

The role emotions play in loyalty and WOM intention in a Smart Tourism Destination Management

Sergio Nieves-Pavón, Natalia López-Mosquera^{*}, Héctor Jiménez-Naranjo

Departamento de Economía Financiera y Contabilidad, Facultad de Empresa, Finanzas y Turismo, Universidad de Extremadura, Avenida de la Universidad s/n, 10071-Cáceres, España

ARTICLE INFO

Keywords:

Emotions
Moral norm
Smart tourism destination
TPB
Word-of-mouth

ABSTRACT

This study applies an extension of the theory of planned behaviour (TPB) by including moral regulation and negative and positive emotions to determine the attitudinal and emotional factors that influence tourist loyalty and word-of-mouth. Structural equation modeling was applied to a sample of 303 face-to-face interviews with tourists visiting the smart tourism destination of Cáceres, a city that has also been declared a World Heritage site. The results indicate that the original components of the TPB, moral norms and positive and negative emotions significantly impact loyalty and intention to recommend the smart destination. Additionally, the proportion of variance explained shows that including moral norms and positive and negative emotions significantly improve the explanatory power of the original model. The joint communication of information in local campaigns and through social networks offering memorable experiences is the main strategy destination managers should follow in order to promote socially and environmentally responsible attitudes, positive emotions, and a greater intention to recommend the destination and build loyalty to it.

1. Introduction

Currently, 56.2 % of the world's population inhabits cities and urban areas, and by the year 2030 this is expected to increase to 60.4 %. In the case of Europe, cities will account for 77.5 % of the population by 2030 (United Nations, 2018). Many of these urban areas are also tourist attraction hubs due to the wide range of features they offer, as they concentrate a great number of tourist resources and activities (Romero-García et al., 2019). Added to this is the technological development they have undergone in recent years, which has favoured the emergence of what is known as the smart tourism destination (STD) (Gelster et al., 2021), the main mission of which is to maximize the destination's competitiveness and consumer satisfaction with the ultimate purpose of enhancing the tourist experience (Del Vecchio et al., 2018). Therefore, STDs seek to improve quality of life and tourism communication (Um & Chung, 2019). Despite the importance of information and communications technology (ICT) in tourism, often stakeholders do not understand how to take advantage of the benefits of destination intelligence (Buhalis, 2022). Therefore, stakeholders need to learn how to implement the benefits that STD offers them. A number of international studies have already addressed these issues through the basic human

values theory (Pereira et al., 2021), arousal theory (Wang, Wang, et al., 2020; Wang, Xie, et al., 2020), the technology acceptance model (Kang & Namkung, 2019; Sakshi et al., 2020), perceived value theory (San-Martín et al., 2020; Singh et al., 2021), service-dominant logic (Wang et al., 2013) and the theory of planned behaviour (Ghaderi et al., 2019).

Undoubtedly, one of the most widespread theories is the Theory of Planned Behaviour (TPB), which has been used in multiple fields of study, including environmental sciences (Berki-Kiss & Menrad, 2022; Qi et al., 2021), computer science (Doanh & Bernat, 2019; Rana et al., 2019), psychology (Neto et al., 2020), business management (Zar-mohzzabieh et al., 2019) and behavioural sciences (Kim, 2014; Mahmud & Osman, 2010). There are several extended versions of the original TPB model, offering a suitable process for predicting the behaviour of individuals (Ajzen, 1991; Lam & Hsu, 2004; Meng & Choi, 2018). Specifically, if we focus on our field of study, the tourism sector, different empirical studies have confirmed the usefulness of the extended version of the TPB in this type of research (Choe et al., 2020; Kun-Shan & Teng, 2011; Park et al., 2017; Quintal et al., 2010; Soliman, 2019). Previous studies, in other contexts, have used extended versions of the TPB, including emotions and moral norms, to study its impact on intention to reduce food waste (Jian-Ming & Long-Chang, 2016; La

^{*} Corresponding author at: School of Business, Finance and Tourism, Avd de la Universidad s/n, 10003 Cáceres, Spain.

E-mail address: nmosquera@unex.es (N. López-Mosquera).

Barbera et al., 2022; Russell et al., 2017), individual green behaviours (Razali et al., 2020; Yuriev et al., 2020), sustainable tourism (Hu et al., 2019; Liu et al., 2020) or tourists' intention to travel to rural destinations (Azhar et al., 2022). In relation to the use of the extended TPB model in an STD, only one study has examined the role that the original components of the TPB – i.e. attitudes, behavioural control and subjective norms – exert on memorable experiences through smart tourism technologies (Torabi et al., 2022). However, so far, no study has been conducted that has implemented an extended version of the TPB that incorporates emotional dimensions and moral norms together in the context of an STD.

Taking the aforementioned studies as a reference, the purpose of this research was to fill the existing gap in the tourism literature on the explanatory power of the extended version of the TPB in relation to STDs, determining the influence exerted by these psychosocial and emotional factors (attitudes, perceived control, subjective norms, moral norms and emotions) on the loyalty and word-of-mouth (WOM) of tourists visiting an STD. The study was conducted through a sample of 303 face-to-face interviews with tourists visiting a popular urban tourist destination in Spain – Cáceres – declared a UNESCO World Heritage Site in 1986 and which is an STD.

This research presents important theoretical and practical contributions in the context of STDs. The integration of emotions and moral norms into the TPB allows capturing the complexity and multidimensionality of tourism behaviour in an STD. The addition of these variables complements and extends the traditional components of the TPB by providing a substantially improved explanation of tourist behaviours by facilitating a more accurate and complete understanding of the factors that influence or trigger loyalty and WOM behaviours in a STD. This provides a sound theoretical basis for the design of tourism strategies and policies that promote tourist satisfaction, loyalty and positive destination promotion. Specifically, from a practical perspective, creating positive emotional experiences for tourists in the STD, through offering high-quality services and personalising experiences, can increase the likelihood that tourists will be loyal to the destination and share positive recommendations. Conversely, in the event of situations that generate negative emotions, it is important to have an effective crisis management plan in place to quickly address problems, provide solutions and communicate transparently with affected tourists. On the other hand, encouraging and promoting positive moral standards in the STD can facilitate the adoption of sustainable, ethical and responsible practices, favouring the creation of a positive image of the destination and increasing the attraction of tourists who value and identify with these values. Therefore, regularly collecting and analysing feedback from tourists on their attitudes, emotional experiences and perceptions of moral standards in the STD can help to assess the impact of the strategies implemented, identify areas for improvement and make management adjustments to create a positive experience, foster loyalty and promote positive recommendations.

The paper is organised as follows: Section 2 conceptualises the theoretical framework. Section 3 presents the study methodology and data analysis. The results of the measurement model and the structural model are shown in Section 4. Section 5 contains the discussion and Section 6 summarises the main conclusions, limitations and future strategies for action.

2. Theoretical framework

2.1. Smart tourism destination

STDs originated with the development of smart city projects (Boes et al., 2015; Celdran-Bernabeu et al., 2018). According to Neuhofer et al. (2015), smart tourism refers to particular applications that increase tourists' experiences and create added value for costumers. More specifically, an STD is defined as obtaining information from physical and digital sources which, when combined with advanced technology,

allows experiences and value propositions to be offered that focus on efficiency, sustainability and improving the tourist experience (Gretzel et al., 2015). Recently, it has been pointed out that STD stakeholders see the need to counter the dominant focus on technology by highlighting aspects such as sustainability, the involvement of diverse actors and interrelated networks, the need for understanding and learning, and lack of transparency (Gelter et al., 2022). This concept is different from e-tourism, which focuses exclusively on the application of technology: STDs also seek to create enhanced destination experiences (Celdran-Bernabeu et al., 2018; Gretzel et al., 2015). Their main goal is to use the technological infrastructure to improve the tourist experience, along with efficiency when managing their own resources, to maximize both their competitiveness and tourist satisfaction in a sustainable way in the long term (Buhalis & Amaranggana, 2013).

In order to become an STD, a number of conditions must be met. According to Cavalheiro et al. (2020), to be an STD, a model based on four key elements must be implemented: tourism destination, smart ICT infrastructure, tourism applications, and a smart tourism destination. Other authors also point out that the components an STD should have are attractions, accessibility, amenities, available packages, activities and ancillaries (Buhalis & Amaranggana, 2013), as well as sustainability (AENOR, 2018; de Avila Muñoz & Sánchez, 2015; Flores Ruiz et al., 2018).

Cáceres began its transformation into an STD in 2015 through its participation in the second call for smart cities under the project "Cáceres, Patrimonio Inteligente" (Cáceres, Smart Heritage). The goals of this project are to conserve, enhance and raise awareness of heritage; acquire knowledge on the behaviour of visitors and citizens in terms of their relationship with the city; activate strategies to build visitor loyalty; diversify the consumption of the services on offer; and structure a management system and model that enhance the local business sector.

To achieve these objectives, Cáceres has implemented several initiatives, including monitoring systems for heritage sites; using sensors to track visitors to the city; developing web portals and mobile apps; and creating digital content, marketing solutions and integrated tourism management systems.

At present, projects and research associated with STDs are expanding, and the study of sustainability and accessibility is particularly prominent (Romão et al., 2018). Specifically, the study carried out by Mandić and Praničević (2019) analysed STDs in terms of six elements that comprise the attractiveness of a tourist destination, concluding that implementing an STD contributes to sustainability (visitor management and reduced resource use) and accessibility (information provision, navigation, travel planning and site availability). In addition to this, a study carried out by Almobaideen et al. (2017) used technology to create tourist routes located close to medical centres, allowing greater travel accessibility for the chronically ill and those with difficulties.

At the same time, among the most studied theories on STD are the extensive cognitive-affective-normative model (García-Milon et al., 2020), service dominant logic (Tavitiyaman et al., 2021), arousal theory (Wang, Wang, et al., 2020; Wang, Xie, et al., 2020), stress-coping theory (Kim et al., 2021), the elaboration likelihood model (Yoo et al., 2017), the technology acceptance model (Kaplanidou & Vogt, 2006), and the TPB (Ghaderi et al., 2018; Yi et al., 2020).

From all the theories mentioned, the TPB has been selected because of its greater complexity and ability to integrate different cognitive, affective and normative factors into a single model. In addition, its ability to analyse the interactions that may exist between the different factors and the joint inclusion of attitudes, social norms and behavioural control makes it more complete and accurate in explaining behaviour (Ajzen, 1991). Therefore, in the context of STD, it provides a clear framework for identifying areas (factors) where interventions can be made to influence tourists' intentions and behaviours (Chansuk et al., 2022; Juschten et al., 2019; Panwanitdumrong & Chen, 2021).

2.2. The TPB, loyalty and WOM

The TPB falls within social psychology, addressing how individuals' own attitudes and norms, as well as those of other individuals or groups, determine their behavioural intentions and ultimate behaviour (Crouch et al., 2004). It should therefore be noted that this is one of the most prominent socio-psychological models in the fields of tourism, leisure and hospitality management (Ulker-Demirel & Ciftci, 2020). Tourist behaviour still draws the attention of tourism researchers who wish to understand the motivations underlying the decision-making processes of tourists in order to take the necessary actions in the tourism environment (Ulker-Demirel & Ciftci, 2020).

The TPB psychosocial model, which has its origins in the fields of psychology and sociology, is grounded in self-interest and deliberation based on rational choice. This model mainly reflects the fact that attitudes and perceived possibilities are necessary to engage in specific behaviour (Ajzen, 1991). It could be argued that the TPB model reflects people's future willingness to change their attitudes and norms in response to circumstances that are perceived to be individually rewarding (López-Mosquera et al., 2014).

The TPB is an extension of the theory of reasoned action (TRA) which was necessitated by the limitations of the original model when it came to dealing with behaviours over which people have incomplete volitional control (Ajzen, 1991). According to the original TPB model, the closest predictors of behaviour are behavioural intentions, which in turn are preceded by attitudes, subjective norms, and perceived behavioural control (Hai et al., 2023). Attitudes are generally viewed as a person's overall evaluation of an object, person or place, and as fundamentally influencing subsequent intentions and behaviour (Bagozzi, 1992). Subjective norms represent the social influence exerted by those closest to the individual (family, friends, colleagues, etc.) on their behavioural decision-making—in other words, the individual takes the beliefs and choices of those close to them into consideration when making a behavioural decision (Bagozzi & Lee, 2002). Perceived behavioural control determines the individual's ease or difficulty implementing particular behaviour, depending on the necessary resources, time, and opportunities to undertake it (Ajzen, 1991). Therefore, the main premise of the original TPB model is that people who have a positive attitude towards the behaviour, receive the support of others who are important to them, and think that they are able to participate actively in the behaviour in question will be more likely to implement that behaviour (Ajzen, 1991; Liebe et al., 2011).

To date, the original TPB model has been successfully used in tourism studies to analyse various behavioural intentions and final behaviours such as accommodation decisions (Tajeddini et al., 2021), risk and uncertainty in making a travel decision (Quintal et al., 2010), and predicting travel behaviour (Park et al., 2017). Few studies have analysed the influence of attitudinal factors on loyalty (Chen, 2016; Pai & Yeh, 2015; Tajeddini et al., 2021) and WOM (Fu et al., 2015; Tercia & Teichert, 2017; Yuda Bakti et al., 2020). Loyalty is understood as "a deeply held commitment to re-buy or re-patronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same-brand-set purchasing, despite situational influences and marketing efforts having the potential to cause behavioural switches" (Oliver, 1999, p. 34). WOM is communication between one person and another in which one of them shares their opinion about a service, product or brand (Ferguson et al., 2010).

According to these studies, people who have a positive attitude towards a destination (attitude) should have greater loyalty (Yang et al., 2022) and an increased capacity to recommend a tourist destination to others (Agag & El-Masry, 2016). On the other hand, people who perceive support from those close to them (subjective norm) have a greater disposition towards loyalty (Tajeddini et al., 2021) and an increased capacity to recommend a tourist destination to others (Kalia et al., 2022). Finally, people who believe in their own ability to develop a specific behaviour (perceived behavioural control) should have greater

loyalty (Chen, 2016) and an increased capacity to recommend a tourist destination to others (Yuda Bakti et al., 2020). Therefore, based on the original TPB components, the first three study hypotheses are postulated:

H1. Attitude positively influences tourist WOM (a) and loyalty (b) in terms of a STD.

H2. Subjective norms positively influence tourist WOM (a) and loyalty (b) in terms of a STD.

H3. Perceived behavioural control positively influences tourist WOM (a) and loyalty (b) in terms of a STD.

Few studies have examined possible relationships between attitudes, subjective norms and perceived behavioural control, despite high correlations between these variables (Gansser & Reich, 2023; Maheshwari, 2022; Xie et al., 2022). The strength of the association between attitudes and subjective norms is remarkable, suggesting that subjective norms influence attitudes (López-Mosquera et al., 2014; Qi et al., 2021; Quintal et al., 2010). In other words, people take the expectations of others into account when forming their own attitudes. Subjective norms have also been shown to determine perceived control over behaviour (Lim & An, 2021; Quintal et al., 2010; Soorani & Ahmadvand, 2019). Consequently, social pressure from those people who are important to us enables or inhibits the way in which we act as individuals. Therefore:

H4. Subjective norms positively influence the attitude of tourists towards a STD.

H5. Subjective norms positively influence tourists' perceived behavioural control towards a STD.

2.3. Moral standards and the TPB

Although several studies support the view that the original TPB constructs are useful for predicting the intentions and behaviour of individuals, it is evident that the TPB model still leaves a large percentage of variance unexplained in terms of intention and behaviour (Han & Hansen, 2012; Hu et al., 2018; Wang, Wang, et al., 2020; Wang, Xie, et al., 2020). For this reason, several authors have extended the original TPB model to improve its explanatory power (Du & Pan, 2021; Karimi & Saghaleini, 2021; Zhang et al., 2021). The TPB model has been widely criticized for the absence of a moral obligation component that reflects the individual's perception of the moral rightness or wrongness of a given behaviour (Ajzen, 1991). According to this postulate, several studies have concluded that moral norms not only determine intentions and behaviours, but also improve the predictive power of the original TPB model (Yuda Bakti et al., 2020). We can understand the moral norm as being "the reflection of the idea that people behave in a certain way because they believe it is the right thing to do" (Wang et al., 2021, p. 2).

In this study, loyalty and a positive WOM towards an STD are considered to be behavioural intentions that are likely to contain elements of personal and social morality. It has been demonstrated that individuals are highly cognizant of the negative consequences stemming from not acting in a prosocial and socially responsible manner, feeling accountable for the results of their behaviour whether it be in favour of or against the environment (Han & Hwang, 2015). We therefore consider it appropriate to include this variable in the model because of its high explanatory value, as shown in previous research (Razali et al., 2020; Shahangian et al., 2021).

STDs make use of advanced technology, such as mobile apps, sensor systems or information systems. All of this can raise ethical dilemmas around privacy or the security of one's personal data. This implies that visitors may find their own values and moral principles conditioned by the technological context surrounding STDs, and this may condition their visit to the destination, their loyalty and their recommendations to others. When visiting an STD, tourists expect these smart destinations, unlike others, to promote and apply ethical practices and policies that

not only are respectful of the environment, the economy or society in general, but are in line with their own moral standards. Other studies have reflected the importance of considering moral standards in the use of green technologies (Yoon, 2018). Therefore, the study of moral standards in the context of STDs is indispensable to determine the congruence between the moral standards of tourists and their attitudes and behaviours in this type of destination, which is so subject to questions of morality. On the basis of the above, it is postulated that:

H6. Moral norms positively influence tourist WOM (a) and loyalty (b) in terms of a STD.

In addition, it has been shown that moral norms are closely related to attitudes and subjective norms in the context of various behaviours (Conner & Armitage, 1998). Moral norms not only help explain intentions, but also improve the prediction of an individual's attitude (Raats et al., 1995). Several studies have found that people's attitudes seem to be determined by moral norms (Chan & Bishop, 2013; López-Mosquera, 2016; Maleksaeidi & Keshavarz, 2019; Tao et al., 2021). For example, the study conducted by Tao et al. (2021) suggests that individuals who feel a moral obligation to reduce carbon emissions perceive that reducing carbon usage is beneficial for the environment. In other words, our perceptions of right and wrong lead to a positive or negative assessment of the behaviour we should engage in. Therefore:

H7. Moral standards positively influence a tourist's attitude towards a STD.

Furthermore, it has been shown that subjective norms determine moral norms (López-Mosquera, 2016; López-Mosquera et al., 2014; Tao et al., 2021). Specifically, the social pressure we receive from those around us—that is, from those people who are important to us—affects our moral perception of what is or is not correct. For example, in a study on sustainable tourism based on low carbon emissions, it has been demonstrated that Chinese tourists, in order to preserve their status and image within the social group to which they belong, comply with the basic norms of said social group (Chen & Wu, 2022). This leads us to the eighth study hypothesis:

H8. Subjective norms positively influence a tourist's moral norms in terms of a STD.

2.4. Emotions and the TPB

Emotions can be understood as reactions to an object or event and comprise both an emotional and a cognitive element (Forgas, 1994; Lazarus & Lazarus, 1991), such as a visit to a destination in the context of an STD using technology in an immersive way. Consequently, including emotions can increase the explanatory power of decision-making models (Bagozzi et al., 1999; Cohen et al., 2008; Erevelles, 1998; Loewenstein & Lerner, 2003; Pfister & Böhm, 2008). Despite the importance of emotions, the cognitive value of these has been addressed through other cognitive drivers such as attitudes, subjective norms and perceived behavioural control (Ajzen, 1991; Russell et al., 2017).

According to Morris et al. (2002), models based on cognition do not adequately measure feelings, assigning emotional processes a less relevant role and making it difficult to understand consumer behaviour. So far, few studies have investigated the influence of emotions on behavioural intention (Berki-Kiss & Menrad, 2022; Kossmann & Gomez-Suarez, 2019; O'Connor et al., 2017), despite the fact that their importance in decision-making and their impact on behaviour has been highlighted (Graham-Rowe et al., 2014; Triandis, 1977; Weiss & Beal, 2005).

Emotions are an antecedent of attitudes and behaviours because they influence how we perceive and respond to a given stimulus (Berki-Kiss & Menrad, 2022)—in our case, the visit to an STD. Our feelings and emotions influence our attitudes towards a destination, which can affect our future decisions and actions during and after the visit. Therefore, the

study of emotions generated in an STD, together with attitudes, norms and perceived control by visitors, can help to provide further explanation of the causes that determine tourists' behavioural intentions, such as loyalty and WOM, as other authors have shown in different contexts (Chen, 2016; Londono et al., 2017; Sukhu et al., 2019). As such, they are the starting point of the destination decision-making formation process and not a trigger for it (Juschten et al., 2019; Londono et al., 2017). In addition, positive emotions can be aroused when users are happy, interested or delighted with their visit to the destination, which will trigger positive attitudes and behavioural intentions or, on the contrary, generate negative emotions if they are dissatisfied or bored, which will result in the emergence of undesired attitudes and behaviours.

In addition, emotions have been shown to play a significant role in behavioural intentions (Londono et al., 2017; Moons & De Pelsmacker, 2012; Silva et al., 2021; Wang, 2009; Xie et al., 2023). Thus, studies such as those by Hosany et al. (2015) and Hosany and Gilbert (2010) developed a scale that measures the diversity and intensity of tourists' emotional experiences towards destinations. On the other hand, other studies have demonstrated the influence of negative emotions on tourism perceptions (Wai Lai et al., 2020).

It is important to study the emotions that arise in an STD because they are a fundamental part of the tourism experience and can have an impact on tourists' attitudes, their loyalty towards the destination, and the likelihood that they will recommend the STD to others. Furthermore, proper management of emotions in an STD can contribute to improving the quality of the tourism services offered, the competitiveness and profitability of the destination, and the image and quality of life of the host city and its citizens. It is therefore important to understand how emotions, both positive and negative, can influence tourists' behaviour and how these emotions can be effectively managed to create a positive and sustainable tourism experience. In particular, positive emotions can act on an STD in different ways, as aspects such as unique technological experiences, technology-based services and amenities can elicit positive emotions. Negative emotions, on the other hand, can act differently in an STD context. For example, issues related to the overuse of technology or the risk of data privacy or technology-induced failures can provoke negative emotions. Previous studies have already pointed out the importance of studying emotions in response to an STD (García-Milon et al., 2020; Wang, Wang, et al., 2020; Wang, Xie, et al., 2020).

The link between emotions and the components of the TPB has been successfully applied in several studies assessing sustainable consumer behaviour, driving and electric cars (Moons & De Pelsmacker, 2015) and the practice of physical activity (Wang, 2011). In the tourism sector, emotions are considered to be one of the main psychological determinants that shape the tourist experience (Crouch et al., 2004). Malhotra (2005) highlighted the need to investigate how emotions interact with intentions, attitude and general behaviour. In addition, predictors of TPB are based on individual beliefs, and emotions can contribute to the conception of these (Ajzen, 2011; Bang et al., 2000; Frijda & Mesquita, 2000). Moreover, emotions, depending on their nature and meaning for the person who experiences them, have important implications for behaviour as they generate impulses to take action or stimulate approach or avoidance tendencies (Bagozzi et al., 1999; Lazarus & Lazarus, 1991). For this reason, it is essential to study the positive and negative emotions experienced in an STD in order to gain a better understanding of the feelings and behaviours exhibited by tourists. For example, a study related to the purchase of organic or fair trade products in Germany brought to light the suitability of using emotions with the original variables of the TPB and behavioural intentions (Berki-Kiss & Menrad, 2022). For that reason, this study analyses the relationship between positive and negative emotions and the components of the TPB, loyalty and WOM by examining how far these behavioural intentions to visit an STD are influenced by a tourist's emotional response.

H9. Positive emotions have a positive impact on moral norms (a),

attitudes (b), subjective norms (c), and moral norms (d) perceived behavioural control of tourists towards an STD.

H10. Positive emotions have a positive impact on WOM (a) and the loyalty (b) of tourists towards a STD.

H11. Negative emotions have a negative impact on tourist moral norms (a), attitudes (b), subjective norms (c), and moral norms (d) perceived behavioural control of tourists towards an STD.

H12. Negative emotions have a negative impact on WOM (a) and loyalty (b) of tourists in terms of a STD.

Finally, WOM is an excellent way to attract new tourists and retain existing tourists in an STD, as these are highly dependent on what other tourists say about a destination. WOM originates from attitudinal loyalty, which refers to the likelihood that customers will continue to support a service provider, share business recommendations, engage in positive conversations, and voluntarily recommend a service provider to other potential customers (Lee & Wong, 2021; Oliver, 1999; Ranaweera & Prabhu, 2003). WOM recommendations eliminate doubt, generating greater confidence and enthusiasm and preventing tourists from breaking their future relationship with the destination. In the business context, Fornell (1992) argued that loyalty is determined by WOM, among other factors, and Ferguson et al. (2006) stated that this can be a powerful marketing tool when it comes to building customer loyalty. The effect of WOM on loyalty in the context of tourism has been previously studied (Buhalis et al., 2020). Therefore, tourists who are willing to share and recommend the destination to their loved ones are more likely to develop a strong bond and loyalty to the destination. This is because their willingness to recommend it indicates that they are satisfied with their experience and are likely to return to the destination in the future along with their loved ones. For this reason, we believe that those who show positive WOM will be more likely to repeat their visit and be more loyal to the destination because of their experiences. This leads us to the last study hypothesis, which states:

H13. WOM has a positive impact on the loyalty of tourists to a STD.

All these hypotheses are presented together in Fig. 1.

3. Material and methods

3.1. Procedure and measures

In this study, a quantitative data collection questionnaire was developed to test the hypotheses developed in the previous section. Prior to conducting the survey, a pilot study was conducted on a sample of 30 subjects to ensure the validity and usability of the questionnaire. The pilot study included meetings and discussions with experts from the tourism sector, as well as the participation of focus groups, which allowed for minor adjustments based on their contributions. In addition, following the pilot study data collection, it was confirmed that all Cronbach's alpha coefficient values exceeded the threshold of 0.7.

Once the pilot study had been conducted, the purposive sampling technique was utilized to collect responses from the sample of the visitors of Cáceres, stratified by age and sex. Data were collected in the period from August to November 2021. The national and international tourism industry experienced a downturn in 2020 and 2021 due to the COVID-19 pandemic. However, Cáceres is a World Heritage City by UNESCO in 1986 and has implemented an STD Project that places it at the forefront of current trends in tourism management and promotion. Cáceres began its transformation into an STD in 2015 through its participation in the second call for smart cities under the project "Cáceres, Patrimonio Inteligente" (Cáceres, Smart Heritage). The goals of this project are to conserve, enhance and raise awareness of heritage; acquire knowledge on the behaviour of visitors and citizens in terms of their relationship with the city; activate strategies to build visitor loyalty; diversify the consumption of the services on offer; and structure a

management system and model that enhance the local business sector.

To achieve these objectives, Cáceres has implemented several initiatives, including monitoring systems for heritage sites; using sensors to track visitors to the city; developing web portals and mobile apps; and creating digital content, marketing solutions and integrated tourism management systems.

At the same time, all means of security were used in the surveys to minimize any risks. In addition, it should be noted that certain age groups were more reluctant to have contact with the interviewers. Because the survey was conducted in a post-pandemic period, some respondents showed some reluctance to answer the survey and this, in turn, may have affected the significance of some variables due to the fear and uncertainty generated by the pandemic. Therefore, we are presented with a post-pandemic scenario in the study. A total of 303 face-to-face interviews were conducted with domestic and international tourists who were present in the old town of Cáceres, using surveys administered by trained personnel who used electronic devices to collect the responses. All respondents were informed of the survey's objective, the responsible entity, and the guarantee of anonymity and confidentiality of their data. Additionally, respondents were informed about the meaning and main features of an STD like the city of Cáceres and were asked beforehand whether they used the destination's tourism apps during their visits. Only those who responded affirmatively to this question participated in the survey, as all the questions revolved around the use of this technology and users' perceptions of it.

The survey was conducted in the context of an STD, which implies that the destination itself uses technology to offer services to all tourists, whether or not they use an STD app. Technology is present in the destination, and tourists directly or indirectly receive its benefits. Examples of initiatives include the use of a smart destination platform for destination management, the implementation of innovative technologies for heritage monitoring and conservation, the collection of tourism information to provide personalized and real-time offers, interactive information displays, QR codes, the creation of smart routes and the development of mobile apps. A total of 303 valid questionnaires were completed with a margin of error of 5.63 % at 95 % (Table 1). The data were collected in accordance with data protection legislation.

The questionnaire was structured into an introduction and three thematic blocks. The introduction contained a brief explanation of the survey to be carried out and described what an STD is, specifying the city of Cáceres.¹ Part 1 contained questions on the respondent's attitudinal profile (attitudes, subjective norm, behavioural control). The second part focused on their emotional/psychological profile (moral norms, emotions). Finally, the third part contained questions related to their socio-demographic profile (age, gender, income, educational level and travelling companions). All the questions, except those related to the socio-demographic profile, were measured on a Likert scale of 1 to 7

¹ In order to facilitate the degree of knowledge of those surveyed about what its designation as a STD means for the city of Cáceres, it is explained that the 'Cáceres Patrimonio Inteligente' project is aimed at conserving, enhancing and raising awareness of its heritage, acquiring greater knowledge of the behaviour of visitors and citizens in their relationship with the city, activating strategies to build visitor loyalty, diversifying the consumption of the services on offer and structuring a management system and model that strengthens the local business sector. One of the initiatives has been the development of a mobile APP for tourism and Cáceres Card. In addition, innovative activities have been implemented as a complementary tourist offer, such as the Innovative Tourist Routes with the aim of getting to know other attractions of the city apart from the jewel in the crown that is the old town. Finally, it should be added that all these measures have led to the revaluation of the destination through innovation and technology, leading to an increase in competitiveness, an improvement in efficiency, as well as a boost to the sustainable development of the destination, not only in the environmental field, but also in the economic and socio-cultural fields (Adapted from the information published by the Cáceres City Council on its website: <https://www.ayto-caceres.es>).

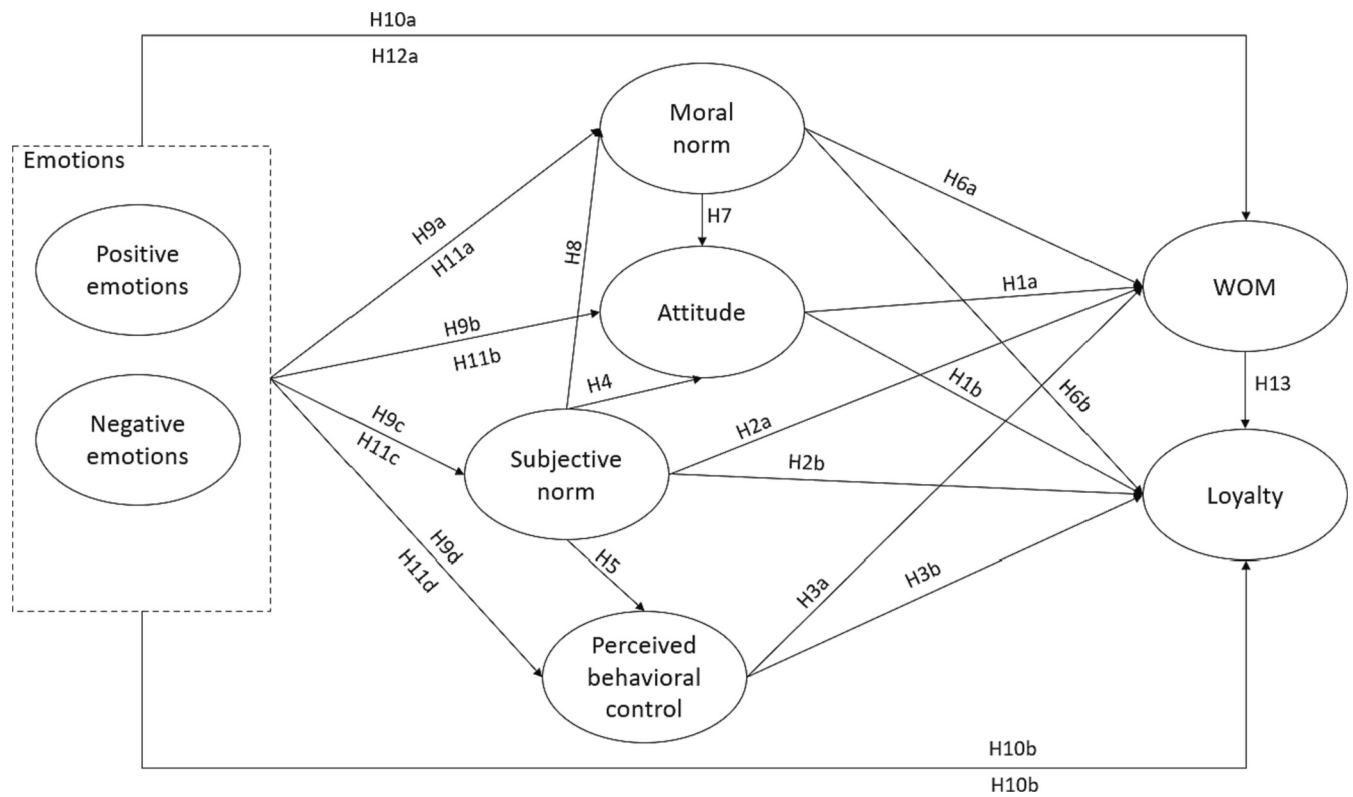


Fig. 1. Conceptual model of the extended version of the TPB. Source: In-house.

Table 1
Sample characteristics.

Sample characteristics	Respondents (n = 303)	Frequency
Gender		
Female	158	52,1 %
Male	145	47,9 %
Age		
<20	3	1,0 %
20–29	153	50,49 %
30–39	63	20,8 %
40–49	44	14,5 %
50–59	22	7,26 %
60–69	16	5,28 %
70+	2	0,6 %
Travel companions		
Alone	18	5,9 %
Partners	102	33,7 %
Families	94	31,0 %
Friends	89	29,4 %
Education		
High school or below	50	16,4 %
Bachelor's degree	53	17,5 %
Vocational training	45	14,9 %
Master's degree or above	155	51,2 %
Monthly income		
<1.000 €	169	55,8 %
1.000–3.000 €	125	41,3 %
>3.000 €	9	3,0 %

points (1 = strongly disagree, 7 = strongly agree) to make the questionnaire easier for the respondents to fill in. All measurement items were adopted from existing studies and modified to fit the study context to ensure content validity, reliability and readability. The reference literature used in their development is listed in Table 2.

3.2. Data analysis

The current study used SPSS 26 and AMOS 26.0 to analyse the data with the maximum likelihood algorithm. Following Anderson and Gerbing's (1988) two-step approach, a measurement model was estimated using confirmatory factor analysis (CFA), and structural equation modeling (SEM) was used to test causal relationships. The following fit indices were calculated to determine how the model fit the data: chi squared (χ^2), comparative fit index (CFI), goodness of fit index (GFI) and normed fit index (NFI). The indices should be close to 0.9 or 1.0 and the robustness of mean squared error approximation (RMSEA) should ideally lie between 0.05 and 0.08.

Finally, we confirm the discriminant validity of the scales because the average variance extracted (AVE) of the latent variables is higher than the squared correlations between the latent variables (Fornell & Larcker, 1981), except for perceived behavioural control (PBC), which presents higher correlation values (Table 3). Despite finding PBC to be a weak construct, it is able to deliver a unique position of the measurement model with respect to other variables and does not affect the overall fit of the model, as has been found in other studies (Sadiq et al., 2021). The correlation matrix also showed that most of the constructs are highly correlated. All the tests performed therefore demonstrated the reliability and validity of the proposed measurement model.

4. Results

4.1. Confirmatory factor analysis

Initially, a confirmatory factor analysis (CFA) including all latent variables (attitude, subjective norms, perceived behavioural control, moral norms, loyalty and WOM) was run, as shown in Table 1. The CFA model fits well with the data ($\chi^2 = 943.261$; $df = 433$, $GFI = 0.84^2$; $CFI = 0.949$; $NFI = 0.911$; $RMSEA = 0.062$) and all standardized regression coefficients in the measurement model were significant at the 0.01 level.

Table 2
Reliability and confirmatory factor analysis for the expanded TPB model scales^a.

Variables and items	Mean	SD ^b	β	CR	AVE
Positive emotions ($\alpha = 0.93$) ^c				0.92	0.75
[PE01] Enjoyable.	6.03	1.29	0.93		
[PE02] Cheerful.	6.10	1.22	0.92		
[PE03] Thrilling.	5.64	1.62	0.81		
[PE04] Amusing.	5.68	1.56	0.80		
Negative emotions ($\alpha = 0.91$) ^c				0.91	0.72
[NE01] Disappointed.	1.63	1.11	0.87		
[NE02] Upset.	1.58	1.08	0.87		
[NE03] Bored.	1.81	1.16	0.75		
[NE04] Annoyed.	1.53	1.10	0.90		
Attitude ($\alpha = 0.94$) ^c				0.92	0.64
(AT01) I think visiting this STD is very positive	6.35	0.91	0.77		
(AT02) I think a visit this STD is a must!	5.97	1.21	0.86		
(AT03) I think visiting this STD is very smart.	5.97	1.17	0.84		
(AT04) I think visiting this STD is very useful.	6.05	1.16	0.85		
(AT05) I think visiting this STD is very eco-friendly.	5.64	1.17	0.72		
(AT06) I think visiting this STD is an attractive idea.	6.39	0.97	0.80		
(AT07) I think visiting this STD is interesting.	6.41	0.90	0.84		
(AT08) I think visiting this STD is relaxing.	6.10	1.16	0.78		
(AT09) I think the residents of the STD of Cáceres are hospitable.	6.04	1.10	0.69		
Subjective norm ($\alpha = 0.96$) ^c				0.96	0.90
(NS01) People who are important to me think that I should visit this STD.	5.64	1.45	0.95		
(NS02) People who are important to me want me to visit this STD.	5.70	1.46	0.96		
(NS03) People whose opinions I value prefer that I visit this STD.	5.65	1.21	0.94		
Moral norm ($\alpha = 0.86$) ^c				0.87	0.77
(NM01) I feel I must visit this STD.	5.85	1.38	0.96		
(NM02) I will feel guilty if I don't visit this STD.	5.41	1.47	0.79		
Perceived behavioural control ($\alpha = 0.80$)				0.79	0.57
(PB01) I am sure that if I want, I will recommend this STD.	6.2	1.21	0.82		
(PB02) Visiting this STD depends exclusively on me	5.77	1.41	0.74		
(PB03) I have the resources, time and opportunity to visit this STD.	5.97	1.31	0.70		
WOM ($\alpha = 0.96$) ^c				0.96	0.91
(WM01) I would recommend visiting this STD to my friends and family.	6.26	1.22	0.94		
(WM02) I would offer positive opinions about this STD to other people.	6.30	1.10	0.95		
(WM03) I would encourage friends and family to visit this STD.	6.29	1.14	0.97		
Loyalty ($\alpha = 0.88$) ^c				0.89	0.66
(LY01) When I need to go on a trip (a getaway), this STD is my first choice.	5.31	1.31	0.77		
(LY02) I like visiting this STD.	5.99	1.30	0.92		
(LY03) If I had to choose a destination again, I would choose this STD.	5.39	1.71	0.71		
(LY04) I will visit this STD again soon.	5.94	1.42	0.82		

β: standard regression weight; α: reliability (Cronbach's α); CR: composite reliability; AV: average variance; ni: not included in the model. The scales used have been adapted from the literature. The following references describe the main concepts in our study and their more meaningful references: emotions (Hosany et al., 2015; Houran et al., 2020); attitudes (López-Mosquera, 2016); subjective norms (López-Mosquera, 2016); moral norms (López-Mosquera, 2016); perceived behavioural control (López-Mosquera, 2016); WOM (Dedeoglu et al., 2018); and loyalty (López-Mosquera & Sánchez, 2014; Srinivasan et al., 2002).

^a The items listed in this table have been summarized for ease of presentation and comprehension.

^b s.d: Standard deviation.

^c reliability coefficients

In turn, all the scales are internally consistent according to Cronbach's alpha (>0.7), composite reliability (close to or >0.7) and AVE (close to or >0.5). Therefore, the internal validity of the measurement model is adequate. Only the moral norm scale revealed low reliability and validity. Although it is desirable to have higher reliability coefficients, lower alphas can be expected for scales containing relatively few items because the alpha value is sensitive to the number of items (Kaiser et al., 2005; Neto et al., 2020; Oreg & Katz-Gerro, 2006; Peter, 1979).

4.2. Analysis of the structural model

The expanded structural model (Fig. 2) has an acceptable fit ($\chi^2 = 996,219$, DF = 436, RMSEA = 0.065, GFI = 0.834,² CFI = 0.945, NFI = 0.906, IFI = 0.945, TLI = 0.937). Most of the structural coefficients are significant ($p < 0.01$).

With regard to the original components of the TPB and their relationship with WOM and loyalty, respectively, it is confirmed that attitudes ($\beta = 0.13$, $t = 1.78$, $p < 0.10$; $\beta = 0.18$, $t = 2.468$, $p < 0.05$) significantly and positively influence the two dependent variables, confirming H1a,b. Subjective norms were shown only to be a determinant of loyalty ($\beta = 0.56$, $t = 7.254$, $p < 0.01$), and not of WOM ($\beta = 0.03$, $t = 0.470$, $p > 0.10$) and perceived behavioural control were shown only to be determinant of WOM ($\beta = 0.271$, $t = 3.269$, $p < 0.01$) and not of loyalty ($\beta = 0.064$, $t = 0.798$, $p > 0.10$). This leads us to accept H2b and H3a and reject H2a and H3b.

With regard to the relationships established between the TPB components, the influence of subjective norms on perceived behavioural control was confirmed ($\beta = 0.42$, $t = 5.746$, $p < 0.01$), supporting H5, although its influence on attitudes was not confirmed ($\beta = 0.09$, $t = 1.302$, $p > 0.10$), causing us to reject H4.

On the other hand, moral norms positively and significantly impact loyalty ($\beta = 0.147$, $t = 2.217$, $p < 0.05$) and WOM ($\beta = 0.19$, $t = 2.807$, $p < 0.05$), which leads us to accept H6a and H6b. Additionally, the positive and significant effect of moral norms on attitudes ($\beta = 0.205$, $t = 2.907$, $p < 0.01$), and of subjective norms on moral norms ($\beta = 0.64$, $t = 10.09$, $p < 0.01$) were also revealed, confirming H7 and H8.

The inclusion of emotions has presented mixed results in this respect. In relation to positive emotions, we confirm their positive and significant effect on moral norms ($\beta = 0.13$, $t = 1.79$, $p < 0.10$), attitude ($\beta = 0.71$, $t = 9.28$, $p < 0.01$), subjective norms ($\beta = 0.7$, $t = 10.48$, $p < 0.01$), behavioural control ($\beta = 0.30$, $t = 3.357$, $p < 0.01$), WOM ($\beta = 0.24$, $t = 2.51$, $p < 0.10$) and loyalty ($\beta = 0.15$, $t = 1.66$, $p < 0.10$), corroborating H9a, H9b, H9c, H9d, H10a and H10b. With respect to negative emotions, we could only confirm their negative and significant influence on moral norms ($\beta = -0.11$, $t = -1.861$, $p < 0.10$), attitude ($\beta = -0.127$, $t = -2.25$, $p < 0.10$), perceived behavioural control ($\beta = -0.22$, $t = -3.169$, $p < 0.01$), and WOM ($\beta = -0.11$, $t = -1.95$, $p < 0.10$), confirming H11a, H11b, H11d and H12a. However, the influence of negative emotions on subjective norms ($\beta = -0.08$, $t = -1.29$, $p > 0.10$) and loyalty ($\beta = -0.02$, $t = -0.509$, $p > 0.10$) could not be confirmed, leading us to reject H11c and H12b.

Finally, the positive and significant impact of WOM on loyalty has been confirmed ($\beta = 0.409$, $t = 6.18$, $p < 0.01$), leading us to accept H13.

The structural model suggests that the causal model closely fits the data from tourist sample. Virtually all hypothesized relationships are empirically supported, or partially supported, at $p < 0.10$. Finally, determinants, attitudes, subjective norms, personal norms, positive and negative emotions and perceived behavioural control explain 83.8 % of the variance in loyalty and 74.7 % of the variance in WOM.

² Otros estudios que han aplicado versiones extendidas de la TPB han obtenido GFI similares (Chen & Tung, 2014; K. et al., 2022; Tang et al., 2022).

Table 3
Interconstruct correlations^a.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Positive emotions (1)	0.75							
Negative emotions (2)	0.52	0.72						
Attitudes (3)	0.70	0.31	0.64					
Subjective norm (4)	0.57	0.33	0.53	0.90				
Moral norm (5)	0.48	0.33	0.50	0.64	0.77			
Perceived behavioural control (6)	0.58	0.44	0.54	0.58	0.64	0.57		
WOM (7)	0.63	0.44	0.56	0.55	0.56	0.64	0.91	
Loyalty (8)	0.57	0.37	0.46	0.77	0.64	0.79	0.64	0.66

^a The variance extracted is in bold.

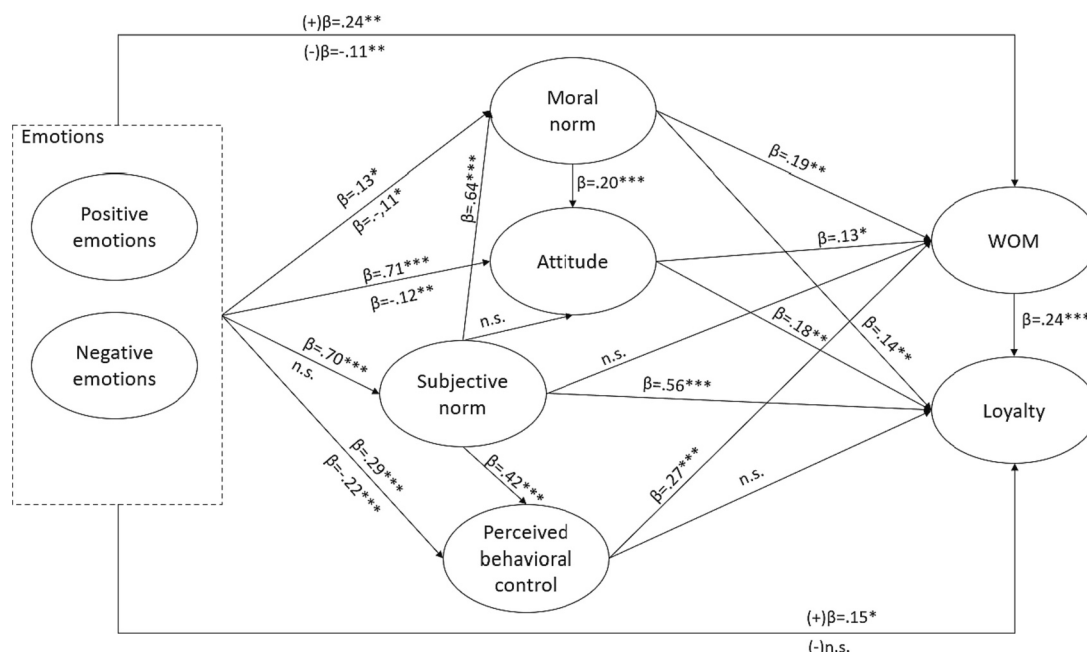


Fig. 2. SEM results.
Source: In-house. $(-)$ refers to negative emotions and $(+)$ refers to positive emotions.

5. Discussion, theoretical implications and managerial implications

Some studies have pointed out that including additional variables, such as moral norms (Botetzagias et al., 2015; Hu et al., 2019; Liu et al., 2020; López-Mosquera et al., 2014; Oteng-Peprah et al., 2020) or emotions (Berki-Kiss & Menrad, 2022; Kim et al., 2013; Moons & De Pelsmacker, 2015) substantially improves the explanatory power of the original TPB model in relation to destination loyalty and WOM. However, extending the model with emotions and moral norms is an unusual and seldom applied procedure, despite these being highlighted by other authors as determining variables in the prediction of behaviour (Crouch et al., 2004; Malhotra, 2005). In addition, although the application of the extended TPB model is widespread in the field of tourism (Liu et al., 2020; Pahrudin et al., 2021; Panwanitdumrong & Chen, 2021), there has been no research in the field of smart tourism (Pahrudin et al., 2021) or in heritage destinations (Lee et al., 2020) that incorporates and interrelates emotions and moral norms in the TPB model, this being one of the main novelties of this work.

To examine these issues, this study uses an extended TPB model to analyse the psychosocial motivations that condition the decision-making processes of tourists when they choose an STD such as Cáceres (Spain). To learn more about visitors' intentions and behavioural patterns towards these resources, STD managers and companies operating in the field of tourism should try to comprehend the motivational factors

that lead people to recommend a visit or loyalty to the destination with the objective of determining whether they factors encourage, strengthen or inhibit such behaviours.

If we focus on how much each original TPB construct influences WOM, the results differ. PBC was found to be the strongest determinant of WOM (H3a). This indicates that people who have control over their behaviour so are more likely to recommend visiting the tourist destination to others. This relationship has been argued by other authors, including Cheng et al. (2005). However, it is worth noting that other studies have shown either a negative (Tercia & Teichert, 2017) or non-existent (Yuda Bakti et al., 2020) relationship between PBC and WOM. In turn, the relationship between PBC and loyalty is significant and positive (H3b), indicating that people in control of their behaviour also tend to be more loyal to a tourist destination, as pointed out by Chen (2016).

In regard to attitudes, the next component of the original TPB model, there is a positive relationship with both WOM (H1a) and loyalty (H1b), as supported by, respectively, Lee and Wong (2021) and Panda et al. (2020). This suggests that people with a more positive attitude towards the STD—in other words, those who find the STD useful, relaxing or interesting—are more likely to recommend the destination to those close to them and to be more loyal to the destination.

In terms of the last component of the original TPB model, we can report that subjective norms have a positive relationship with loyalty (H2b), as pointed out by Hwang et al. (2021). On the other hand, as Lee

and Wong (2021) found, it was not possible to confirm the direct effect of subjective norms on WOM (H2a), although other studies have confirmed this relationship (Yuda Bakti et al., 2020). All this indicates that the opinions expressed in a tourist's social environment—that is, the support of the people closest to them—favour their loyalty to the STD but do not influence their WOM. This variable therefore requires further investigation.

On the other hand, the inclusion of moral norms has demonstrated strong predictive power on WOM (H6a) and loyalty (H6b). This indicates that tourists who have a particular feeling or moral obligation to visit an STD such as Cáceres are more likely to recommend the destination and be more loyal to it over time, as pointed out by other authors (Han & Hwang, 2015; Yuda Bakti et al., 2020).

Positive and negative emotions are distinct emotional experiences, as the high presence of one type of emotion does not necessarily imply the low presence of the other. Therefore, measuring positive and negative emotions separately allows a more complete assessment of the emotional experiences of individuals, which is one of the main objectives of this paper, and helps to understand how positive and negative affect can influence tourists' attitudes and behavioural intentions differently.

Specifically, positive emotions were shown to have a strong effect on subjective norms (H9c) and attitudes (H9b), a moderate effect on WOM (H10a) and loyalty (H10b), and a lesser effect on moral norms (H9a) and PBC (H9d). Consequently, positive emotions are a relevant construct in our study, as tourists who are happier and more content in the destination are more likely to recommend the destination to family and friends and, in turn, be more loyal to the destination (Houran et al., 2020).

In contrast, negative emotions were seen to have a negative effect on moral norms (H11a), attitudes (H11b), PBC (H11d) and WOM (H12a). This indicates that tourists who are sad, bored or disappointed in the destination do not feel that they should visit the destination and do not recommend it to others, results that are in line with expectations. All these findings are consistent with the recommendation to integrate emotions into an extended TPB model to improve its explanatory power (Lee et al., 2020; Malhotra, 2005; Moons & De Pelsmacker, 2015; Zhang & Wang, 2019).

We can also highlight the positive effect of WOM on STD loyalty (H13): in other words, people who recommend the destination to family and relatives are more loyal to the Cáceres STD. Recruitment and attraction efforts are necessary to ensure that tourists do not visit Cáceres only once, but that they return on subsequent occasions, making the STD one of their favourite destinations to visit in the future.

Focusing on the remaining interrelationships between the psychosocial constructs, we can see that subjective norms are significant predictors of moral norms and PBC (H5 and H8), a result that confirms the finding of a previous study (López-Mosquera et al., 2014). This seems to indicate that the opinions of people who are important to the tourist have a major influence on moral norms and behavioural control. In contrast, no influence on attitudes was demonstrated (H4). This shows that subjective norms are not directly associated with tourists' attitude in the context of an STD, although other studies have indicated their positive influence in the environmental context (López-Mosquera, 2016; Tao et al., 2021). This may be due to the timing of the study, because during the pandemic, social relations were strongly reduced. Social contacts decreased and, as a consequence, the ability to influence individual third parties' personal decision-making was radically reduced. Finally, the notion that moral norms influence tourist attitudes was supported (H7), as suggested by previous studies (López-Mosquera et al., 2014; Oteng-Peprah et al., 2020).

5.1. Theoretical implications

This study offers several theoretical implications. Firstly, the main novelty of this study lies in the use of emotions and moral norms in STDs.

Regarding emotions, their usefulness has already been highlighted in other contexts and with other theoretical approaches (Hosany et al., 2015, 2020; Hosany & Gilbert, 2010; Wai Lai et al., 2020). The role of emotions has been highlighted by authors such as Malhotra (2005), who indicated that not only should cognitive aspects be taken into account, but emotional aspects, too. On the other hand, the inclusion of emotions as independent constructs in decision-making models has been suggested (Kim et al., 2013).

This study also includes moral norms, which have been widely used in other applied studies of the extended version of the TPB (Botetzagias et al., 2015; Razali et al., 2020). Moral norms have been extensively employed in studies related to sustainability and the environment. Therefore, the incorporation of moral norms in an STD is apt as one of the main goals of an STD is long-term sustainability. However, no studies have so far shown that the extension of the TPB in STDs offers significant improvements in its prediction and in the knowledge of the attitudinal and emotional factors that condition tourists' decision-making process when deciding to revisit or recommend an STD. García-Milon et al. (2020) evaluated emotions in the context of an STD to find the positive influence they have in the tourist shopping journey. However, moral norms have not so far been assessed in the context of STDs.

Finally, it should be noted that our study of the expanded TPB model shows that its components, moral norms, attitudes, PBC, subjective norms, and emotions (both positive and negative) explain 74 % of WOM and 83 % of loyalty. Previous studies have been able to explain 36.12 % (Lee & Wong, 2021) or 63 % of WOM (Sukhu et al., 2019), and 44 % (Izquierdo-Yusta et al., 2022) and 75 % (Abou-Shouk & Soliman, 2021) of loyalty. This endorses our choice of independent variables, which provide a better explanation of the dependent variable, and demonstrates the suitability of adding emotional aspects and moral norms to the TPB, highlighting their suitability in models based on decision-making.

5.2. Managerial implications

The results of this study offer several managerial implications. Firstly, given the current reality, where tourism recommendations are a determining factor in visitors' decision-making, managers should regard tourists as influencers who, by controlling their own behaviour, influence and promote the behavioural intentions of those around them. In this way, visitors transmit their opinions and preferences to other people, helping to attract new tourists who interact with and promote these places, turning STDs into major attractions and sites of great tourist interest (Alves et al., 2016).

Secondly, tourist destination managers need to induce attitudinal changes in current and potential STD visitors, gaining in-depth knowledge of their attitudinal profile and favouring promotion of the destination. Thirdly, managers should reinforce tourists' moral norms through advertising campaigns based on highlighting responsible and sustainable tourism practices that help to promote ethical and moral values and encourage behaviour that respects the environment, other tourists and the local community. In this sense, advertising can be used as a tool to sensitize and raise awareness among tourists of the importance of adopting ethical and responsible behaviour in STDs, which would contribute to the creation of a more sustainable and positive tourism experience for all stakeholders. Thus, real-time personalization strategies can be useful tools to collect data to help design advertisements tailored to tourists' interests and preferences, promoting socially responsible activities and experiences that are in line with their ethical and moral values.

Fourthly, it is necessary to reinforce the positive emotions of tourists in the destination by establishing fewer exhausting itineraries and offering memorable experiences that help them to escape and unwind. In addition, there is a need to apply strategies to emphasize positive emotional connections that reinforce the links between visitors and the

destination. Hosany et al. (2020) show that eye-catching advertising slogans such as “I feel Slovenia”, “Amazing Thailand”, “Incredible India” and “Brunei: Abode of peace” can increase the emotional levels of tourist attraction. Therefore, tourism companies and/or local governments should make an investment effort to improve the emotional condition of tourists by offering advertisements featuring images of happy tourists so that they increase their visit recommendations and loyalty to an STD. Regarding negative emotions, destination managers should provide places or spaces where tourists can exchange travel information, stimulating their positive emotions and inhibiting their negative ones, thus creating a sense of belonging to the destination (Alves et al., 2016; Maoz & Bekerman, 2010). For example, by having an effective crisis management plan in the STD, managers can efficiently respond to unexpected events, minimizing the impact on tourists and their overall experience. It enables quick problem-solving, solution provision, and transparent communication with affected tourists.

Furthermore, reinforcing and innovating recreational, cultural and gastronomic activities, and so on, to ensure that tourists have a positive experience will reinforce this feeling, as has been argued in other studies (Ngoma & Ntale, 2019).

Finally, STD managers should consider the attitudes and opinions of tourists to help other tourists in their decision-making process, whether choosing to visit the destination or to carry out activities when there. Establishing networks that allow the opinions of other tourists to be easily and accessibly sought and shared could contribute to development in this area.

6. Conclusions

This study fills a gap in the current literature by applying an extended TPB model to an STD, which makes use of information and communication technologies to improve the tourist experience through more accessible and sustainable tourism, increasing visits to tourist attractions and facilitating decision-making in the destination. The results obtained in this work support the suitability and usefulness of incorporating measures that reflect the emotional, affective and moral bases of behavioural intentions in relation to an STD in the framework of the TPB. In this way, we can observe how tourists experience destination recommendations and loyalty as something that is morally correct and positive.

In the context of the results obtained, managers of destinations, and specifically STDs, should develop different tourism packages adapted to the personal interests of tourists, tailoring them to the emotional needs of tourists according to the tourist’s educational level or age, as well as other socio-demographic factors. To this end, in order to offer unique and memorable experiences that are in line with the needs and desires of today’s tourist—a demanding tourist, looking for new experiences and using technologies intensively—campaigns should be designed that reflect the psycho-sociological profile of tourists and the main emotions they experience in an STD. A recommendation system could be implemented based on the use of mobile apps, artificial intelligence technologies and/or data analytics that are able to suggest activities and tourist destinations that match the visitor’s mood, evaluating visitor through different questions that help discriminate the starting information (e.g. Do you prefer more relaxing or exciting activities? Do you like to explore nature or enjoy urban life? Are you more interested in cultural or sporting activities?) These personalized plans could be promoted through targeted advertising campaigns adapted to the visitor’s profile and could be shared on online tourism platforms and social media.

Another important aspect is to raise the profile of the different opinions that tourists have about the destination, since this is a determining element in whether other tourists will visit the STD. Marketing campaigns should therefore focus on conveying these recommendations to potential tourists through billboards, organs that enhance emotions, taking advantage of the differentiating element of being an STD and a UNESCO World Heritage City—for example, “Cáceres, an exciting

journey to the past and future”; “Cáceres: building a smart future”; “Cáceres: heritage and innovation”; or “Live the new digital Cáceres!” In addition, there should be ads on travel websites, blogs and other marketing materials that allow the dissemination of tourist recommendations. The media and social networks are very useful tools for promotional campaigns that stimulate positive emotions and the moral implications for the audience. In turn, focusing more attention on platforms that allow experiences of the destination to be shared and improving all the negative aspects that are expressed in these spaces will allow tourists to develop more positive emotions and attitudes towards the destination, which will lead to increased recommendations for the destination and, consequently, greater loyalty towards it.

6.1. Limitations and future research

With respect to the limitations of this study, and therefore future research, we would like to point out that it is possible that the results obtained in this study may be difficult to extrapolate to other STDs that have characteristics different from the city of Cáceres. Future studies should collect data from other STDs in order to generalize the results to other cities. Secondly, the sample used was composed exclusively of visitors to the city. To obtain a more representative sample of the local population, it would be interesting to include residents visiting the city and increase the sample size. Although the inclusion of moral norms and emotions improves the predictive power of the TPB model, a small percentage of the variance remains unexplained. Therefore, other causal elements such as socioeconomic factors (income, age, educational level), personal factors (personal capacity, identity, past experiences) and contextual factors (satisfaction) should be taken into account to improve the predictive ability of the TPB further. In turn, the use of new variables in an extended TPB model and models that include the use of technologies at the destination are recommended for future research. Additionally, the study of satisfaction could be interesting to assess jointly with emotions in the context of a STD and thus achieve a better understanding of how tourists interact with the destination and how they feel during and after the visit. This information would contribute to improve the explanatory power of the proposed study model and provide a better assessment of the quality of the services offered and of the capacity of the STD itself in offering unique and memorable experiences that facilitate successful management of the STD. Finally, with respect to the relationship between the subjective norm and tourists’ attitudes (H4) it is recommended that these relationships be tested in another year without the results being altered by the pandemic and in other STDs with characteristics different from those studied.

CRedit authorship contribution statement

Sergio Nieves-Pavón contributed to the literature review, data collection and analysis and writing up of the paper. Natalia López-Mosquera contributed to the methodology, data analysis and the framing of conclusions/implications. Héctor Jiménez revised manuscript.

Funding

This publication has been made possible thanks to funding granted by the Consejería de Economía, Ciencia and Agenda Digital de la Junta de Extremadura and by the European Regional Development Fund of the European Union through the reference grant GR21161 and the University of Extremadura through the Initiation Plan for Research, Technological Development and Innovation 2022.

Declaration of competing interest

No potential conflict of interest was reported by the authors.

Data availability

Data will be made available on request.

References

- Abou-Shouk, M., & Soliman, M. (2021). The impact of gamification adoption intention on brand awareness and loyalty in tourism: The mediating effect of customer engagement. *Journal of Destination Marketing & Management*, 20, Article 100559. <https://doi.org/10.1016/j.jdmm.2021.100559>
- AENOR. (2018). *UNE 178501: 2018 Sistemas de gestión de los destinos turísticos inteligentes: Requisitos*.
- Agag, G., & El-Masry, A. A. (2016). Understanding consumer intention to participate in online travel community and effects on consumer intention to purchase travel online and WOM: An integration of innovation diffusion theory and TAM with trust. *Computers in Human Behavior*, 60, 97–111. <https://doi.org/10.1016/j.chb.2016.02.038>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Ajzen, I. (2011). The theory of planned behaviour: Reactions and reflections. *Psychology & Health*, 26(9), 1113–1127. <https://doi.org/10.1080/08870446.2011.613995>
- Almobaideen, W., Krayshan, R., Allan, M., & Saadeh, M. (2017). Internet of Things: Geographical routing based on healthcare centers vicinity for mobile smart tourism destination. *Technological Forecasting and Social Change*, 123, 342–350. <https://doi.org/10.1016/j.techfore.2017.04.016>
- Alves, S., Abrantes, J. L., Antunes, M. J., Seabra, C., & Herstein, R. (2016). WOM antecedents in backpacker travelers. *Journal of Business Research*, 69(5), 1851–1856. <https://doi.org/10.1016/j.jbusres.2015.10.068>
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–423. <https://doi.org/10.1037/0033-2909.103.3.411>
- Azhar, M., Hamid, S., Akhtar, M. J., & Subhan, M. (2022). Delineating the influence of social media use on sustainable rural tourism: an application of TPB with place emotion. *Journal of Tourism, Sustainability and Well-Being*, 10(4), Article 4. <https://doi.org/10.34623/1ta2-yj22>
- Bagozzi, R. P. (1992). The self-regulation of attitudes, intentions, and behavior. *Social Psychology Quarterly*, 55(2), 178–204. <https://doi.org/10.2307/2786945>
- Bagozzi, R. P., Gopinath, M., & Nyer, P. U. (1999). The role of emotions in marketing. *Journal of the Academy of Marketing Science*, 27(2), 184–206. <https://doi.org/10.1177/0092070399272005>
- Bagozzi, R. P., & Lee, K.-H. (2002). Multiple routes for social influence: The role of compliance, internalization, and social identity. *Social Psychology Quarterly*, 65(3), 226–247. <https://doi.org/10.2307/3090121>
- Bang, H.-K., Ellinger, A. E., Hadjimarou, J., & Traichal, P. A. (2000). Consumer concern, knowledge, belief, and attitude toward renewable energy: An application of the reasoned action theory. *Psychology & Marketing*, 17(6), 449–468. [https://doi.org/10.1002/\(SICI\)1520-6793\(200006\)17:6<449::AID-MAR2>3.0.CO;2-8](https://doi.org/10.1002/(SICI)1520-6793(200006)17:6<449::AID-MAR2>3.0.CO;2-8)
- Berki-Kiss, D., & Menrad, K. (2022). The role emotions play in consumer intentions to make pro-social purchases in Germany – An augmented theory of planned behavior model. *Sustainable Production and Consumption*, 29, 79–89. <https://doi.org/10.1016/j.spc.2021.09.026>
- Boes, K., Buhalis, D., & Inversini, A. (2015). Conceptualising smart tourism destination dimensions. In *Information and communication technologies in tourism 2015* (pp. 391–403). Springer.
- Botetzagias, I., Dima, A.-F., & Malesios, C. (2015). Extending the Theory of Planned Behavior in the context of recycling: The role of moral norms and of demographic predictors. *Resources, Conservation and Recycling*, 95, 58–67. <https://doi.org/10.1016/j.resconrec.2014.12.004>
- Buhalis, D. (2022). *Smart tourism*. Encyclopedia of tourism management and marketing: Edward Elgar Publishing, Cheltenham.
- Buhalis, D., & Amaranggana, A. (2013). Smart tourism destinations. In *En Information and communication technologies in tourism 2014* (pp. 553–564). Springer.
- Buhalis, D., Parra López, E., & Martínez-González, J. A. (2020). Influence of young consumers' external and internal variables on their e-loyalty to tourism sites. *Journal of Destination Marketing & Management*, 15, Article 100409. <https://doi.org/10.1016/j.jdmm.2020.100409>
- Cavalheiro, M. B., Joia, L. A., & Cavalheiro, G. M. D. C. (2020). Towards a smart tourism destination development model: Promoting environmental, economic, socio-cultural and political values. *Tourism Planning and Development*, 17(3), Article 3 (Scopus) <https://doi.org/10.1080/21568316.2019.1597763>.
- Celdran-Bernabeu, M. A., Mazon, J.-N., Ivars-Baidal, J. A., & Fernando Vera-Rebollo, J. (2018). Smart tourism. A study on systematic mapping. *Cuadernos De Turismo*, 41, Article 41. <https://doi.org/10.6018/turismo.41.326971>
- Chan, L., & Bishop, B. (2013). A moral basis for recycling: Extending the theory of planned behaviour. *Journal of Environmental Psychology*, 36, 96–102. <https://doi.org/10.1016/j.jenvp.2013.07.010>
- Chansuk, C., Arreeras, T., Chiangboon, C., Phonmakham, K., Chotikool, N., Buddee, R., Pumjampa, S., Yanasoi, T., & Arreeras, S. (2022). Using factor analyses to understand the post-pandemic travel behavior in domestic tourism through a questionnaire survey. *Transportation Research Interdisciplinary Perspectives*, 16, Article 100691. <https://doi.org/10.1016/j.trip.2022.100691>
- Chen, M.-F., & Tung, P.-J. (2014). Developing an extended Theory of Planned Behavior model to predict consumers' intention to visit green hotels. *International Journal of Hospitality Management*, 36, 221–230. <https://doi.org/10.1016/j.ijhm.2013.09.006>
- Chen, S.-Y. (2016). Using the sustainable modified TAM and TPB to analyze the effects of perceived green value on loyalty to a public bike system. *Transportation Research Part A-Policy and Practice*, 88, 58–72. <https://doi.org/10.1016/j.tra.2016.03.008>
- Chen, T., & Wu, Z. (2022). Employing a sort of “we” based VBN model to gauge Chinese tourists' intentions to support low-carbon tourism. *Acta Psychologica*, 230, Article 103761. <https://doi.org/10.1016/j.actpsy.2022.103761>
- Cheng, S., Lam, T., & Hsu, C. H. C. (2005). Testing the sufficiency of the theory of planned behavior: A case of customer dissatisfaction responses in restaurants. *International Journal of Hospitality Management*, 24(4), 475–492. <https://doi.org/10.1016/j.ijhm.2004.10.006>
- Choe, J. Y. (J.), Kim, J. J., & Hwang, J. (2020). The environmentally friendly role of edible insect restaurants in the tourism industry: Applying an extended theory of planned behavior. *International Journal of Contemporary Hospitality Management*, 32(11), 3581–3600. <https://doi.org/10.1108/IJCHM-04-2020-0352>
- Cohen, J. B., Pham, M. T., & Andrade, E. B. (2008). The nature and role of affect in consumer behavior. In *En Handbook of consumer psychology* (pp. 297–348). Taylor & Francis Group/Lawrence Erlbaum Associates.
- Conner, M., & Armitage, C. J. (1998). Extending the theory of planned behavior: A review and avenues for further research. *Journal of Applied Social Psychology*, 28(15), 1429–1464. <https://doi.org/10.1111/j.1559-1816.1998.tb01685.x>
- Crouch, G., Perdue, R., Timmermans, H., & Uysal, M. (2004). Building foundations for understanding the consumer psychology of tourism, hospitality and leisure. *Consumer Psychology of Tourism, Hospitality and Leisure*, 3, 1–10.
- de Avila Muñoz, A. L., & Sánchez, S. G. (2015). Destinos turísticos inteligentes. *Economía industrial*, 395, Article 395.
- Dedeoglu, B. B., Bilgihan, A., Ye, B. H., Buoincontri, P., & Okumus, F. (2018). The impact of servicescape on hedonic value and behavioral intentions: The importance of previous experience. *International Journal of Hospitality Management*, 72, 10–20. <https://doi.org/10.1016/j.ijhm.2017.12.007>
- Del Vecchio, P., Mele, G., Ndou, V., & Secundo, G. (2018). Creating value from Social Big Data: Implications for Smart Tourism Destinations. *Information Processing & Management*, 54(5), Article 5. <https://doi.org/10.1016/j.ipm.2017.10.006>
- Doanh, D. C., & Bernat, T. (2019). Entrepreneurial self-efficacy and intention among Vietnamese students: A meta-analytic path analysis based on the theory of planned behavior. *Procedia Computer Science*, 159, 2447–2460. <https://doi.org/10.1016/j.procs.2019.09.420>
- Du, J., & Pan, W. (2021). Examining energy saving behaviors in student dormitories using an expanded theory of planned behavior. *Habitat International*, 107, Article 102308. <https://doi.org/10.1016/j.habitatint.2020.102308>
- Erevelles, S. (1998). The role of affect in marketing. *Journal of Business Research*, 42(3), 199–215. [https://doi.org/10.1016/S0148-2963\(97\)00118-5](https://doi.org/10.1016/S0148-2963(97)00118-5)
- Ferguson, R. J., Paulin, M., & Bergeron, J. (2010). Customer sociability and the total service experience: Antecedents of positive word-of-mouth intentions. *Journal of Service Management*, 21(1), 25–44. <https://doi.org/10.1108/09564231011025100>
- Ferguson, R. J., Paulin, M., & Leiriao, E. (2006). Loyalty and positive word-of-mouth. *Health Marketing Quarterly*, 23(3), 59–77. <https://doi.org/10.1080/07359680802086174>
- Flores Ruiz, D., Perogil Burgos, J., & Miedes Ugarte, B. (2018). Smart destinations or intelligent territories? Study of cases in Spain. *Revista De Estudios Regionales*, 113, Article 113.
- Forgas, J. P. (1994). The role of emotion in social judgments: An introductory review and an Affect Infusion Model (AIM). *European Journal of Social Psychology*, 24(1), 1–24. <https://doi.org/10.1002/ejsp.2420240102>
- Fornell, C. (1992). A national Customer Satisfaction Barometer: The Swedish experience. *Journal of Marketing*, 56(1), 6–21. <https://doi.org/10.1177/002224299205600103>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>
- Frijda, N. H., & Mesquita, B. (2000). Beliefs through emotions. *Emotions and beliefs: How feelings influence thoughts*, 3, 45.
- Fu, J.-R., Ju, P.-H., & Hsu, C.-W. (2015). Understanding why consumers engage in electronic word-of-mouth communication: Perspectives from theory of planned behavior and justice theory. *Electronic Commerce Research and Applications*, 14(6), 616–630. <https://doi.org/10.1016/j.elerap.2015.09.003>
- Gansser, O. A., & Reich, C. S. (2023). Influence of the New Ecological Paradigm (NEP) and environmental concerns on pro-environmental behavioral intention based on the Theory of Planned Behavior (TPB). *Journal of Cleaner Production*, 382, Article 134629. <https://doi.org/10.1016/j.jclepro.2022.134629>
- García-Milon, A., Juaneda-Ayensa, E., Olarte-Pascual, C., & Pelegrín-Borondo, J. (2020). Towards the smart tourism destination: Key factors in information source use on the tourist shopping journey. *Tourism Management Perspectives*, 36. <https://doi.org/10.1016/j.tmp.2020.100730> (Scopus).
- Gelter, J., Fuchs, M., & Lexhagen, M. (2022). Making sense of smart tourism destinations: A qualitative text analysis from Sweden. *Journal of Destination Marketing & Management*, 23, Article 100690. <https://doi.org/10.1016/j.jdmm.2022.100690>
- Gelter, J., Lexhagen, M., & Fuchs, M. (2021). A meta-narrative analysis of smart tourism destinations: Implications for tourism destination management. *Current Issues in Tourism*, 24(20), 2860–2874. <https://doi.org/10.1080/13683500.2020.1849048>
- Ghaderi, Z., Hatamifard, P., & Ghahramani, L. (2019). How smartphones enhance local tourism experiences? *Asia Pacific Journal of Tourism Research*, 24(8), 778–788. <https://doi.org/10.1080/10941665.2019.1630456>
- Ghaderi, Z., Hatamifard, P., & Henderson, J. C. (2018). Destination selection by smart tourists: The case of Isfahan, Iran. *Asia Pacific Journal of Tourism Research*, 23(4), Article 4. <https://doi.org/10.1080/10941665.2018.1444650>

- Graham-Rowe, E., Jessop, D. C., & Sparks, P. (2014). Identifying motivations and barriers to minimising household food waste. *Resources, Conservation and Recycling*, 84, 15–23. <https://doi.org/10.1016/j.resconrec.2013.12.005>
- Gretzel, U., Sigala, M., Xiang, Z., & Koo, C. (2015). Smart tourism: Foundations and developments. *Electronic Markets*, 25(3), 179–188.
- Hai, D. N., Minh, C. C., & Huynh, N. (2023). Meta-analysis of driving behavior studies and assessment of factors using structural equation modeling. *International Journal of Transportation Science and Technology*. <https://doi.org/10.1016/j.ijst.2023.05.002>
- Han, H., & Hwang, J. (2015). Norm-based loyalty model (NLM): Investigating delegates' loyalty formation for environmentally responsible conventions. *International Journal of Hospitality Management*, 46, 1–14. <https://doi.org/10.1016/j.ijhm.2015.01.002>
- Han, Y., & Hansen, H. (2012). Determinants of sustainable food consumption: A meta-analysis using a traditional and a structural equation modelling approach. *International Journal of Psychological Studies*, 4(1), Article p22. <https://doi.org/10.5539/ijps.v4n1p22>
- Hosany, S., & Gilbert, D. (2010). Measuring tourists' emotional experiences toward hedonic holiday destinations. *Journal of Travel Research*, 49(4), 513–526. <https://doi.org/10.1177/0047287509349267>
- Hosany, S., Hunter-Jones, P., & McCabe, S. (2020). Emotions in tourist experiences: Advancing our conceptual, methodological and empirical understanding. *Journal of Destination Marketing & Management*, 16, Article 100444. <https://doi.org/10.1016/j.jdmm.2020.100444>
- Hosany, S., Prayag, G., Deesilatham, S., Caušević, S., & Odeh, K. (2015). Measuring tourists' emotional experiences: Further validation of the destination emotion scale. *Journal of Travel Research*, 54(4), 482–495. <https://doi.org/10.1177/0047287514522878>
- Houran, J., Lange, R., & Laythe, B. (2020). Understanding consumer enchantment via paranormal tourism: Part II—Preliminary Rasch validation. *Cornell Hospitality Quarterly*, 1938965520971276. <https://doi.org/10.1177/1938965520971276>
- Hu, H., Zhang, J., Chu, G., Yang, J., & Yu, P. (2018). Factors influencing tourists' litter management behavior in mountainous tourism areas in China. *Waste Management*, 79, 273–286. <https://doi.org/10.1016/j.wasman.2018.07.047>
- Hu, H., Zhang, J., Wang, C., Yu, P., & Chu, G. (2019). What influences tourists' intention to participate in the Zero Litter Initiative in mountainous tourism areas: A case study of Huangshan National Park, China. *Science of the Total Environment*, 657, 1127–1137. <https://doi.org/10.1016/j.scitotenv.2018.12.114>
- Hwang, J., Choe, J. Y. (J.), Kim, H. M., & Kim, J. J. (2021). Human baristas and robot baristas: How does brand experience affect brand satisfaction, brand attitude, brand attachment, and brand loyalty? *International Journal of Hospitality Management*, 99, Article 103050. <https://doi.org/10.1016/j.ijhm.2021.103050>
- Izquierdo-Yusta, A., Martínez-Ruiz, M. P., & Pérez-Villareal, H. H. (2022). Studying the impact of food values, subjective norm and brand love on behavioral loyalty. *Journal of Retailing and Consumer Services*, 65, Article 102885. <https://doi.org/10.1016/j.jretconser.2021.102885>
- Jian-Ming, W., & Long-Chang, W. U. (2016). The study of domestic water conservation behavior through dual-path of recognition and affection: A extended TPB with Taoist Value. *Collected Essays on Finance and Economics*, 207(5), 105.
- Juschten, M., Jiricka-Pürner, A., Unbehau, W., & Hössinger, R. (2019). The mountains are calling! An extended TPB model for understanding metropolitan residents' intentions to visit nearby alpine destinations in summer. *Tourism Management*, 75, 293–306. <https://doi.org/10.1016/j.tourman.2019.05.014>
- K., S. S., T. p., T., & M. v. n., S. K. (2022). Implementing construction waste management in India: An extended theory of planned behaviour approach. *Environmental Technology and Innovation*, 27, Article 102401. <https://doi.org/10.1016/j.eti.2022.102401>
- Kaiser, F. G., Hübner, G., & Bogner, F. X. (2005). Contrasting the theory of planned behavior with the value-belief-norm model in explaining conservation behavior. *Journal of Applied Social Psychology*, 35(10), 2150–2170. <https://doi.org/10.1111/j.1559-1816.2005.tb02213.x>
- Kalia, P., Zia, A., & Kaur, K. (2022). Social influence in online retail: A review and research agenda. *European Management Journal*. <https://doi.org/10.1016/j.emj.2022.09.012>
- Kang, J.-W., & Namkung, Y. (2019). The information quality and source credibility matter in customers' evaluation toward food O2O commerce. *International Journal of Hospitality Management*, 78, 189–198. <https://doi.org/10.1016/j.ijhm.2018.10.011>
- Kaplanidou, K., & Vogt, C. (2006). A structural analysis of destination travel intentions as a function of web site features. *Journal of Travel Research*, 45(2), 204–216. <https://doi.org/10.1177/0047287506291599>
- Karimi, S., & Saghaleini, A. (2021). Factors influencing ranchers' intentions to conserve rangelands through an extended theory of planned behavior. *Global Ecology and Conservation*, 26, Article e01513. <https://doi.org/10.1016/j.gecco.2021.e01513>
- Kim, H., Koo, C., & Chung, N. (2021). The role of mobility apps in memorable tourism experiences of Korean tourists: Stress-coping theory perspective. *Journal of Hospitality and Tourism Management*, 49, 548–557. <https://doi.org/10.1016/j.jhtm.2021.11.003>
- Kim, Y. G. (2014). Ecological concerns about Genetically Modified (GM) food consumption using the Theory of Planned Behavior (TPB). *Procedia - Social and Behavioral Sciences*, 159, 677–681. <https://doi.org/10.1016/j.sbspro.2014.12.467>
- Kim, Y. J., Njite, D., & Hancer, M. (2013). Anticipated emotion in consumers' intentions to select eco-friendly restaurants: Augmenting the theory of planned behavior. *International Journal of Hospitality Management*, 34, 255–262. <https://doi.org/10.1016/j.ijhm.2013.04.004>
- Kossmann, E., & Gomez-Suarez, M. (2019). Words-deeds gap for the purchase of Fairtrade products: A systematic literature review. *Frontiers in Psychology*, 10, 2705. <https://doi.org/10.3389/fpsyg.2019.02705>
- Kun-Shan, W., & Teng, Y.-M. (2011). Applying the extended theory of planned behavior to predict the intention of visiting a green hotel. *African Journal of Business Management*, 5(17), 7579–7587. <https://doi.org/10.5897/AJB11.684>
- La Barbera, F., Amato, M., Rivero, R., & Verneau, F. (2022). Social emotions and good provider norms in tackling household food waste: An extension of the theory of planned behavior. *Sustainability*, 14(15), Article 15. <https://doi.org/10.3390/su14159681>
- Lam, T., & Hsu, C. H. C. (2004). Theory of planned behavior: Potential travelers from China. *Journal of Hospitality and Tourism Research*, 28(4), 463–482. <https://doi.org/10.1177/1096348004267515>
- Lazarus, R. S., & Lazarus, R. S. (1991). *Emotion and adaptation*. Oxford University Press.
- Lee, C.-K., Ahmad, M. S., Petrick, J. F., Park, Y.-N., Park, E., & Kang, C.-W. (2020). The roles of cultural worldview and authenticity in tourists' decision-making process in a heritage tourism destination using a model of goal-directed behavior. *Journal of Destination Marketing & Management*, 18, Article 100500. <https://doi.org/10.1016/j.jdmm.2020.100500>
- Lee, C. K. H., & Wong, A. O. M. (2021). Antecedents of consumer loyalty in ride-hailing. *Transportation Research Part F: Traffic Psychology and Behaviour*, 80, 14–33. <https://doi.org/10.1016/j.trf.2021.03.016>
- Liebe, U., Preisendörfer, P., & Meyerhoff, J. (2011). To pay or not to pay: Competing theories to explain Individuals' willingness to pay for public environmental goods. *Environment and Behavior*, 43(1), 106–130. <https://doi.org/10.1177/0013916509346229>
- Lim, H.-R., & An, S. (2021). Intention to purchase wellbeing food among Korean consumers: An application of the Theory of Planned Behavior. *Food Quality and Preference*, 88, Article 104101. <https://doi.org/10.1016/j.foodqual.2020.104101>
- Liu, J., An, K., & Jang, S. (S.). (2020). A model of tourists' civilized behaviors: Toward sustainable coastal tourism in China. *Journal of Destination Marketing & Management*, 16, Article 100437. <https://doi.org/10.1016/j.jdmm.2020.100437>
- Loewenstein, G., & Lerner, J. S. (2003). The role of affect in decision making. In *En Handbook of affective sciences* (pp. 619–642). Oxford University Press.
- Londono, J. C., Davies, K., & Elms, J. (2017). Extending the Theory of Planned Behavior to examine the role of anticipated negative emotions on channel intention: The case of an embarrassing product. *Journal of Retailing and Consumer Services*, 36, 8–20. <https://doi.org/10.1016/j.jretconser.2016.12.002>
- López-Mosquera, N. (2016). Gender differences, theory of planned behavior and willingness to pay. *Journal of Environmental Psychology*, 45, 165–175. <https://doi.org/10.1016/j.jenvp.2016.01.006>
- López-Mosquera, N., García, T., & Barrena, R. (2014). An extension of the Theory of Planned Behavior to predict willingness to pay for the conservation of an urban park. *Journal of Environmental Management*, 135, 91–99. <https://doi.org/10.1016/j.jenvman.2014.01.019>
- López-Mosquera, N., & Sánchez, M. (2014). Cognitive and affective determinants of satisfaction, willingness to pay, and loyalty in suburban parks. *Urban Forestry & Urban Greening*, 13(2), 375–384. <https://doi.org/10.1016/j.ufug.2013.08.007>
- Maheshwari, G. (2022). Entrepreneurial intentions of university students in Vietnam: Integrated model of social learning, human motivation, and TPB. *The International Journal of Management Education*, 20(3), Article 100714. <https://doi.org/10.1016/j.ijme.2022.100714>
- Mahmud, S. N. D., & Osman, K. (2010). The determinants of recycling intention behavior among the Malaysian school students: An application of theory of planned behaviour. *Procedia - Social and Behavioral Sciences*, 9, 119–124. <https://doi.org/10.1016/j.sbspro.2010.12.123>
- Maleksaeidi, H., & Keshavarz, M. (2019). What influences farmers' intentions to conserve on-farm biodiversity? An application of the theory of planned behavior in Fars province, Iran. *Global Ecology and Conservation*, 20, Article e00698. <https://doi.org/10.1016/j.gecco.2019.e00698>
- Malhotra, N. K. (2005). Attitude and affect: New frontiers of research in the 21st century. *Journal of Business Research*, 58(4), 477–482. [https://doi.org/10.1016/S0148-2963\(03\)00146-2](https://doi.org/10.1016/S0148-2963(03)00146-2)
- Mandic, A., & Pranicevic, D. G. (2019). Progress on the role of ICTs in establishing destination appeal implications for smart tourism destination development. *Journal of Hospitality and Tourism Technology*, 10(4), Article 4. <https://doi.org/10.1108/JHTT-06-2018-0047>
- Maoz, D., & Bekerman, Z. (2010). Searching for Jewish answers in Indian resorts: The postmodern traveler. *Annals of Tourism Research*, 37(2), 423–439. <https://doi.org/10.1016/j.annals.2009.10.015>
- Meng, B., & Choi, K. (2018). An investigation on customer revisit intention to theme restaurants: The role of servicescape and authentic perception. *International Journal of Contemporary Hospitality Management*, 30(3), 1646–1662. <https://doi.org/10.1108/IJCHM-11-2016-0630>
- Moons, I., & De Pelsmacker, P. (2012). Emotions as determinants of electric car usage intention. *Journal of Marketing Management*, 28(3–4), 195–237. <https://doi.org/10.1080/0267257X.2012.659007>
- Moons, I., & De Pelsmacker, P. (2015). An extended decomposed theory of planned behaviour to predict the usage intention of the electric car: A multi-group comparison. *Sustainability*, 7(5), Article 5. <https://doi.org/10.3390/su7056212>
- Morris, J. D., Woo, C., Geason, J. A., & Kim, J. (2002). The power of affect: Predicting intention. *Journal of Advertising Research*, 42(3), 7–17. <https://doi.org/10.2501/JAR-42-3-7-17>
- Neto, I. L., Matsunaga, L. H., Machado, C. C., Günther, H., Hillesheim, D., Pimentel, C. E., ... D'Orsi, E. (2020). Psychological determinants of walking in a Brazilian sample: An application of the Theory of Planned Behavior. *Transportation Research Part F: Traffic Psychology and Behaviour*, 73, 391–398. <https://doi.org/10.1016/j.trf.2020.07.002>

- Neuhofer, B., Buhalis, D., & Ladkin, A. (2015). Smart technologies for personalized experiences: A case study in the hospitality domain. *Electronic Markets*, 25(3), 243–254. <https://doi.org/10.1007/s12525-015-0182-1>
- Ngoma, M., & Ntale, P. D. (2019). Word of mouth communication: A mediator of relationship marketing and customer loyalty. *Cogent Business & Management*, 6(1), Article 1580123. <https://doi.org/10.1080/23311975.2019.1580123>
- O'Connor, E. L., Sims, L., & White, K. M. (2017). Ethical food choices: Examining people's Fair Trade purchasing decisions. *Food Quality and Preference*, 60, 105–112. <https://doi.org/10.1016/j.foodqual.2017.04.001>
- Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(4_suppl1), 33–44. <https://doi.org/10.1177/00222429990634s105>
- Oreg, S., & Katz-Gerro, T. (2006). Predicting proenvironmental behavior cross-nationally: Values, the theory of planned behavior, and value-belief-norm theory. *Environment and Behavior*, 38(4), 462–483. <https://doi.org/10.1177/0013916505286012>
- Ong-Peprah, M., de Vries, N., & Acheampong, M. A. (2020). Households' willingness to adopt greywater treatment technologies in a developing country – Exploring a modified theory of planned behaviour (TPB) model including personal norm. *Journal of Environmental Management*, 254, Article 109807. <https://doi.org/10.1016/j.jenvman.2019.109807>
- Pahrudin, P., Chen, C.-T., & Liu, L.-W. (2021). A modified theory of planned behavior: A case of tourist intention to visit a destination post pandemic Covid-19 in Indonesia. *Heliyon*, 7(10), Article e08230. <https://doi.org/10.1016/j.heliyon.2021.e08230>
- Pai, F.-Y., & Yeh, T.-M. (2015). Investigating the antecedents of customer behavioral intentions using the service acceptance model. *Human Factors and Ergonomics in Manufacturing & Service Industries*, 25(4), 428–438. <https://doi.org/10.1002/hfm.20560>
- Panda, T. K., Kumar, A., Jakhar, S., Luthra, S., Garza-Reyes, J. A., Kazancoglu, I., & Nayak, S. S. (2020). Social and environmental sustainability model on consumers' altruism, green purchase intention, green brand loyalty and evangelism. *Journal of Cleaner Production*, 243, Article 118575. <https://doi.org/10.1016/j.jclepro.2019.118575>
- Panwanitdumrong, K., & Chen, C.-L. (2021). Investigating factors influencing tourists' environmentally responsible behavior with extended theory of planned behavior for coastal tourism in Thailand. *Marine Pollution Bulletin*, 169, Article 112507. <https://doi.org/10.1016/j.marpolbul.2021.112507>
- Park, S. H., Hsieh, C.-M., & Lee, C.-K. (2017). Examining Chinese college students' intention to travel to Japan using the extended theory of planned behavior: Testing destination image and the mediating role of travel constraints. *Journal of Travel & Tourism Marketing*, 34(1), 113–131. <https://doi.org/10.1080/10548408.2016.1141154>
- Pereira, M. d. L., Anjos, F. A. d., Añaña, E. d. S., & Weismayer, C. (2021). Modelling the overall image of coastal tourism destinations through personal values of tourists: A robust regression approach. *Journal of Outdoor Recreation and Tourism*, 35, Article 100412. <https://doi.org/10.1016/j.jort.2021.100412>
- Peter, J. P. (1979). Reliability: A review of psychometric basics and recent marketing practices. *Journal of Marketing Research*, 16(1), 6–17. <https://doi.org/10.2307/3150868>
- Pfister, H.-R., & Böhm, G. (2008). The multiplicity of emotions: A framework of emotional functions in decision making. *Judgment and Decision Making*, 3(1), 13.
- Qi, W., Shen, B., Yang, Y., & Qu, X. (2021). Modeling drivers' scrambling behavior in China: An application of theory of planned behavior. *Travel Behaviour and Society*, 24, 164–171. <https://doi.org/10.1016/j.tbs.2021.03.008>
- Quintal, V. A., Lee, J. A., & Soutar, G. N. (2010). Risk, uncertainty and the theory of planned behavior: A tourism example. *Tourism Management*, 31(6), 797–805. <https://doi.org/10.1016/j.tourman.2009.08.006>
- Raats, M. M., Shepherd, R., & Sparks, P. (1995). Including moral dimensions of choice within the structure of the theory of planned behavior. *Journal of Applied Social Psychology*, 25(6), 484–494. <https://doi.org/10.1111/j.1559-1816.1995.tb01763.x>
- Rana, N. P., Slade, E., Kitching, S., & Dwivedi, Y. K. (2019). The IT way of loafing in class: Extending the theory of planned behavior (TPB) to understand students' cyberlacking intentions. *Computers in Human Behavior*, 101, 114–123. <https://doi.org/10.1016/j.chb.2019.07.022>
- Ranaweera, C., & Prabhu, J. (2003). The influence of satisfaction, trust and switching barriers on customer retention in a continuous purchasing setting. *International Journal of Service Industry Management*, 14(4), 374–395. <https://doi.org/10.1108/09564230310489231>
- Razali, F., Daud, D., Weng-Wai, C., & Anthony Jiram, W. R. (2020). Waste separation at worksite behaviour among Malaysian households: The Theory of Planned Behaviour with moral norm. *Journal of Cleaner Production*, 271, Article 122025. <https://doi.org/10.1016/j.jclepro.2020.122025>
- Romão, J., Kourtit, K., Neuts, B., & Nijkamp, P. (2018). The smart city as a common place for tourists and residents: A structural analysis of the determinants of urban attractiveness. *Cities*, 78, 67–75. <https://doi.org/10.1016/j.cities.2017.11.007>
- Romero-García, L. E., Aguilar-Gallegos, N., Morales-Matamoros, O., Badillo-Piña, I., & Tejeida-Padilla, R. (2019). Urban tourism: A systems approach – State of the art. *Tourism Review*, 74(3), 679–693. <https://doi.org/10.1108/TR-06-2018-0085>
- Russell, S. V., Young, C. W., Unsworth, K. L., & Robinson, C. (2017). Bringing habits and emotions into food waste behaviour. *Resources, Conservation and Recycling*, 125, 107–114. <https://doi.org/10.1016/j.resconrec.2017.06.007>
- Sadiq, M. A., Rajeswari, B., Ansari, L., & Danish Kirmani, M. (2021). The role of food eating values and exploratory behaviour traits in predicting intention to consume organic foods: An extended planned behaviour approach. *Journal of Retailing and Consumer Services*, 59, Article 102352. <https://doi.org/10.1016/j.jretconser.2020.102352>
- Sakshi, Tandon, U., Ertz, M., & Bansal, H. (2020). Social vacation: Proposition of a model to understand tourists' usage of social media for travel planning. *Technology in Society*, 63, Article 101438. <https://doi.org/10.1016/j.techsoc.2020.101438>
- San-Martín, S., Jiménez, N., & Liébana-Cabanillas, F. (2020). Tourism value VS barriers to booking trips online. *Journal of Retailing and Consumer Services*, 53, Article 101957. <https://doi.org/10.1016/j.jretconser.2019.101957>
- Shahangian, S. A., Tabesh, M., & Yazdanpanah, M. (2021). How can socio-psychological factors be related to water-efficiency intention and behaviors among Iranian residential water consumers? *Journal of Environmental Management*, 288, Article 112466. <https://doi.org/10.1016/j.jenvman.2021.112466>
- Silva, J., Sá, E. S., Escadas, M., & Carvalho, J. (2021). The influence of ambient scent on the passengers' experience, emotions and behavioral intentions: An experimental study in a Public Bus service. *Transport Policy*, 106, 88–98. <https://doi.org/10.1016/j.tranpol.2021.03.022>
- Singh, S., Singh, N., Kalinic, Z., & Liébana-Cabanillas, F. J. (2021). Assessing determinants influencing continued use of live streaming services: An extended perceived value theory of streaming addiction. *Expert Systems with Applications*, 168, Article 114241. <https://doi.org/10.1016/j.eswa.2020.114241>
- Soliman, M. (2019). Extending the theory of planned behavior to predict tourism destination revisit intention. *International Journal of Hospitality & Tourism Administration*, 0(0), 1–26. <https://doi.org/10.1080/15256480.2019.1692755>
- Soorani, F., & Ahmadvand, M. (2019). Determinants of consumers' food management behavior: Applying and extending the theory of planned behavior. *Waste Management*, 98, 151–159. <https://doi.org/10.1016/j.wasman.2019.08.025>
- Srinivasan, S. S., Anderson, R., & Ponnaravolu, K. (2002). Customer loyalty in e-commerce: An exploration of its antecedents and consequences. *Journal of Retailing*, 78(1), 41–50. [https://doi.org/10.1016/S0022-4359\(01\)00065-3](https://doi.org/10.1016/S0022-4359(01)00065-3)
- Sukhu, A., Choi, H., Bujisic, M., & Bilgihan, A. (2019). Satisfaction and positive emotions: A comparison of the influence of hotel guests' beliefs and attitudes on their satisfaction and emotions. *International Journal of Hospitality Management*, 77, 51–63. <https://doi.org/10.1016/j.ijhm.2018.06.013>
- Tajeddini, K., Mostafa Rasoolimanesh, S., Chaturika Gamage, T., & Martin, E. (2021). Exploring the visitors' decision-making process for Airbnb and hotel accommodations using value-attitude-behavior and theory of planned behavior. *International Journal of Hospitality Management*, 96, Article 102950. <https://doi.org/10.1016/j.ijhm.2021.102950>
- Tang, D., Gong, X., & Liu, M. (2022). Residents' behavioral intention to participate in neighborhood micro-renewal based on an extended theory of planned behavior: A case study in Shanghai, China. *Habitat International*, 129, Article 102672. <https://doi.org/10.1016/j.habitatint.2022.102672>
- Tao, Y., Duan, M., & Deng, Z. (2021). Using an extended theory of planned behaviour to explain willingness towards voluntary carbon offsetting among Chinese consumers. *Ecological Economics*, 185, Article 107068. <https://doi.org/10.1016/j.ecolecon.2021.107068>
- Tavitayan, P., Qu, H., Tsang, W. L., & Lam, C. R. (2021). The influence of smart tourism applications on perceived destination image and behavioral intention: The moderating role of information search behavior. *Journal of Hospitality and Tourism Management*, 46, 476–487. <https://doi.org/10.1016/j.jhtm.2021.02.003>
- Tercia, C. Y., & Teichert, T. (2017). How consumers respond to incentivized word of mouth: An examination across gender. *Australasian Marketing Journal*, 25(1), 46–56. <https://doi.org/10.1016/j.ausmj.2017.01.003>
- Torabi, Z.-A., Shalbafian, A. A., Allam, Z., Ghaderi, Z., Murgante, B., & Khavarian-Garmsir, A. R. (2022). Enhancing memorable experiences, tourist satisfaction, and revisit intention through smart tourism technologies. *Sustainability*, 14(5), Article 5. <https://doi.org/10.3390/su14052721>
- Triandis, H. C. (1977). *Interpersonal behavior*. Brooks/Cole Publishing Company.
- Ulker-Demirel, E., & Giftci, 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>
- Um, T., & Chung, N. (2019). Does smart tourism technology matter? Lessons from three smart tourism cities in South Korea. *Asia Pacific Journal of Tourism Research*. *Scopus*. <https://doi.org/10.1080/10941665.2019.1595691>
- United Nations, D. of E. and S. A., Population Division. (2018). World Urbanization Prospects: The 2018 Revision, Online Edition. <https://population.un.org/wup/Download/>
- Wai Lai, I. K., Yang, T., & Hitchcock, M. (2020). Evaluating tourists' emotional experiences regarding destination casino resorts: An impact-asymmetry analysis. *Journal of Destination Marketing & Management*, 16, Article 100365. <https://doi.org/10.1016/j.jdmm.2019.05.008>
- Wang, D., Li, X. (R.), & Li, Y. (2013). China's "smart tourism destination" initiative: A taste of the service-dominant logic. *Journal of Destination Marketing & Management*, 2(2), 59–61. <https://doi.org/10.1016/j.jdmm.2013.05.004>
- Wang, E. S.-T. (2009). Displayed emotions to patronage intention: Consumer response to contact personnel performance. *The Service Industries Journal*, 29(3), 317–329. <https://doi.org/10.1080/02642060701846747>
- Wang, J., Xie, C., Huang, Q., & Morrison, A. M. (2020). Smart tourism destination experiences: The mediating impact of arousal levels. *Tourism Management Perspectives*, 35. <https://doi.org/10.1016/j.tmp.2020.100707> (Scopus).
- Wang, P., McCarthy, B., & Kapetanaki, A. B. (2021). To be ethical or to be good? The impact of 'Good Provider' and moral norms on food waste decisions in two countries. *Global Environmental Change*, 69, Article 102300. <https://doi.org/10.1016/j.gloenvcha.2021.102300>
- Wang, S., Wang, J., Yang, S., Li, J., & Zhou, K. (2020). From intention to behavior: Comprehending residents' waste sorting intention and behavior formation process. *Waste Management*, 113, 41–50. <https://doi.org/10.1016/j.wasman.2020.05.031>

- Wang, X. (2011). The role of anticipated negative emotions and past behavior in individuals' physical activity intentions and behaviors. *Psychology of Sport and Exercise*, 12(3), 300–305. <https://doi.org/10.1016/j.psychsport.2010.09.007>
- Weiss, H. M., & Beal, D. (2005). Reflections on affective events theory. *Research on Emotion in Organizations*, 1, 1–21.
- Xie, C., Yu, J., Huang, S.(S.), Zhang, K., & Ou Yang, D. (2023). The 'magic of filter' effect: Examining value co-destruction of social media photos in destination marketing. *Tourism Management*, 98, Article 104749. <https://doi.org/10.1016/j.tourman.2023.104749>
- Xie, X., Wang, R., & Gou, Z. (2022). Incorporating motivation and execution into healthy building rating systems based on the theory of planned behaviour (TPB). *Building and Environment*, 222, Article 109452. <https://doi.org/10.1016/j.buildenv.2022.109452>
- Yang, F. X., Li, X., & Choe, Y. (2022). What constitutes a favorable destination brand portfolio? Through the lens of coherence. *Tourism Management*, 90, Article 104480. <https://doi.org/10.1016/j.tourman.2021.104480>
- Yi, J., Yuan, G., & Yoo, C. (2020). The effect of the perceived risk on the adoption of the sharing economy in the tourism industry: The case of Airbnb. *Information Processing & Management*, 57(1), Article 1. <https://doi.org/10.1016/j.ipm.2019.102108>
- Yoo, C. W., Goo, J., Huang, C. D., Nam, K., & Woo, M. (2017). Improving travel decision support satisfaction with smart tourism technologies: A framework of tourist elaboration likelihood and self-efficacy. *Technological Forecasting and Social Change*, 123, 330–341 (Scopus) <https://doi.org/10.1016/j.techfore.2016.10.071>
- Yoon, C. (2018). Extending the TAM for Green IT: A normative perspective. *Computers in Human Behavior*, 83, 129–139. <https://doi.org/10.1016/j.chb.2018.01.032>
- Yuda Bakti, I. G. M., Rakhmawati, T., Sumaedi, S., Widiyanti, T., Yarmen, M., & Astrini, N. J. (2020). Public transport users' WOM: An integration model of the theory of planned behavior, customer satisfaction theory, and personal norm theory. *Transportation Research Procedia*, 48, 3365–3379. <https://doi.org/10.1016/j.trpro.2020.08.117>
- Yuriev, A., Dahmen, M., Paillé, P., Boiral, O., & Guillaumie, L. (2020). Pro-environmental behaviors through the lens of the theory of planned behavior: A scoping review. *Resources, Conservation and Recycling*, 155, Article 104660. <https://doi.org/10.1016/j.resconrec.2019.104660>
- Zaremohzzabieh, Z., Ahrari, S., Krauss, S. E., Samah, A. A., Meng, L. K., & Ariffin, Z. (2019). Predicting social entrepreneurial intention: A meta-analytic path analysis based on the theory of planned behavior. *Journal of Business Research*, 96, 264–276. <https://doi.org/10.1016/j.jbusres.2018.11.030>
- Zhang, L., Yang, X., Fan, Y., & Zhang, J. (2021). Utilizing the theory of planned behavior to predict willingness to pay for urban heat island effect mitigation. *Building and Environment*, 204, Article 108136. <https://doi.org/10.1016/j.buildenv.2021.108136>
- Zhang, Y., & Wang, L. (2019). Influence of sustainable development by tourists' place emotion: Analysis of the multiply mediating effect of attitude. *Sustainability*, 11(5), Article 5. <https://doi.org/10.3390/su11051384>