2019.

This study was conducted as part of a funded project (NORTE-06-3559-FSE-000164) by the Northern Regional Operational Program (NORTE 2020), Portugal 2020 and the European Union, through the European Social Fund (ESF).

## References

- Bernini, C., & Cracolici, M. F. (2015). Demographic change, tourism expenditure and life cycle behaviour. *Tourism Management*, 47, 191–205. <https://doi.org/10.1016/j.tourman.2014.09.016>
- Björk, P., & Jansson, T. (2008). Travel Decision-making: The Role of Habit. *Tourismos: An International Multidisciplinary Journal of Tourism e 3, Number 2, Autumn 2008, Pp. 11-3*, 3(2), 11–34. <https://www.researchgate.net/publication/46396037>
- Bond, N., Packer, J., & Ballantyne, R. (2014). Exploring Visitor Experiences, Activities and Benefits at Three Religious Tourism Sites. *International Journal of Tourism Research*, 17, 471–481.
- Cohen, S. A., Prayag, G., & Moital, M. (2014). Consumer behaviour in tourism: Concepts, influences and opportunities. In *Current Issues in Tourism* (Vol. 17, Issue 10, pp. 872–909). Routledge. <https://doi.org/10.1080/13683500.2013.850064>
- Collins-Kreiner, N. (2010). Researching pilgrimage: Continuity and transformations. *Annals of Tourism Research*, 37(2), 440–456. <https://doi.org/10.1016/j.annals.2009.10.016>
- Collins-Kreiner, N. (2016). The lifecycle of concepts: the case of ‘Pilgrimage Tourism’. *Tourism Geographies*, 18(3), 322–334. <https://doi.org/10.1080/14616688.2016.1155077>
- Collins-Kreiner, N. (2018). Pilgrimage Tourism: Commons Themes in Different Religions. *International Journal of Religious Tourism and International Journal of Religious Tourism and Pilgrimage*, 6. <https://doi.org/10.21427/D73428>
- Collins-Kreiner, N. (2020). Pilgrimage tourism-past, present and future rejuvenation: a perspective article. In *Tourism Review* (Vol. 75, Issue 1, pp. 145–148). Emerald Group Holdings Ltd. <https://doi.org/10.1108/TR-04-2019-0130>
- Collins-Kreiner, N., & Wall, G. (2015). Tourism and religion: Spiritual journeys and their consequences. In *The Changing World Religion Map: Sacred Places, Identities, Practices and Politics* (pp. 689–707). Springer Netherlands. [https://doi.org/10.1007/978-94-017-9376-6\\_34](https://doi.org/10.1007/978-94-017-9376-6_34)
- Correia, A., & Pimpão, A. (2008). Decision-making processes of Portuguese tourist travelling to South America and Africa. *International Journal of Culture, Tourism and Hospitality Research*, 2(4), 330–373. <https://doi.org/10.1108/17506180810908989>
- Decrop, A. (2017). *The Routledge Handbook of Tourism Marketing* (S. McCabe, Ed.; Routledge).

- di Giovine, M. A. (2011). Pilgrimage: Communitas and contestation, unity and difference - An introduction. *Anthropology & Sociology Faculty Publications*, 59(3), 247–269. [https://digitalcommons.wcupa.edu/anthrosoc\\_facpub](https://digitalcommons.wcupa.edu/anthrosoc_facpub)
- Digance, J. (2003). Pilgrimage at contested sites. *Annals of Tourism Research*, 30(1), 143–159. [https://doi.org/10.1016/S0160-7383\(02\)00028-2](https://doi.org/10.1016/S0160-7383(02)00028-2)
- Durán-Sánchez, A., Álvarez-García, J., del Río-Rama, M. de la C., & Oliveira, C. (2018). Religious tourism and pilgrimage: Bibliometric overview. *Religions*, 9(9). <https://doi.org/10.3390/rel9090249>
- Engel, J., Blackwell, R., & Kollat, D. (1968). *Consumer Behavior*. Holt, Rinehart, and Winston, Inc.
- Erasmus, A., Boshoff, E., & Rousseau, G. (2010). Consumer decision-making models within the discipline of consumer science: a critical approach. *Journal of Family Ecology and Consumer Sciences /Tydskrif Vir Gesinsekologie En Verbruikerswetenskappe*, 29(1). <https://doi.org/10.4314/jfec.v29i1.52799>
- Fratu, D. (2011). Factors of Influence and Changes in the Tourism Consumer Behaviour. In *Bulletin of the Transilvania University of Braşov* • (Vol. 4, Issue 53).
- Horner, S., & Swarbrooke, J. (2007). *Consumer Behaviour In Tourism* (Elsevier, Vol. 2nd).
- Huang, H. C., Lin, T. H., Lai, M. C., & Lin, T. L. (2014). Environmental consciousness and green customer behavior: An examination of motivation crowding effect. *International Journal of Hospitality Management*, 40, 139–149. <https://doi.org/10.1016/j.ijhm.2014.04.006>
- Hyde, K. F., & Harman, S. (2011). Motives for a secular pilgrimage to the Gallipoli battlefields. *Tourism Management*, 32(6), 1343–1351. <https://doi.org/10.1016/j.tourman.2011.01.008>
- Iliev, D. (2020). The evolution of religious tourism: Concept, segmentation and development of new identities. *Journal of Hospitality and Tourism Management*, 45, 131–140. <https://doi.org/10.1016/j.jhtm.2020.07.012>
- Jang, S. C. (Shawn), & Ham, S. (2009a). A double-hurdle analysis of travel expenditure: Baby boomer seniors versus older seniors. *Tourism Management*, 30(3), 372–380. <https://doi.org/10.1016/j.tourman.2008.08.005>
- Jang, S. C. (Shawn), & Ham, S. (2009b). A double-hurdle analysis of travel expenditure: Baby boomer seniors versus older seniors. *Tourism Management*, 30(3), 372–380. <https://doi.org/10.1016/j.tourman.2008.08.005>
- Juvan, E., Omerzel, D. G., & Maravić, M. U. (2017). Tourist Behaviour: An Overview of Models to Date. *Management International Conference*, 23–33.

- Kemperman, A. (2021). A review of research into discrete choice experiments in tourism: Launching the Annals of Tourism Research Curated Collection on Discrete Choice Experiments in Tourism. *Annals of Tourism Research*, 87. <https://doi.org/10.1016/j.annals.2020.103137>
- Lopez, L. (2013). How Long Does the Pilgrimage Tourism Experience to Santiago de Compostela Last? *International Journal of Religious Tourism and International Journal of Religious Tourism and Pilgrimage*, 1. <https://doi.org/10.21427/D7C133>
- MacInnis, D. J., & Folkes, V. S. (2010). The disciplinary status of consumer behavior: A sociology of science perspective on key controversies. *Journal of Consumer Research*, 36(6), 899–914. <https://doi.org/10.1086/644610>
- Martin, D., & Woodside, A. G. (2012). Structure and process modeling of seemingly unstructured leisure-travel decisions and behavior. *International Journal of Contemporary Hospitality Management*, 24(6), 855–872. <https://doi.org/10.1108/09596111211247209>
- Moutinho, L. (1987a). Consumer Behaviour in Tourism. *European Journal of Marketing*, 21(10), 5–7.
- Moutinho, L. (1987b). Consumer Behaviour in Tourism. *European Journal of Marketing*, 21(10), 5–7.
- Nyaupane, G. P., Timothy, D. J., & Poudel, S. (2015). Understanding tourists in religious destinations: A social distance perspective. *Tourism Management*, 48(1), 343–353. <https://doi.org/10.1016/j.tourman.2014.12.009>
- Piramanayagam, S., Kumar, N., & Mallya, J. (2020). Tourist's Motivation and Behavioural Intention to Visit a Religious Buddhist: A Case Study of Bodhgaya. *Journal of Religious Tourism and Pilgrimage*, 8(8), 42–56.
- Rinschede, G. (1992). Forms of religious tourism. *Annals of Tourism Research*, 19, 51–67.
- Shrestha, N. (2021). Probit Model Analysis of Tourists' Revisit Intention to Nepal. *Open Access Library Journal*, 8(e7210), 1–14. <https://doi.org/10.4236/oalib.1107210>
- Solla, S. (2006). El Camino de Santiago: Turistas y Peregrinos hacia Compostale. *Cuadernos de Turismo*, 18, 135–150.
- Solomon, M. R. (2008). *O Comportamento do consumidor: comprando, possuindo e sendo*. Tradução de Lene Belon Ribeiro (7. ed.). Bookman.
- Stankevich, A. (2017). Explaining the Consumer Decision-Making Process: Critical Literature Review. *Journal of International Business Research and Marketing*, 2(6), 7–14. <https://doi.org/10.18775/jibrm.1849-8558.2015.26.3001>

Turner, V. (1973). The Center out There: Pilgrim's Goal. *History of Religions* , 12, 191–230.

Ulker-Demirel, E., & Ciftci, G. (2020). A systematic literature review of the theory of planned behavior in tourism, leisure and hospitality management research. *Journal of Hospitality and Tourism Management*, 43, 209–219. <https://doi.org/10.1016/j.jhtm.2020.04.003>

UNWTO. (2016, July 29). *International Tourism Highlights*. World Tourism Organization; World Tourism Organization (UNWTO). <https://doi.org/10.18111/9789284418145>