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The influence of socio-demographic factors on feelings of attachment, involvement, loyalty attitudes, and environmentally responsible behavior toward a cultural destination

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Abstract: Tourist demand is very diverse and there are many alternatives for segmentation, with even basic demographic factors not only effectively discriminating in some markets but serving as a valuable starting point for creating market segmentation methods. Against this perspective, this study aims to provide a deeper analysis into whether and how socio-demographic factors, in terms of nationality, age, gender, and education explain tourists' place attachment, in terms of place dependence, place identity, and sense of belonging, both online and onsite activity involvement, recommendation and revisit intentions, and environmentally responsible behavior (ERB) toward a cultural Italian destination. Data were collected from 384 tourists participating in a cultural heritage tourism experience. Descriptive statistics were analyzed and reported, and a series of ANOVAs were performed using SPSS to analyze possible differences among nationality, age, gender, and education, regarding the variables of interest. According to the literature, factors that may affect tourists'

perceptions include socio-demographic data. However, current research on cultural tourism lacks an in-depth investigation of the relationships between various socio-demographic factors and tourists' perceptions and behavior. While studies have looked at how these elements affect marketing in general, more data is still required to forecast cultural visitors' feelings of attachment, involvement, intention, and environmental behavior toward a cultural destination. Results highlight that tourists of an Italian cultural destination have varying levels of education, age, and gender, and are partly represented by foreign visitors. Findings mainly confirm that the variables of interest can be influenced by the socio-demographic characteristics of tourists, with a major impact coming from nationality, age, and education. Moreover, they showed that the main differences were recorded for place identity, sense of belonging, onsite and online activity involvement, revisit intention, and responsible behavior, with only nationality and age respectively affecting place identity and recommendation intention.

1. Introduction

Prior to COVID-19, global tourism had been expanding quickly for several years and emerged as a major force in global trade to such an extent that, since the late 1990s, the number of destinations generating \$1 billion or more in US dollars from foreign tourism had nearly doubled and in 2019 tourism injected \$8.9 trillion into the global economy (UNESCO, 2021). Businesses experienced a sudden and extraordinary disruption due to the COVID-19 epidemic as policymakers limited the flow of people worldwide (Temperini et al., 2022). Tourism has historically experienced crises (Blake and Sinclair 2003; Sönmez et al. 1999), however, the impact of COVID-19 has been more tragic than any previous crisis in recent memory, at least from an economic perspective (Hall et al. 2020; UNWTO 2021). As a result, the crisis has raised fresh concerns about how the travel and tourism sector is reacting to and recovering from this crisis and, eventually, how it will change as a socio-economic activity in our society (Gretzel et al., 2020). The COVID-19 pandemic has opened up to a more environmentally and socially conscious global travel market and unprecedented potentialities for slow and proximity tourism leading (UNESCO, 2021).

Social distancing policies, travel restrictions, and ban on public meetings for cultural events all had a negative impact on cultural tourism (Mitrică et al., 2022). In this context, restarting cultural tourism, in addition to being a major concern for governments around the world, represents critical challenges as well as market opportunities for cultural tourism managers. In fact, one of the side effects of the pandemic is the need for sustainable, calm, quiet, and safe spaces, leading to a search for a new "slow living" lifestyle, representing a valuable chance for cultural tourism (Rodríguez-Vázquez et al., 2023). Although no real consensus on the definition of cultural tourism and cultural tourists exists (among others: Hughes, 1996; Ashworth & Tunbridge, 2000; Cuccia & Rizzo, 2011), it can reasonably state that a tourist's primary objective in engaging in cultural tourism is not just to consume but also, to learn about, explore, and experience both tangible and intangible cultural attractions and products in a travel

location (Richards, 2018).

Cultural tourists typically have a larger budget to spend on local high-quality goods rather than on mass-manufactured ones, participate in arts-related activities, and visit museums, monuments, and historical sites, thus making cultural tourism a tool for differentiating the country's tourism product and reduce seasonality (Vergori & Arima, 2020). Market data reveal a total expenditure of 16.1 billion euros in 2019 which decreased to 3.3 in 2021 and 115.2 million overnight stays against 23.9 million in 2021 (Eagan, 2023). By looking at these data, we entail the central role of cultural tourism in driving economic growth in the tourism sector and the urgency to return and outweigh pre-pandemic levels. Cultural tourism, being one of the fastest-growing segments of the tourism industry and accounting for an estimated 40% of all tourism worldwide (UNESCO, 2021), is a powerful element of attraction that can function as a locomotive of tourist demand. Also in Italy, the cultural products are a point of strength of the tourist offer, capable of attracting a large number of tourists, internationally known, representing the strategic offer segment for the entire tourist system of the Country (Assoturismo-Confesercenti, 2022). However, it is necessary to identify the key elements that allow for understanding the potential of cultural tourism and its response to the demands of new post-pandemic tourist behavior (Rodríguez-Vázquez et al., 2023). Within this scenario, cultural tourism has attracted greater interest from researchers (Cerquetti and Romagnoli, 2022; Carreira et al., 2022; Du Cros and McKercher, 2020; Richards, 2018). Research seeks to understand why people engage in cultural tourism through studies of motivation and related factors such as satisfaction and loyalty (Richards, 2018), authenticity and destination image (Carreira et al., 2022).

Heritage, and especially the destination of 'World Heritage Sites' (WHS), being one of the fundaments of cultural tourism, is where most of research is focused on (Richards, 2018). Literature comparing cultural and non-cultural tourists, through a series of socio-economic-demographic variables, highlights that a "new cultural tourism" is emerging in Italy, and that demographic aspects (i.a., age and education) are often stereotypes deeply rooted in the literature or variables taken for granted (Tangeland et al., 2013) than empirically confirmed propositions (Vergori & Arima, 2020). Due to their ability to facilitate understanding, managing, and promoting a destination and/or facility, as well as discriminating well in certain markets (Mohsin, 2008), socio-demographic variables are of major importance for stakeholders of tourism including the research communities (Gössling et al. 2020; Hall et al. 2020; Jamal and Budke 2020), especially in light of their use in market segmentation strategies (Weaver et al., 1994). Against this background, the present study aims at integrating socio-demographic characteristics as independent variables (exogenous variables) and perceptions and intentions toward a cultural destination as dependent variables (endogenous variables). We fall within the scope of cultural heritage tourism studies (Magliacani e Francesconi, 2022), focusing on an Italian UNESCO WHS (World Heritage Site) by attempting to understand which socio-demographic factors help explain tourists' feelings, experiences during their visit, as well as behavioral intentions.

The study examines variables that signify attachment and involvement to a cultural destination because such connections bear significant positive implications for visitors' behavioral intents, such as revisiting and recommending intentions (Dwyer et al. 2019; Amaro & Duarte, 2015). The study also covers a topic related to environmental sustainability, with the inclusion of a construct, namely Environmentally Responsible Behavior (ERB), which represents the best indicator for sustainable tourism in destination management (Kafyri et al., 2012). Specifically, this exploratory research provides a deeper analysis into whether and how nationality, age, gender, and education explain tourists' attachment (in the form of place dependence, place identity, and sense of belonging), activity

involvement (both online and onsite), recommendation and revisit intentions, and ERB. The paper is organized as follows. First, a review of the literature presenting the theoretical background and the research questions is provided. In the subsequent section, the methodology is described, followed by statistical analyses of the data. Finally, we discuss the findings and propose conclusions, implications, and suggested avenues for future research.

2. Literature review and theoretical framework

2.1. Socio-demographic characteristics and tourism: a brief overview

Socio-demographic factors are employed as segmentation criteria for a variety of reasons, including their cost effectiveness, simplicity of understanding, and suitability for usage in commercial settings, while offering a foundation for deeper, more intricate studies (Tangeland et al., 2013).

Thus, it comes as no surprise that individuals' socio-demographic characteristics such as age, gender, race, tenure, and education have long been considered important variables in research, especially in psychological studies (Zedeck & Cascio, 1984). This line of research has produced findings showing that demographic variables are significantly associated with characteristics, perceptions, attitudes, and work outcomes (Tsui & O'Really, 1989). In recent tourism literature, researchers have argued that there is a relation between individuals' demographic profiles and the types of travel experiences they seek (Goodrich 1980; Weaver et al., 1994). Buckley and Papadopoulos (1986) highlighted that greater attention must be paid to the characteristics of visitors when trying to develop a more rational marketing strategy: a clear market segment should be identified, and an investigation made of the buying decision factors that predominate in that segment with the aim of aligning tourism products with the client profile.

Since the tourist demand is very diverse and there are innumerable alternatives for segmentation, with even basic demographic factors, like age and gender, effectively discriminating in some markets, serving as a valuable starting point for creating market segmentation methods (Mitchell & Haggett, 1997), many are the studies that have focused on the analysis of socio-demographic factors when exploring tourists' attitudes and behaviors. Uysal et al. (1994), in their study of Australian visitors to U.S. national parks and natural areas, analyzed demographic characteristics and found that college graduates, professionals, and high-income groups have a higher propensity to visit national parks and natural areas. In a similar vein, Huang and Xiao (2000) argued that demographic research is important because it has the potential to both broaden the understanding of tourist behavior and improve destination management and planning. Their research shows that gender differences and professional composition have a substantial impact on Changchun leisure travelers' behavior patterns and attraction preferences. A very recent study from Yang et al. (2023) examined how demographic factors affect the quality of cultural perception and found interesting results from an age, gender, and education perspective.

Generally speaking, the geographical, demographic, and economic dimensions are important research variables to understand the motivation of tourists (Almeida, 2020). More specifically, there are many potential differences in the determinant factors affecting perceptions and selection of cultural heritage attractions among visitors with different demographic characteristics (Siriphanich, 2007). Based on this, the main objective of this study is to analyze how the socio-demographic characteristics of tourists influence perceptions and intentions toward a cultural heritage destination.

2.2. Tourists' attachment: place dependence, place identity, and sense of belonging

To better understand the connections between people and places, as well as to manage and market tourist attractions, place attachment has been extensively researched across disciplines (Dwyer et al., 2019). Place attachment is not only an immediate sensory response but a deeper reflective resonance with specific locations (Rishbeth & Powell, 2013). It is a multidimensional construct, with roots in environmental psychology and tourism, that captures the complexity of the meanings that both visitors and locals attribute to their physical surroundings (Dwyer et al., 2019). Usually, researchers identify two main cognitive dimensions of place attachment, namely place identity and place dependence (Chen & Dwyer, 2018). More recent works in environmental psychology propose affective attachment as another key dimension of place attachment (Hidalgo and Hernández, 2001; Jorgensen and Stedman 2001), making belongingness or social bond another dimension of place attachment (Chen & Dwyer, 2018). Place dependence is an outcome of the cognitive justification process that involves an individual attachment to a place for functional reasons. Generic place-dependent individuals can be attached to areas that they have never visited because the area may afford them a unique setting in which to accomplish their goals (White et al., 2008). Place identity is an outcome of a cognitive justification process that reflects an individual's personal identity defined in relation to the physical environment, influenced by conscious and unconscious ideals, beliefs, preferences, feelings, values, goals, and behavioral tendencies and skills (Proshansky, 1978). The sense of belonging is an enduring reaction that implies a tourist's feeling of identification with or attachment to a cultural tourism destination that they have visited (Lin et al., 2014). Tourists' attachment adds value to cultural and heritage tourism and place marketing research and is grabbing researchers' and practitioners' attention because of its potential for interpreting behaviors (Chen & Dwyer, 2018). Indeed, attachment has a beneficial impact not only on tourists' willingness to revisit the destination but also on their disposition to promote the place (Dwyer et al. 2019). In light of this, we believe it is important to explore how socio-demographic factors affect this concept in its cognitive and affective dimensions. Thus, the first research question is:

RQ1. What differences in place dependence, place attachment, and sense of belonging emerge across nationality, age, gender, and education?

2.3. Tourists' involvement: online and onsite activity involvement

According to Havitz Dimanche (1997, p. 246), involvement is described as an "unobservable state of motivation, arousal or interest towards a product or activity evoked by a stimulus or situation" that affects tourist's perceptions and perceived value (Prebensen et al., 2013). By highlighting both mental state and a behavioral process behind involvement, Stone (1984) defined it as the time and/or intensity of effort expended in pursuing a particular activity. Kim and Ritchie (2014) noted that involvement can have a significant impact on tourism experiences (Forlani, 2018), not only when travelers plan for their trips (i.e., planning phase) but also when travelers are at their destinations. Thus, it should not be surprising that researchers have agreed that the importance of tourist involvement has increased due to its impact on tourists' experiences (Hung et al., 2019;), especially because a higher level of experience involvement brings a more memorable and meaningful experience to the consumer (Cioppi et al., 2022; Zatori et al., 2018).

Grounded on Rothschild's (1984) definition of involvement, the current study defines onsite

involvement as a person's level of interest, emotional attachment, or arousal with both websites and social media (Splendiani et al., 2023). Travelers may be more passive or active when they receive advertising communication, and limit or expand their processing of this information, depending on their level of involvement (Laurent & Kapferer, 1985). As a result, online participation is a helpful tool for online travel marketers to adjust to these variances. In the same vein, the influence of onsite activities, defined as the extent to which a tourist is interested and engaged in activities hosted by a cultural tourism destination (Lee & Chang, 2012), should equally be considered when examining tourists' consumption, especially of cultural destinations, which offer a greater number of activities than other types of tourism destinations (Hung et al., 2019). If the present tourism literature puts a great emphasis on the influence of involvement during the planning phase (Kim & Ritchie, 2014; Lu et al., 2015), researchers have also noted that immersion in onsite activities could have a profound impact on tourists' actual experiences (Hung et al., 2019). Thus, following Amaro and Duarte (2015), the study focuses its attention on the analysis of tourists' involvement both onsite and online as travelers who feel more involved might have different characteristics that could be fruitfully used to target and customize both online and offline touristic activities. This leads us to the second research question:

RQ2. What differences in online activity involvement and onsite activity involvement emerge across nationality, age, gender, and education?

2.4. Tourists' intentions: revisit and recommend

Behavioral intention is one of the most important concepts in marketing and consumer behavior, as consumers' behavioral intentions for a product or service are likely to translate into actual purchase or consumption behaviors (Oliver, 2010), being this the most proximal and salient determinant of their actual behaviors (Ajzen, 1991).

Scholars in heterogeneous contexts agree that the repurchase/revisit and recommendation intentions are the two major constituents of behavioral intentions (Choo et al., 2016). From a different perspective, repurchase/revisit intentions and recommendations to others are the most commonly used measures of loyalty, which is an indicator of long-term satisfaction and interest in a brand or a destination (Eusébio & Vieira 2013; Horng et al. 2012). What is certain is that both revisiting and recommending intentions are of high relevance in tourism research (Han et al., 2019). When placed in a tourist context, behavioral intentions refer to tourists' willingness or perceived likelihood of engaging in revisit and word-of-mouth behaviors for the community-based tourism destination (Han et al., 2019). Visitors who perceive a higher value in a holiday destination are more likely to revisit and recommend it (Quintal & Polczynski, 2010). As much as customers form post-purchase intentions and engage in repurchase or recommendation behaviors based on their appraisal of product/service performance (Oliver, 2010), travelers form their revisit and recommending intentions according to their assessment of the overall experience.

Given that boosting visitors' favorable decisions/behaviors is one of the essential requisites for successful sustainable destination development under the competitive market environment, tourism companies are invited to pay attention also to tourists' socio-demographic characteristics in order to match them with their value proposals and increase tourists' motivation (Hassan et al., 2023). Thus the third research question is:

RQ3. What differences in revisit intention and recommending intention emerge across nationality, age, gender, and education?

2.5. Environmentally Responsible Behavior

ERB represents people's environmental concerns, beliefs, and ecological knowledge concerning the

reduction of environmental problems (Chiu et al., 2014), and reflects actions to minimize negative impacts on the environment (Lin & Lee, 2020; Lee & Jan, 2015). The term is used interchangeably with "ecological/environmental/sustainable behavior" or "environmentally concerned or significant behavior" (Lee et al., 2013).

Tourists, either consciously or unconsciously, might add to environmental destruction, for example by picking flowers (Chang, 2010); interfering with wildlife (Ballantyne et al., 2011; Chen, 2011); by increasing pollution activity (Logar, 2010; Teh & Cabanban, 2007); or by simply overcrowding destinations (Dickinson & Robbins, 2008; Poitras & Getz, 2006). However, individuals who manifest environmentally responsible behavior can reduce the harmful impact and create a positive effect on the natural surroundings (Wang & Zhang, 2020; Barbaro and Pickett, 2016). Therefore, as suggested by Lin and Lee (2020), ERB plays a pivotal role in reducing environmental problems (Sivek & Hungerford, 1990) by minimizing impacts on the environment (Kollmuss & Agyeman, 2002), and improving environmental sustainability (Meijers & Stapel, 2011). Also, researchers report that tourists' ERB has been pointed out as the best indicator for sustainable tourism in destination management (Kafyri et al., 2012; Lin &Lee, 2020).

As such, we believe that the understanding of how socio-demographic antecedents shape tourists' environmental responsibility (Luo et al., 2020) is necessary because of their role in facilitating segmentation and targeting, and thus enhancing the formulation of strategic marketing communication efforts. In this respect, we formulate our last research question:

RQ4. What differences in environmentally responsible behavior emerge across nationality, age, gender, and education?

3. Materials and methods

3.1. Data collection and measures

The research aimed to develop an exploratory analysis (Malhotra and Grover, 1998) to discern which demographic factors affect key variables for cultural and sustainable tourism: place dependence and identity, sense of belonging, online and onsite activity involvement, intentions, and environmentally responsible behavior.

During summer 2022, tourists were asked to fill out the questionnaire at Urbino's old town, a significant UNESCO World Heritage site. Other studies have already previously analyzed this context of study with respect to the cultural tourism dimension (Vesci et al., 2020; Conti et al., 2020; Pencarelli et al, 2017). The study used a non-random sampling approach. Participants at the end of the visit to Urbino, received a tablet with a link to the Google Form with the survey displayed on it for them to complete on their own. Participants were informed about the overall storage and

processing of data according to Regulation (EU) 2016/ 679 GDPR and expressed their explicit consent to participate in the study. Following the ethical standards of the 1964 Declaration of Helsinki, participants were informed of the right to refuse to participate in the study or to withdraw consent to participate at any time without negative consequences.

The survey was conducted in several languages using a translation-back translation technique. We collected 384 valid replies after removing respondents with consistent response styles and incomplete responses. The questionnaire consisted of two sections. The first related to individuals' demographic aspects taken into consideration: nationality, age, gender, and level of education. The second section recorded individuals' evaluations regarding the statements of the constructs of interest.

We used pre-existing, empirically validated scales to operationalize the constructs. Using a seven-point Likert scale, from *totally disagree* (1) to *totally agree* (7), participants were asked to indicate the extent they agreed or disagreed with each of the questions. The measures for place dependence (4 items, e.g. "I enjoy recreating in Urbino more than any other cultural area/destination") and place identity (5 items, e.g. "Urbino means a lot to me") were taken from White et al. (2008). The measures for sense of belonging (4 items, e.g. "I feel a strong sense of belonging to Urbino"), online activity involvement (4 items, e.g. "While visiting Urbino, I search for travel information on its social media websites"), and onsite activity involvement (3 items, e.g. "I was interested in the cultural/sustainable activities Urbino hosted") were taken from Hung et al. (2019). The measures for recommendation intention (3 items, e.g. "I will recommend Urbino to a relative or friend") and revisit intention (3 items, e.g. I intend to revisit Urbino in the future") were taken from Altunel and Erkurt (2015). Finally, environmentally responsible behavior (6 items, e.g. "If there are cleaning environment activities, I am willing to attend") was adapted from Su et al. (2020).

3.2. Data Analysis

The Analysis of Variance (ANOVA) was performed using F-tests to statistically test the equality of means (Markowski & Markoski, 1990) and analyze differences among nationality, age, gender, and education, regarding the variables of interest. By using SPSS v.22, a multivariate analysis of variance was run in the system (Huberty & Olejnik, 2006) due to its ability to consider several continuous dependent variables simultaneously, identifying significant differences due to an independent variable while offering results for Univariate tests for each independent variable.

The ANOVA test is a statistical technique used to determine if there are significant differences among the means of three or more groups (Markowski and Markoski, 1990). It is employed to compare the means of multiple groups in order to evaluate whether these differences are statistically significant or simply due to chance. The methodology of the ANOVA test involves analyzing the variance between groups and the variance within groups. In general, the ANOVA test is based on the null hypothesis (H0) that all group means are equal, while the alternative hypothesis (H1) asserts that at least one mean is significantly different from the others. The ANOVA test calculates the between-group variance and the residual variance within the groups. If the between-group variance is much larger than the residual variance, then there are significant differences among at least two of the groups. Conversely, if the between-group variance is similar to or smaller than the residual variance, there are no significant differences among the groups. To assess whether the differences

between group means are significant, the ANOVA test utilizes an F statistic, which compares the between-group variance with the residual variance. If the calculated F value exceeds a critical threshold, the null hypothesis is rejected, and it is concluded that there are significant differences among at least two groups.

4. Results

The study reveals that tourists of an Italian cultural heritage destination have varying levels of education, age, and gender and are also considerably represented by foreign visitors. Our sample includes a slightly higher number of foreign participants (197) compared to Italians (187), 195 men and 189 women, 62 visitors with an age between 18-29, 75 visitors with an age between 30-39, 86 between 40-49, 93 between 50-59, and 69 who are more than 60. Regarding education, 131 participants have a lower level of instruction since they do not possess a bachelor, 137 participants declared to possess a bachelor, and 116 participants report holding a master or a Ph.D. Descriptive statistics for all the factors considered are shown in Table 1.

Table 1. Descriptive statistics for nationality, age, gender, and education.

Factor	Item	Number (N = 384)	Percentage (%)
Nationality	Italian	187	48.7
	Foreign	197	51.3
Age	18-29	62	16.1
	30-39	75	19.5
	40-49	86	22.4
	50-59	92	24.0
	>60	69	18.0
Gender	M	195	50.8
	F	189	49.2
Education	No Bachelor	131	34.1
	Bachelor	137	35.7
	Master/PhD	116	30.2

Source: Author elaboration

4.1. Feelings of Attachment: Place Dependence, Place Identity, Sense of belonging

The first research question aims to trace (any) significant differences that emerged concerning the feelings of attachment of the different individuals' factors considered. Respondents were asked to evaluate, based on a seven-point Likert scale, the feeling of place dependence, place identity, and sense of belonging. As shown in Table 2, results regarding place dependence are modest; only nationality shows a significant difference (F(1, 382) = 32.242, p = <.001), with Italians scoring higher (4.65) than foreigners (3.88). There are no significant differences when considering age, gender, and education.

Table 2. Place identity in relation to nationality, age, gender, and education.

Factor	Item	M(SD)	F	Sig	η2
Nationality	Italian	4.66 (1.43)	32.242	<.001	.078
	Foreign	3.88 (1.25)			
Age	18-29	4.31 (1.58)	1.288	.274	.013
	30-39	4.04 (1.15)			
	40-49	4.14 (1.38)			
	50-59	4.32 (1.38)			
	>60	4.52 (1.32)			
Gender	M	4.17 (1.38)	1.429	.233	.004
	F	4.34 (1.41)			
Education	No Bachelor	4.44 (1.39)	2.785	0.63	.014
	Bachelor	4.28 (1.38)			
	Master/PhD	4.03 (1.40)			

Note(s): Significantly different average scores * = p < 0.05; ** = p < 0.01; *** = p < 0.001

Source: Author elaboration

Regarding place identity, as reported in Table 3, while there is no significant difference in age and education, nationality and gender have an impact on participants' feelings of place identity. The effect is stronger for nationality (F(1, 382) = 16.653, p = <.001), where, on average, Italians score significantly higher (3.85) than foreigners (3.16). Men (3.70) provided significantly higher scores for place identity compared to women (3.28), F(1, 382) = 6.068, p = <.05.

Table 3. Place dependence in relation to nationality, age, gender, and education.

Factor	Item	M(SD)	F	Sig	η2
Nationality	Italian	3.85 (1.81)	16.653	<.001	.042
	Foreign	3.16 (1.45)			
Age	18-29	3.11 (1.80)	2.099	.080	0.22
	30-39	3.31 (1.56)			
	40-49	3.49 (1.52)			
	50-59	3.68 (1.66)			
	>60	3.83 (1.78)			
Gender	M	3.28 (1.60)	6.068	.014	.016
	F	3.70 (1.71)			
Education	No Bachelor	3.49 (1.65)	.324	.723	.002
	Bachelor	3.42 (1.61)			.042
	Master/PhD	3.59 (1.76)		<.001	

Note(s): Significantly different average scores * = p < 0.05; ** = p < 0.01; *** = p < 0.001

Source: Author elaboration

Interesting results emerge when we observe sense of belonging (see Table 4). In this case, only age has not a significant influence, while nationality, gender, and education significantly impact participants' sense of belonging. Specifically, Italians (4.11) score higher than foreigners (2.98), F(1, 382) = 49.768, p = <.001; Men (3.73), on average, score higher than women (3.32), F(1, 382) =5.956, p = <.05; and participants that are not possessing a bachelor (3.83) score higher than people with a bachelor (3.51) or Master/Ph.D. (3.22), F(2, 381) = 4.287, p = <.05.

Table 4. Sense of belonging in relation to nationality, age, gender, and education.

Factor	Item	M(SD)	F	Sig	η2
Nationality	Italian	4.11 (1.59)	49.768	<.001	.115
	Foreign	2.98 (1.56)			
Age	18-29	3.46 (1.79)	.924	.450	.010
	30-39	3.30 (1.56)			
	40-49	3.49 (1.61)			
	50-59	3.58 (1.61)			
	>60	3.82 (1.81)			
Gender	M	3.32 (1.57)	5.956	.015	.015
	F	3.73 (1.74)			
Education	No Bachelor	3.83 (1.61)	4.287	.014	.022
	Bachelor	3.51 (1.58)			
	Master/PhD	3.22 (1.78)			

Note(s): Significantly different average scores * = p < 0.05; ** = p < 0.01; *** = p < 0.001

Source: Author elaboration

4.2. Involvement: Online and onsite activities

The second research question aims to identify (any) significant differences that emerged with reference to the feelings of involvement of the different individuals' factors considered. Respondents were asked to evaluate, based on a seven-point Likert scale, the feeling of both online and onsite involvement. As regards online involvement, as reported in Table 5, both education and nationality have a significant effect, while gender and age are not statistically significant. Italians (3.65) compared to foreigners (3.21) declare to be, on average, more involved in online activities ($F(1, 382) = 5.859$, $p = <.05$). Similarly, participants with no bachelor (3.79) are more involved in online activities, compared to participants with a bachelor (3.32) and Master/PhD (3.14), $F(2, 381) = 4.495$, $p = <.05$.

Table 5. Online activity involvement in relation to nationality, age, gender, and education.

Factor	Item	M(SD)	F	Sig	η2
Nationality	Italian	3.65 (1.82)	5.859	.016	.015
	Foreign	3.21 (1.73)			
Age	18-29	3.63 (1.74)	2.067	.084	.021
	30-39	3.36 (1.76)			
	40-49	3.70 (1.76)			
	50-59	3.45 (1.76)			
	>60	2.93 (1.79)			
Gender	M	3.48 (1.78)	.360	.549	.001
	F	3.37 (1.79)			
Education	No Bachelor	3.79 (1.79)	4.495	.012	.023
	Bachelor	3.32 (1.72)			
	Master/PhD	3.14 (1.81)			

Note(s): Significantly different average scores * = p < 0.05; ** = p < 0.01; *** = p < 0.001

Source: Author elaboration

As reported in Table 6, with regard to onsite (offline) involvement, interesting results were found for nationality, age, and education, which significantly influence this type of involvement, in contrast to gender. In line with the other results, Italians (5.73) declare to be more involved in onsite activities compared to foreigners (5.48) ($F(1, 382) = 4.147$ $p = <.05$). Concerning age, 18-29 (5.07) reported the lower score compared to 30-39 (5.42), 40-49 (5.77), 50-59 (5.80), and > 60 (5.78) who

report the higher score (F(4, 379) =, 5.260 p = <.001).

Table 6. Onsite activity involvement in relation to nationality, age, gender, and education.

Factor	Item	M(SD)	F	Sig	η2
Nationality	Italian	5.73 (1.19)	4.147	.042	.011
	Foreign	5.48 (1.18)			
Age	18-29	5.07 (1.49)	5.260	<.001	.053
	30-39	5.42 (.99)			
	40-49	5.77 (1.02)			
	50-59	5.80 (1.26)			
	>60	5.78 (1.03)			
Gender	M	5.68 (1.15)	1.684	.195	.004
	F	5.52 (1.23)			
Education	No Bachelor	5.62 (1.26)	4.411	.013	0.23
	Bachelor	5.38 (1.21)			
	Master/PhD	5.82 (1.04)			

Note(s): Significantly different average scores * = p < 0.05; ** = p < 0.01; *** = p < 0.001

Source: Author elaboration

4.3. Intentions: Revisit and Recommend

As concerns the main intention variables, and more precisely revisit intentions, a clear difference emerged for nationality and age. As reported in Table 7, a statistically significant effect of age was detected (F(4, 379) = 4.275 p <.01) and, among the different ages, older people, on average, reported higher scores: >60 (5.36), 50-59 (5.01), 40-49 (5.36); compared to younger people: 30-39 (4.76) and 18-29 (4.44). The effect of nationality is even stronger (F(1, 382) =22.916 p = <.001), where Italians report higher levels of revisit intentions (5.40) compared to foreigners (4.63).

Table 7. Revisit intention in relation to nationality, age, gender, and education.

Factor	Item	M(SD)	F	Sig	η2
Nationality	Italian	5.40 (1.56)	22.916	<.001	0.57
	Foreign	4.63 (1.61)			
Age	18-29	4.44 (1.76)	4.275	0.002	0.43
	30-39	4.76 (1.64)			
	40-49	5.36 (1.46)			
	50-59	5.01 (1.60)			
	>60	5.36 (1.59)			
Gender	M	4.95 (1.70)	.389	.533	.001
	F	5.06 (1.63)			
Education	No Bachelor	4.80 (1.79)	1.814	.164	.009
	Bachelor	5.17 (1.55)			
	Master/PhD	5.05 (1.63)			

Note(s): Significantly different average scores * = p < 0.05; ** = p < 0.01; *** = p < 0.001

Source: Author elaboration

Interestingly, as reported in Table 8, regarding recommendation intentions, a very clear difference emerged only for age (F(4, 379) =5.636 p <.001). Here, same as for revisit intentions, lower scores were recorded for younger generations: 18-29 (5.81) and 30-39 (6.05); compared to older generations: 40-49 (6.46), 50-59 (6.40), >60 (6.26). In contrast, none of the other factors show significant effects on recommendation intentions.

Table 8. Recommendation intention in relation to nationality, age, gender, and education.

Factor	Item	M(SD)	F	Sig	η2
Nationality	Italian	6.34 (.89)	2.493	.127	.006
	Foreign	6.18 (1.15)			
Age	18-29	5.81 (1.52)	5.636	<.001	.056
	30-39	6.05 (.88)			
	40-49	6.46 (.68)			
	50-59	6.40 (1.09)			
	>60	6.26 (1.03)			
Gender	M	6.27 (1.06)	.016	.900	<.000
	F	6.25 (100)			
Education	No Bachelor	6.21 (1.18)	2.136	.120	.011
	Bachelor	6.17 (1.01)			
	Master/PhD	6.42 (.86)			

Note(s): Significantly different average scores * = p < 0.05; ** = p < 0.01; *** = p < 0.001

Source: Author elaboration

4.4. Environmentally responsible behavior

Finally, as shown in Table 9, regarding the environmental-related variable, namely environmentally responsible behavior, same as place identity, we found a significant effect of both nationality and gender. Specifically, nationality has the strongest effect (F(1, 382) =21.595 p = <.001), with Italians scoring higher (5.87) compared to foreigners (5.41) in environmentally responsible behavior. Although the effect is less strong (F(1, 382) =4.323 p = <.05), gender also affects environmentally responsible behavior: in this case, women score, on average, higher (5.74) than men (5.53).

Table 9. Environmentally responsible behavior in relation to nationality, age, gender, and education.

Factor	Item	M(SD)	F	Sig	η2
Nationality	Italian	5.87 (.94)	21.595	<.001	.054
	Foreign	5.41 (1.01)			
Age	18-29	5.63 (1.00)	.818	.514	.009
	30-39	5.53 (.98)			
	40-49	5.60 (.95)			
	50-59	5.61 (1.03)			
	>60	5.82 (1.04)			
Gender	M	5.74 (.88)	4.323	.038	.011
	F	5.53 (1.10)			
Education	No Bachelor	5.66 (1.07)	.692	.501	.004
	Bachelor	5.69 (.99)			
	Master/PhD	5.54 (.95)			

Note(s): Significantly different average scores * = p < 0.05; ** = p < 0.01; *** = p < 0.001

Source: Author elaboration

5. Discussion

Despite socio-demographic variables are of major importance in tourism (Gössling et al. 2020; Hall et al. 2020; Jamal and Budke 2020), especially in light of their application in market segmentation and targeting strategies (Weaver et al., 1994), in Italy, there are no studies that analyze how socio-demographic factors respond to the digital, environmental, and cultural revolution. The present research provides a preliminary and exploratory contribution to fill this research gap by

examining how nationality, age, gender, and education explain tourists' attachment (in the form of place dependence, place identity, and sense of belonging), activity involvement (online and onsite), recommendation and revisit intentions, and environmentally responsible behavior.

Overall, our results confirm that constructs outcomes can mostly and multifacetedly be explained by socio-demographics of tourists. By examining all the feelings of attachment included in the study, the result suggests that, interestingly, the outcomes for each construct are not always the same. Nationality places a significant role in determining all the variables, that is, place dependence, place identity, and sense of belonging since, not surprisingly, Italian visitors reported significantly higher scores compared to foreign visitors. This aligns with Prayag et al. (2018) who confirm that domestic tourists have a stronger connection to the country's heritage than foreign visitors. However, by having a look at gender, the significant effect holds for place identity and sense of belonging, while it is not significant for place dependence. Men feel a stronger emotional connection to the historical place and its community compared to women; however, such bond does not appear to be unique as they do not perceive the place as more recreating or satisfying than other historical sites. On the other hand, education plays a significant role only in determining a sense of belonging. In this instance, visitors with lower levels of education present a stronger sense of belonging and membership to the historical place compared to people with higher levels of education. Although the scores record the same positive trend for both place dependence and place identity, the effect is not statistically significant. It is worth mentioning that different ages do not seem to affect any of the considered variables, meaning that the elderly do not show a particular higher sense of attachment to the historical site compared to younger generations. This result seems to contradict the commonly accepted stereotype of the cultural tourist (Vergori & Arima, 2020) and agrees with Alegre and Pou's (2004) findings that the aging of a population has an ambiguous effect on tourism demand.

All over, among the variables that were included here as a proxy for detecting a feeling of attachment to the historical place, sense of belonging is the more attention-getting one, being highly impacted by socio-demographic factors such as nationality, gender, and education.

Regarding activity involvement, both in the online and online form, exception done for gender, we found considerable results regarding our socio-demographic factors. First of all, it is worth noting that, on average, onsite activity involvement received higher scores compared to online activity involvement. This result emphasizes how crucial sustainable offline activities are for cultural destinations. In fact, as the world gradually recovers from the Covid-19 pandemic, after a period of forced use of virtual platforms, the value of authentic experiences might be increasingly appreciated bringing travelers to manifest a renewed interest and need towards onsite activities.

On the other hand, the finding regarding online activity involvement highlights the importance of finding the right key to convey appropriate online content that can pique interest and boost online visitors' interaction.

Overall, our results align with Hjalager and Jensen (2012), who posit that online behavior changes depending on the traveler's socio-demographic characteristics. The results are also in line with Tangeland et al. (2013), where the likelihood of participation in outdoor activities was significantly influenced by the socio-demographic variables.

Taking into account the nationality of visitors, Italian visitors feel more involved both in online and onsite activities compared to their foreign counterparts.

From the educational perspective, visitors with lower levels of education interact with their

social media by updating their location and enjoy reading online travel information much more than visitors with higher levels of education, while from the onsite perspective, we found the opposite result. In this case, it is the visitor possessing a higher level of education to engage and enjoy cultural/sustainable onsite activities more. This result is similar to Okumus et al. (2021), who confirmed that tourists with a higher level of education were more willing to participate in culinary tourism experiences compared to visitors with a basic level of education.

Another interesting result was found for age. Major differences were found for onsite activity involvement, where the younger generation scored significantly lower compared to older generations, while for online activities the opposite trend emerges. Here people older than 60 reported a scarce interest in social media activities. This is not surprising as members of Generation Z are also known as the digital natives, and in line with Aina and Ezeuduji (2021) and Monaco (2018), who found that post-millennials prefer touristic places with Internet access, and find it necessary to take pictures, upload, and submit reviews on social media regarding the tourism sites they have visited.

With regard to intentions, while no significant results were detected for either gender (in line with Mohsin, 2008) or education, contrary to Lu et al. (2021), we found a strong effect of age. These results are similar to those of Pasaco-González et al. (2023) and Lu et al. (2021), who found that loyalty did not differ according to the gender of visitors. Generally, higher scores, on average, were recorded for recommendation intention compared to revisit intentions. In particular, with advancing age both intentions get stronger. The fact that younger generations are less inclined to revisit or recommend the historical destination is rather surprising, considering that Urbino is also a major university town. Another interesting finding regarding intentions is that while nationality significantly affects revisit intentions, with Italian visitors being more prone to revisit the historical site, it does not turn into a factor explaining recommendation intention. In fact, although even in this case, foreign visitors report lower scores compared to Italian visitors, the difference is not statistically significant.

Finally, regarding ERB, we found significant effects for nationality and gender while. Contrary to findings from Tasci et al. (2022) and Hedlund et al. (2012) where the perceived importance of environmental sustainability in vacation choices is influenced by both age and education, we found no significant difference in ERB for neither age nor education. Specifically, in line with most of our results, Italian tourists seem more willing to protect the natural environment and practice cleaning environmental activities in the cultural site compared to their foreign counterparts. In the same vein, by harmonizing with studies demonstrating how women possess stronger attitudes towards environmental quality and display "greener shopping habits" than their male counterparts (Diamantopoulos et al., 2003), we found that women are more willing to comply with the legal ways not to damage the local environment compared to men, which is also in line with Tasci (2017), who reported higher ratings of women in sustainability benchmarks.

6. Implications and future research

From a theoretical perspective, this study makes several contributions. First, following Richards' (2018) invitation to focus on touristic experience consumption, the study contributes to the literature on cultural tourism consumption by offering an understanding of how socio-demographic factors impact the perception and intentions toward cultural sites. By understanding how socio-

demographic variables shape individual interests and attitudes in an experiential tourism context, our research enriches the literature on the multivariate effects of socio-demographic variables in different contexts (Tsui & O'Reilly, 1989), including tourism Hedlund et al. (2012).

Additionally, although previous studies have explored the substantial relevance of place attachment for the nature of the tourist-place relationship and behavioral intentions and outcomes (White et al., 2008; Dwyer et al., 2019), this work provides additional evidence about the feelings of attachment perceived by different tourist categories in regard to cultural tourism experiences. Then, with the inclusion of activity involvement, both online and especially onsite, this study contributes to the body of knowledge about how immersion in onsite activities has a profound impact on tourists' experiences (Kim & Ritchie, 2014, Hung et al., 2019) by granting an enhanced understanding of this subject from a post Covid-19 perspective. Finally, our findings enrich knowledge regarding intentions toward cultural destinations, also in sustainable tourism destination management, by including a construct that plays a major role in reducing environmental issues in touristic sites (Lin & Lee, 2020). By specifically contributing to the stream literature of sustainable behaviors and the analysis of socio-demographic characteristics affecting ERB in the context of cultural tourism, the study helps to a gap in the more recent literature focused on the "green" attitudes and behaviors of travelers in the domain of cultural tourism (Throsby, 2016).

From a practical viewpoint, this research extends knowledge that could guide tourism professionals in establishing marketing strategies appropriate to the unique needs of each market segment, which will subsequently determine not only their attachment and engagement with the experience but also their revisit intentions. The findings of this study offer important insights for tourism managers, DMOs, and public policy makers regarding both online and offline marketing practices that should be designed to convey appropriate messages for each market segment and generate a sustainable development of tourism in cultural sites. For example, the lower level of attachment (place dependence, place identity, and sense of belonging) in all its three components attested by foreign visitors draws attention to a careful consideration about whether and how services, in terms of reception and entertainment (activities carried out both online and onsite) respond to the needs of this type of tourists (e.g., language translations). Analogously, in cultural destinations, due to historical reasons bringing women to be less represented in published literature and art than men, these seem to find fewer identity elements that diminish their place identity and sense of belonging to the cultural site compared to men. Professionals in tourism management should find the proper way to address the needs and preferences of women when designing tourism experiences in historical sites (Conti et al., 2020).

According to our findings, destination managers should systematize a variety of both physical and virtual components in the form of digital representations of the physical elements (Baggio & Del Chiappa, 2014) to increase youngers' attachment and onsite engagement. For example, considering the attributes that generally have a greater effect on younger generations, managers could implement gamification practices and new technologies in cultural activities. Gamification and innovative digital practices (such as virtual reality or augmented reality) have the potential to revolutionize the engagement of younger generations, enticing them to explore and connect with cultural heritage (Xu et al., 2017). By incorporating gamification elements, such as quests, challenges, and rewards, museums and UNESCO heritage sites could transform educational experiences into immersive and interactive adventures. Virtual and augmented reality could allow visitors to step into the past, experience historical events firsthand, and interact with artifacts in a

digital realm. These approaches not only foster a deeper appreciation for culture but also bridge the generational gap, making heritage sites more appealing and accessible to younger audiences who will be more prone to recommend such historical places to friends. The usage of these innovative technologies, however, could offer more and more suitable solutions not only for young tourists but for all visitors in the form of dynamic packaging that provide a wide range of experiential products (Presenza et al., 2014).

Although this research makes several contributions to the pertinent literature and offers significant practical implications for cultural destination managers, it is not free from limitations. First, the cultural tourism destination investigated in this research is a town with a small historic center. Future studies should be extended to examine visitors' perceptions and intentions in the case of bigger urban areas with historical sites located throughout the city. Second, although the summer season is indeed a favorable time to study tourism in Italy due to increased travel – particularly by foreign and younger tourists – this might have had some implications for certain groups, such as individuals who are more vulnerable to heat or for younger people, who visited a university cultural site during a period where the city was depopulated by students who returned home for summer holidays. This could have affected the vibrancy and social atmosphere, potentially impacting the overall experience and interactions.

Then, this study examined the association between demographic variables like age, gender, and educational level. Future studies could include other variables such as income, occupation, travel arrangements, the number of people traveling together, and the length of stay. Finally, attachment, engagement, ERB, and behavioral intentions were considered as the outcome variables. Future studies could analyze outcome variables associated with the personal sphere of tourists, such as satisfaction, happiness, and well-being (Dini e Pencarelli, 2020).

Moreover, this research applied self-reported measures to collect data. However, visitors' responses might not fully indicate their actual ERB because of the existence of biases such as the social desirability. To resolve this possible inconsistency, future studies should apply different methodological approaches, such as in-depth interviews, and direct behavioral observation to identify visitors' actual environmentally responsible behavior.

Finally, it would be interesting to determine which types of on-site cultural experiences, such as guided tours, technology-driven experiences or food and wine experiences, are most valued by different socio-demographic groups. Likewise, the role fulfilled by social media should be further examined through qualitative studies, which allow a deeper understanding of the topic.

Conflict of interest

All authors declare no conflicts of interest in this paper.

References

Aina, A. O., & Ezeuduji, I. O. (2021). The influence of socio-demographic factors on perceptions of domestic tourism: The case of generation Z. *African Journal of Hospitality, Tourism and Leisure*, *10*(4), 1503-1515. DOI: https://doi.org/10.46222/ajhtl.19770720-175

Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision*

processes, *50*(2), 179-211. DOI: https://doi.org/10.1016/0749-5978(91)90020-T

Alegre, J., Mateo, S., & Pou, L. (2013). Tourism participation and expenditure by Spanish households: The effects of the economic crisis and unemployment. *Tourism Management*, *39*, 37-49. DOI: https://doi.org/10.1016/j.tourman.2013.04.002

Almeida, F. (2020). Exploring the impact of socio-demographic dimensions in choosing a city touristic destination. *Journal of Tourism and Heritage Research*, *3*(4), 120-142.

Altunel, M. C., & Erkurt, B. (2015). Cultural tourism in Istanbul: The mediation effect of tourist experience and satisfaction on the relationship between involvement and recommendation intention. *Journal of Destination Marketing & Management*, *4*(4), 213-221. DOI: https://doi.org/10.1016/j.jdmm.2015.06.003

Amaro, S., & Duarte, P. (2015). An integrative model of consumers' intentions to purchase travel online. *Tourism management*, *46*, 64-79. DOI: https://doi.org/10.1016/j.tourman.2014.06.006

Ashworth, G. J., & Tunbridge, J. E. (2000). The tourist-historic city. Routledge. DOI: https://doi.org/10.4324/9780080519470

Assoturismo-Confesercenti (2022), "Ritorno alla Grande Bellezza – La ripartenza del turismo culturale e delle città d'arte italiane", [accessed: https://www.confesercenti.it/wp-content/uploads/2022/06/15-Dossier-Citta%CC%80-DArte-Assoturismo-CST.pdf; consulted on 31/05/2023].

Baggio, R., & Del Chiappa, G. (2014). Real and virtual relationships in tourism digital ecosystems. *Information Technology & Tourism*, *14*, 3-19. DOI: https://doi.org/10.1007/s40558-013-0001-5

Ballantyne, R., Packer, J., & Falk, J. (2011). Visitors' learning for environmental sustainability: Testing short-and long-term impacts of wildlife tourism experiences using structural equation modelling. *Tourism management*, *32*(6), 1243-1252. DOI: https://doi.org/10.1016/j.tourman.2010.11.003

Barbaro, N., & Pickett, S. M. (2016). Mindfully green: Examining the effect of connectedness to nature on the relationship between mindfulness and engagement in pro-environmental behavior. *Personality and Individual Differences*, *93*, 137-142. DOI: https://doi.org/10.1016/j.tourman.2010.11.003

Blake, A., & Sinclair, M. T. (2003). Tourism crisis management: US response to September 11. *Annals of tourism research*, *30*(4), 813-832. DOI: https://doi.org/10.1016/S0160-7383(03)00056-2

Buckley, P. J., & Papadopoulos, S. I. (1986). Marketing Greek tourism—the planning

process. *Tourism Management, 7*(2), 86-100. DOI: https://doi.org/10.1016/0261-5177(86)90019-1

Carreira, V., González-Rodríguez, M. R., & Díaz-Fernández, M. C. (2022). The relevance of motivation, authenticity and destination image to explain future behavioural intention in a UNESCO World Heritage Site. *Current Issues in Tourism, 25*(4), 650-673. DOI: https://doi.org/10.1080/13683500.2021.1905617

Cerquetti, M., & Romagnoli, A. (2022). Toward Sustainable Innovation in Tourism: The Role of Cultural Heritage and Heritage Communities. In *Cultural Leadership in Transition Tourism: Developing Innovative and Sustainable Models* (pp. 33-50). Cham: Springer International Publishing. DOI: https://doi.org/10.1007/978-3-031-14121-8_3

Chang, L. C. (2010). The effects of moral emotions and justifications on visitors' intention to pick flowers in a forest recreation area in Taiwan. *Journal of Sustainable tourism, 18*(1), 137-150. DOI: https://doi.org/10.1080/09669580903215154

Chen, N. C., Dwyer, L., & Firth, T. (2018). Residents' place attachment and word-of-mouth behaviours: A tale of two cities. *Journal of Hospitality and Tourism Management, 36*, 1-11. DOI: https://doi.org/10.1016/j.jhtm.2018.05.001

Chiu, Y. T. H., Lee, W. I., & Chen, T. H. (2014). Environmentally responsible behavior in ecotourism: Antecedents and implications. *Tourism management, 40*, 321-329. DOI: https://doi.org/10.1016/j.tourman.2013.06.013

Choo, H., Ahn, K., & F. Petrick, J. (2016). An integrated model of festival revisit intentions: Theory of planned behavior and festival quality/satisfaction. *International journal of contemporary hospitality management, 28*(4), 818-838. DOI: https://doi.org/10.1108/IJCHM-09-2014-0448

Cioppi, M., Curina, I., Dini, M., & Francioni, B. (2022). La soddisfazione e il senso di appartenenza dei turisti nell'adozione di comportamenti responsabili: il ruolo del coinvolgimento on-site e social nell'ambito del turismo culturale. In *Next Generation Marketing. Place, People, Planet: cooperation & shared value for a new era of critical marketing* (https://hdl.handle.net/11576/2705496).

Conti, E., Forlani, F., & Pencarelli, T. (2020). The visiting experience of a cultural city in the experiential perspective: the case of Urbino. Il capitale culturale. *Studies on the Value of Cultural Heritage, (21)*, 391-424. DOI: http://dx.doi.org/10.13138/2039-2362/2117

Cuccia, T., & Rizzo, I. (2011). Tourism seasonality in cultural destinations: Empirical evidence from Sicily. *Tourism Management, 32*, 589–595. DOI: https://doi.org/10.1016/j.tourman.2010.05.008

Diamantopoulos, A., Schlegelmilch, B. B., Sinkovics, R. R., & Bohlen, G. M. (2003). Can socio-demographics still play a role in profiling green consumers? A review of the evidence and an empirical investigation. *Journal of Business research, 56*(6), 465-480. DOI:

https://doi.org/10.1016/S0148-2963(01)00241-7

Dickinson, J. E., & Robbins, D. (2008). Representations of tourism transport problems in a rural destination. *Tourism Management, 29*(6), 1110-1121. DOI: https://doi.org/10.1016/j.tourman.2008.02.003

Dini, M., & Pencarelli, T., (2020). Le destinazioni di benessere per lo sviluppo turistico. Le destinazioni di benessere per lo sviluppo turistico, 1-200. DOI: https://doi.org/10.1016/j.tourman.2008.02.003

Du Cros, H., & McKercher, B. (2020). Cultural tourism. 3rd Edition. Routledge. DOI: https://doi.org/10.4324/9780429277498

Dwyer, L., Chen, N., & Lee, J. (2019). The role of place attachment in tourism research. *Journal of Travel & Tourism Marketing, 36*(5), 645-652. DOI: https://doi.org/10.1080/10548408.2019.1612824

Eagan K. (2023). Cultural tourism in italy: what travelers admire most; Tourism Review, [accessed: https://www.tourism-review.com/report-focuses-on-cultural-tourism-in-italy-news13021; consulted on 19/05/2023].

Eusébio, C., & Vieira, A. L. (2013). Destination attributes' evaluation, satisfaction and behavioural intentions: A structural modelling approach. *International Journal of Tourism Research, 15*(1), 66-80. DOI: https://doi.org/10.1002/jtr.877

Forlani, F. (2018). Il marketing delle esperienze turistiche. Un modello di analisi e gestione per le imprese ei sistemi d'offerta (Vol. 1, pp. 1-232). Aracne, (https://hdl.handle.net/11391/1428991).

Goodrich, J. N. (1980). Benefit segmentation of US international travelers: an empirical study with American Express, 133-147.

Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of sustainable tourism, 29*(1), 1-20. DOI: https://doi.org/10.1080/09669582.2020.1758708

Gretzel, U., Fuchs, M., Baggio, R., Hoepken, W., Law, R., Neidhardt, J., Pesonen, J., Zanker, M., & Xiang, Z. (2020). e-Tourism beyond COVID-19: a call for transformative research. *Information Technology & Tourism, 22*, 187-203. DOI: https://doi.org/10.1007/s40558-020-00181-3

Hall, C. M., Scott, D., & Gössling, S. (2020). Pandemics, transformations and tourism: Be careful what you wish for. *Tourism geographies, 22*(3), 577-598. DOI: https://doi.org/10.1080/14616688.2020.1759131

Hall, M. C., Prayag, G., Fieger, P., & Dyason, D. (2020). Beyond panic buying: consumption displacement and COVID-19. *Journal of Service Management, 32*(1), 113-128. DOI:

https://doi.org/10.1108/JOSM-05-2020-0151

Han, H., Al-Ansi, A., Koseoglu, M. A., Lin, P. M., Park, J., Yu, J., & Kim, W. (2019). Halal tourism: travel motivators and customer retention. *Journal of Travel & Tourism Marketing, 36*(9), 1012-1024. DOI: https://doi.org/10.1080/10548408.2019.1683483

Hassan, T., Carvache-Franco, M., Carvache-Franco, O., & Carvache-Franco, W. (2023). Sociodemographic relationships of motivations, satisfaction, and loyalty in religious tourism: A study of the pilgrimage to the city Mecca. *PloS one, 18*(3), e0283720. DOI: https://doi.org/10.1371/journal.pone.0283720

Havitz, M. E., & Dimanche, F. (1997). Leisure involvement revisited: Conceptual conundrums and measurement advances. *Journal of leisure research, 29*(3), 245-278. DOI: https://doi.org/10.1080/00222216.1997.11949796

Hedlund, T., Marell, A., & Gärling, T. (2012). The mediating effect of value orientation on the relationship between socio-demographic factors and environmental concern in Swedish tourists' vacation choices. *Journal of Ecotourism, 11*(1), 16-33. DOI: https://doi.org/10.1080/00222216.1997.11949796

Hidalgo, M. C., & Hernandez, B. (2001). Place attachment: Conceptual and empirical questions. *Journal of environmental psychology, 21*(3), 273-281. DOI: https://doi.org/10.1006/jevp.2001.0221

Hjalager, A. M. & Jensen, J. M. (2012). A typology of travellers based on their propensity to go online before, during and after the trip. In Information and Communication Technologies in Tourism 2012, (96-107) Vienna: Springer. DOI: https://doi.org/10.1007/978-3-7091-1142-0_9

Horng, J. S., Liu, C. H., Chou, H. Y., & Tsai, C. Y. (2012). Understanding the impact of culinary brand equity and destination familiarity on travel intentions. *Tourism management, 33*(4), 815-824. DOI: https://doi.org/10.1016/j.tourman.2011.09.004

Huang, A., & Xiao, H. (2000). Leisure-based tourist behavior: a case study of Changchun. *International Journal of Contemporary Hospitality Management, 12*(3), 210-214. DOI: https://doi.org/10.1108/09596110010320850

Huberty, C. J., & Olejnik, S. (2006). Applied MANOVA and discriminant analysis. John Wiley & Sons.

Hughes, H. L. (1996). Redefining cultural tourism. *Annals of Tourism Research, 24*, 707–709. DOI: https://doi.org/10.1016/0160-7383(95)00099-2

Hung, K. P., Peng, N., & Chen, A. (2019). Incorporating on-site activity involvement and sense of belonging into the Mehrabian-Russell model–The experiential value of cultural tourism

destinations. *Tourism Management Perspectives, 30*, 43-52. DOI: https://doi.org/10.1016/j.tmp.2019.02.003

Jamal, T., & Budke, C. (2020). Tourism in a world with pandemics: local-global responsibility and action. *Journal of tourism futures, 6*(2), 181-188. DOI: https://doi.org/10.1108/JTF-02-2020-0014

Jorgensen, B. S., & Stedman, R. C. (2001). Sense of place as an attitude: Lakeshore owners attitudes toward their properties. *Journal of environmental psychology, 21*(3), 233-248. DOI: https://doi.org/10.1006/jevp.2001.0226

Kafyri, A., Hovardas, T., & Poirazidis, K. (2012). Determinants of visitor pro-environmental intentions on two small Greek islands: is ecotourism possible at coastal protected areas?. *Environmental Management, 50*, 64-76. DOI: https://doi.org/10.1007/s00267-012-9856-z

Kim, J. H., & Ritchie, J. B. (2014). Cross-cultural validation of a memorable tourism experience scale (MTES). *Journal of Travel Research, 53*(3), 323-335. DOI: https://doi.org/10.1177/0047287513496468

Kollmuss, A., & Agyeman, J. (2002). Mind the gap: why do people act environmentally and what are the barriers to pro-environmental behavior?. *Environmental education research, 8*(3), 239-260. DOI: https://doi.org/10.1080/13504620220145401

Laurent, G., & Kapferer, J. N. (1985). Measuring consumer involvement profiles. *Journal of marketing research, 22*(1), 41-53. DOI: https://doi.org/10.1177/002224378502200104

Lee, T. H., & Chang, Y. S. (2012). The influence of experiential marketing and activity involvement on the loyalty intentions of wine tourists in Taiwan. *Leisure studies, 31*(1), 103-121. DOI: https://doi.org/10.1080/02614367.2011.568067

Lee, T. H., & Jan, F. H. (2015). The effects of recreation experience, environmental attitude, and biospheric value on the environmentally responsible behavior of nature-based tourists. *Environmental management, 56*, 193-208. DOI: https://doi.org/10.1007/s00267-015-0488-y

Lin, H., Fan, W., & Chau, P. Y. (2014). Determinants of users' continuance of social networking sites: A self-regulation perspective. *Information & Management, 51*(5), 595-603. DOI: https://doi.org/10.1016/j.im.2014.03.010

Lin, Y. H., & Lee, T. H. (2020). How do recreation experiences affect visitors' environmentally responsible behavior? Evidence from recreationists visiting ancient trails in Taiwan. *Journal of Sustainable Tourism, 28*(5), 705-726. DOI: https://doi.org/10.1080/09669582.2019.1701679

Logar, I. (2010). Sustainable tourism management in Crikvenica, Croatia: An assessment of policy instruments. *Tourism management, 31*(1), 125-135. DOI: https://doi.org/10.1016/j.tourman.2009.02.005

Lu, C. Y., Dean, D., Suhartanto, D., Hussein, A. S., Suwatno, Kusdibyo, L., ... & Gunawan, A. I. (2021). Predicting tourist loyalty toward cultural creative attractions the moderating role of demographic factors. *Journal of Quality Assurance in Hospitality & Tourism, 22*(3), 293-311. DOI: https://doi.org/10.1080/1528008X.2020.1773371

Lu, L., Chi, C. G., & Liu, Y. (2015). Authenticity, involvement, and image: Evaluating tourist experiences at historic districts. *Tourism management, 50*, 85-96. DOI: https://doi.org/10.1016/j.tourman.2015.01.026

Luo, W., Tang, P., Jiang, L., & Su, M. M. (2020). Influencing mechanism of tourist social responsibility awareness on environmentally responsible behavior. *Journal of Cleaner Production, 271*, 122565. DOI: https://doi.org/10.1016/j.jclepro.2020.122565

Magliacani, M., & Francesconi, A. (2022). How to feed a culturally sustainable development plan over time: evidence from the Tuscan Mining UNESCO Global Geopark. *Journal of Cultural Heritage Management and Sustainable Development*. DOI: https://doi.org/10.1108/JCHMSD-03-2021-0056

Malhotra, M. K., & Grover, V. (1998). An assessment of survey research in POM: from constructs to theory. *Journal of operations management, 16*(4), 407-425. DOI: https://doi.org/10.1016/S0272-6963(98)00021-7

Markowski, C. A., & Markowski, E. P. (1990). Conditions for the effectiveness of a preliminary test of variance. *The American Statistician*, *44*(4), 322-326. DOI: https://doi.org/10.1080/00031305.1990.10475752

Meijers, M. H., & Stapel, D. A. (2011). RETRACTED: Me tomorrow, the others later: How perspective fit increases sustainable behavior. *Journal of Environmental Psychology*, 31(1), 14-20. DOI: https://doi.org/10.1016/j.jenvp.2010.06.002

Mitchell, V. W., & Haggett, S. (1997). Sun-sign astrology in market segmentation: an empirical investigation. *Journal of consumer marketing, 14*(2), 113-131. DOI: https://doi.org/10.1108/07363769710166756

Mitrică, B., Grigorescu, I., Mocanu, I., Şerban, P. R., Damian, N., Dumitraşcu, M., & Dumitrică, C. (2022). COVID-19 Pandemic and Local Cultural Tourism in the Buzău Carpathians and Subcarpathians (Romania). In Healthcare (Vol. 10, No. 12, p. 2392). Multidisciplinary Digital Publishing Institute. DOI: https://doi.org/10.3390/healthcare10122392

Mohsin, A. (2008). Analysis of Chinese travellers' attitudes toward holidaying in New Zealand: The impact of socio-demographic variables. *Journal of Hospitality & Leisure Marketing, 16*(1-2), 21-40. DOI: https://doi.org/10.1080/10507050802096794

Monaco, S. (2018). Tourism and the new generations: emerging trends and social implications in

Italy. *Journal of Tourism Futures, 4(*1), 7-15. DOI: https://doi.org/10.1108/JTF-12-2017-0053

Okumus, B., Shi, F., & Dedeoglu, S. B. (2021). What is the role of demographics in tourists' attitudes towards foods?. *Journal of Gastronomy and Tourism, 5*(4), 207-220. DOI: https://doi.org/10.3727/216929721X16105303036562

Oliver, R. L. (2010). Satisfaction: A behavioral perspective on the consumer: ME Sharpe. Inc., New York.

Pasaco-González, B. S., Campón-Cerro, A. M., Moreno-Lobato, A., & Sánchez-Vargas, E. (2023). The Role of Demographics and Previous Experience in Tourists' Experiential Perceptions. *Sustainability, 15*(4), 3768. DOI: https://doi.org/10.3390/su15043768

Pencarelli, T., Conti, E., & Splendiani, S. (2017). The experiential offering system of museums: evidence from Italy. *Journal of Cultural Heritage Management and Sustainable Development, 7*(4), 430-448. DOI: https://doi.org/10.1108/JCHMSD-02-2017-0009

Poitras, L., & Donald, G. (2006). Sustainable wine tourism: The host community perspective. *Journal of Sustainable Tourism, 14*(5), 425-448. DOI: https://doi.org/10.2167/jost587.0

Prayag, G., Suntikul, W., & Agyeiwaah, E. (2018). Domestic tourists to Elmina Castle, Ghana: Motivation, tourism impacts, place attachment, and satisfaction. *Journal of Sustainable Tourism, 26*(12), 2053-2070. DOI: https://doi.org/10.1080/09669582.2018.1529769

Prebensen, N. K., Woo, E., Chen, J. S., & Uysal, M. (2013). Motivation and involvement as antecedents of the perceived value of the destination experience. *Journal of travel research, 52*(2), 253-264. DOI: https://doi.org/10.1177/0047287512461181

Presenza, A., Micera, R., Splendiani, S., & Del Chiappa, G. (2014). Stakeholder e-involvement and participatory tourism planning: analysis of an Italian case study. *International Journal of Knowledge-Based Development 8, 5*(3), 311-328. DOI: https://doi.org/10.1504/IJKBD.2014.065320

Proshansky, H. M. (1978). The city and self-identity. *Environment and behavior, 10(*2), 147-169. DOI: https://doi.org/10.1177/0013916578102002

Quintal, V. A., & Polczynski, A. (2010). Factors influencing tourists' revisit intentions. Asia Pacific *Journal of Marketing and Logistics, 22*(4), 554-578. DOI: https://doi.org/10.1108/13555851011090565

Richards, G. (2018). Cultural tourism: A review of recent research and trends. *Journal of Hospitality and Tourism Management, 36*, 12-21. DOI: https://doi.org/10.1016/j.jhtm.2018.03.005

Rishbeth, C., & Powell, M. (2013). Place attachment and memory: Landscapes of belonging as experienced post-migration. *Landscape research, 38*(2), 160-178. DOI:

https://doi.org/10.1080/01426397.2011.642344

Rodríguez-Vázquez, C., Castellanos-García, P., & Martínez-Fernández, V. A. (2023). Cultural Tourism in a Post-COVID-19 Scenario: The French Way of Saint James in Spain from the Perspective of Promotional Communication. *Societies, 13*(1), 16. DOI: https://doi.org/10.3390/soc13010016

Rothschild, M. L. (1984). Perspectives on involvement: current problems and future directions. *ACR North American Advances*.

Siriphanich, S. (2007). *International visitor'perception of cultural heritage for tourism development on the Island of Phuket, Thailand: A marketing mix approach*. Oklahoma State University.

Sivek, D. J., & Hungerford, H. (1990). Predictors of responsible behavior in members of three Wisconsin conservation organizations. *The Journal of environmental education, 21*(2), 35-40. DOI: https://doi.org/10.1080/00958964.1990.9941929

Splendiani, S., Dini, M., Rivetti, F., & Pencarelli, T. (2023). Exploring usage, expected benefits and perceived usefulness of social media in travel agencies: an empirical investigation in Italy. *The TQM Journal*, *35*(9), 83-106. DOI: https://doi.org/10.1108/TQM-10-2022-0312

Sönmez, S. F., Apostolopoulos, Y., & Tarlow, P. (1999). Tourism in crisis: Managing the effects of terrorism. *Journal of travel research, 38*(1), 13-18. DOI: https://doi.org/10.1177/004728759903800104

Stone, R. N. (1984). The marketing characteristics of involvement. *ACR North American Advances*.

Su, L., Hsu, M. K., & Boostrom Jr, R. E. (2020). From recreation to responsibility: Increasing environmentally responsible behavior in tourism. *Journal of Business Research, 109*, 557-573. DOI: https://doi.org/10.1016/j.jbusres.2018.12.055

Tangeland, T., Vennesland, B., & Nybakk, E. (2013). Second-home owners' intention to purchase nature-based tourism activity products–A Norwegian case study. *Tourism Management, 36*, 364-376. DOI: https://doi.org/10.1016/j.tourman.2012.10.006

Tasci, A. D. (2017). Consumer demand for sustainability benchmarks in tourism and hospitality. *Tourism Review, 72*(4), 375-391. DOI: https://doi.org/10.1108/TR-05-2017-0087

Tasci, A. D., Fyall, A., & Woosnam, K. M. (2022). Sustainable tourism consumer: socio-demographic, psychographic and behavioral characteristics. *Tourism Review, 77*(2), 341-375. DOI: https://doi.org/10.1108/TR-09-2020-0435

Teh, L., & Cabanban, A. S. (2007). Planning for sustainable tourism in southern Pulau Banggi: An assessment of biophysical conditions and their implications for future tourism development. *Journal*

of environmental management, 85(4), 999-1008. DOI: https://doi.org/10.1016/j.jenvman.2006.11.005

Temperini, V., Sabatini, A., & Fraboni, P. F. L. (2022). Covid-19 and small wineries: new challenges in distribution channel management. *Piccola Impresa/Small Business*, (1). DOI: https://doi.org/10.14596/pisb.2893

Throsby, D. (2016). Tourism, heritage and cultural sustainability: Three 'golden rules'. In *Cultural tourism and sustainable local development* (pp. 31-48). Routledge.

Tsui, A. S., & O'reilly III, C. A. (1989). Beyond simple demographic effects: The importance of relational demography in superior-subordinate dyads. *Academy of management journal, 32*(2), 402-423. DOI: https://doi.org/10.5465/256368

Unesco (2021). Cutting Edge | Bringing cultural tourism back in the game [accessed: https://www.unesco.org/en/articles/cutting-edge-bringing-cultural-tourism-back-game; consulted on 19/05/2023].

UNWTO (2020). 2020: worst year in tourism history with 1 billion fewer international arrivals [accessed: https://www.unwto.org/news/2020-worst-year-in-tourism-history-with-1-billion-fewer-international-arrivals; consulted on 19/05/2023].

Uysal, M., Jurowski, C., Noe, F. P., & McDonald, C. D. (1994). Environmental attitude by trip and visitor characteristics: US Virgin Islands National Park. *Tourism Management, 15*(4), 284-294. DOI: https://doi.org/10.1016/0261-5177(94)90046-9

Vergori, A. S., & Arima, S. (2020). Cultural and non-cultural tourism: Evidence from Italian experience. *Tourism Management, 78*, 104058. DOI: https://doi.org/10.1016/j.tourman.2019.104058

Vesci, M., Conti, E., Rossato, C., & Castellani, P. (2020). The mediating role of visitor satisfaction in the relationship between museum experience and word of mouth: evidence from Italy. *The TQM Journal, 33*(1), 141-162. DOI: https://doi.org/10.1108/TQM-02-2020-0022

Weaver, P. A., McCleary, K. W., Lapisto, L., & Damonte, L. T. (1994). The relationship of destination selection attributes to psychological, behavioral and demographic variables. *Journal of Hospitality & Leisure Marketing, 2*(2), 93-109. DOI: https://doi.org/10.1300/J150v02n02_07

White, D. D., Virden, R. J., & Van Riper, C. J. (2008). Effects of place identity, place dependence, and experience-use history on perceptions of recreation impacts in a natural setting. *Environmental Management, 42*, 647-657. DOI: https://doi.org/10.1007/s00267-008-9143-1

Xu, F., Buhalis, D., & Weber, J. (2017). Serious games and the gamification of tourism. *Tourism management, 60*, 244-256. DOI: https://doi.org/10.1016/j.tourman.2016.11.020

Yang, H., Huang, X., Westervelt, D. M., Horowitz, L., & Peng, W. (2023). Socio-demographic factors shaping the future global health burden from air pollution. *Nature Sustainability, 6*(1), 58-68. DOI: https://doi.org/10.1038/s41893-022-00976-8

Zatori, A., Smith, M. K., & Puczko, L. (2018). Experience-involvement, memorability and authenticity: The service provider's effect on tourist experience. *Tourism management, 67*, 111-126. DOI: https://doi.org/10.1016/j.tourman.2017.12.013

Zedeck, S., & Cascio, W. F. (1984). Psychological issues in personnel decisions. *Annual review of psychology, 35*(1), 461-518. DOI: https://doi.org/10.1146/annurev.ps.35.020184.002333