**THE DIRECT AND INDIRECT INFLUENCE OF EXPERIENCE QUALITY ON SATISFACTION: THE IMPORTANCE OF EMOTIONS.**

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**Abstract**

This paper examines visitor satisfaction in the context of heritage tourism in two tourist-historic heritage destinations: Seville and York. The study investigates the direct and indirect relationships between quality of experience, perceived value and emotions on satisfaction. The results show that the quality of experience positively and directly influences satisfaction through the cognitive variable perceived value and the affective variable emotions. The indirect effect of quality of experience through emotions on satisfaction was greater compared with the indirect effective through perceived value. Therefore, this study draws attention to the importance of quality of experience and emotions on visitor satisfaction. Given that heritage tourism has the potential to elicit emotional and experiential responses by visitors, these findings have significant management implications for heritage destination managers when considering the heritage visitor experience.

Key words: Experience quality, satisfaction, perceived value, emotions, heritage tourism

**Introduction**

The importance of understanding visitor satisfaction in tourism has been widely acknowledged (Su & Hsu, 2013). In previous tourism research concerned with understanding tourist satisfaction and loyalty, the major variables used were service quality and perceived value, both of which are cognitive variables (Giese & Cote, 2000; Oliver, 1997; Tarn, 1999). However, more recent studies of tourist satisfaction suggest that the affective component, i.e. the Quality of Experience, has an increasingly important role in the process of forming satisfaction judgments amongst tourists (De Rojas & Camarero, 2008; Han & Jeong, 2013; Yüksel, Yüksel, & Bilim, 2010). Quality of Experience recognizes the subjective and personal reactions and feelings expressed by consumers when they consume a service (Otto & Brent Ritchie, 1996). Substituting Quality of Service with Quality of Experience has been found to be a more appropriate variable to understand tourist satisfaction (Chen & Chen, 2010), with Quality of Experience positively and directly influencing tourist satisfaction and perceived value (Altunel & Erkut, 2015; Jin, Lee, & Lee, 2015; Kao, Huang, & Wu, 2008). The recognition of the significance of the affective component has resulted in research that combines both cognitive and affective variables in understanding satisfaction judgements (Ali, Amin, & Ryu, 2016; Chen & Chen, 2010; De Rojas & Camarero, 2008; del Bosque & San Martín, 2008; Jin et al., 2015).

Substituting Quality of Service with Quality of Experience draws attention to the emotion variable, also an affective variable, which has been found to have a direct influence on satisfaction (Ali et al., 2016; De Rojas & Camarero, 2008; del Bosque & San Martín, 2008; Zins, 2002). However, the relationship between Quality of Experience, Emotion and Satisfaction thus far remains largely unexplored (Altunel & Erkut, 2015; Chen & Chen, 2010; Jin et al., 2015; Prayag, Hosany, Muskat, & Chiappa, 2017), with inconclusive research regarding the impact of Quality of Experience on tourist satisfaction when considered through the emotion variable (Lee, 2015; Zins, 2002).

Given the importance of experiential benefits to satisfaction in heritage tourism, further understanding and analysis is needed (Chen & Chen, 2010; Otto & Brent Ritchie, 1996). The purpose of this paper, therefore, is to analyse the relationship between the Quality of Experience, Perceived Value, and Emotion variables with regards to their impact and influence on tourist satisfaction in a heritage tourism context. Following an extensive review of the literature, it is apparent that the relationship between quality of experience and emotion is unexplored. This study is concerned with understanding the direct and indirect effects of each variable and therefore seeks to examine whether experience quality exerts an indirect effect on satisfaction through perceived value, whether experience quality exerts an indirect effect on satisfaction through emotion and which of these two indirect effects are greater. Two tourist-historic heritage destinations, Seville, Spain and York, United Kingdom, were chosen for the collection of the empirical data for this study and a multi-group analysis was used to test for significant differences in the relationships identified. By investigating this relationship in two major heritage destinations, this paper is concerned with developing a more informed understanding of the heritage visitor experience and visitor satisfaction, responding to requests for further research in this area (Chen & Chen, 2010).

**Theoretical Background and Hypotheses**

*Quality of Experience*

Otto and Brent Ritchie (1995, 1996) introduced the concept of ‘Quality of Experience’ and applied this to recreational tourism. They define Quality of Experience as the affective component of the experience, which includes subjective, emotional and personal responses to various aspects of service development, leading to overall satisfaction. Otto and Brent Ritchie (1995) explicate the Quality of Experience construct into six dimensions: Hedonic, Interactive, Novelty, Comfort, Safety, and Stimulation. These constructs are refined further by Otto and Brent Ritchie (1996) into four dimensions: Hedonics, Peace of mind, Involvement, and Recognition. Hedonics refers to the set of emotional responses related to enjoyment, fun, and the desire to experience different things. Peace of mind is concerned with physical and mental relaxation needs, comfort, security, and privacy. Involvement includes aspects related to education, participation, control and decision-making during the tourist experience. Finally, recognition is concerned with tourist affective responses derived from having felt important or having been taken into account during the experience. This variable has been used in several studies in the field of tourism, in general (Jin et al., 2015; Kao et al., 2008) and in the area of cultural tourism, more specifically (Chen & Chen, 2010, 2013; Altunel & Erkut, 2015; Domínguez-Quintero, González-Rodríguez, & Paddison, 2018).

*Perceived Value*

Conceptual research on perceived value has been described as limited and lacking in systematic processes (Lin, Sher, & Shih, 2005). However, a growing interest in related concepts such as satisfaction and quality has resulted in more recent studies exploring perceived value in tourism (del Bosque & San Martín, 2008; Jin et al., 2015; Petrick, 2002; Prebensen, Kim, & Uysal, 2016) and cultural tourism (Chen & Chen, 2010; Lee, Phau, Hughes, Li, & Quintal, 2016). According to Zeithaml (1988, p. 14), ‘perceived value is the consumer’s overall assessment of the utility of a product, based on the perception of what is received and what is delivered’. Perceived value is ‘a comparative judgment between what has been received (e.g. the result) and acquisition costs (e.g. financial cost, psychological cost, and effort)’ (Oliver, 1997, p. 28). In a review of the various definitions of perceived value, Gallarza and Gil Saura (2006a) identify three distinctive points: (i) the subjective statements predominate. For these authors, the subjective perspective must prevail as the value is not inherent to the product or service, but is experienced by the client; (ii) most of the definitions understand perceived value as a bidirectional objective assessment, with the term trade-off generally used, thus expressing a balance between costs and benefits; and finally, (iii) most definitions take into account elements of price and quality.

*Emotions*

Most definitions of emotion agree on the complexity of the concept and on three basic characteristics: a subjective experience, a physiological response and a behavioural aspect (Volo, 2017). Shuman and Scherer (2014) consider emotions as a particular kind of affective phenomena having three characteristics: (1) they are event focussed; (2) they last a short amount of time; (3) they are made by different components – a subjective feeling component, a motor component, an action tendency component, and an appraisal component. There are different theoretical perspectives that analyse the interaction of the different components that make up emotions: basic emotions, appraisal, social constructionist, and nonlinear dynamic system theory. In the first perspective, basic emotions, emotions are considered a set of discrete and specific affective states, easily recognizable and distinguishable from each other (Plutchik, 2001). The components are triggered as one package, resulting in an emotional sequence. The appraisal theory (Lazarus, 1991; Scherer, 2009) considers emotions as a process with constantly interacting components.

From the perspective of psychological constructionist theory (Barrett, 2006; Russell, 2003), an emotional outcome occurs when individuals associate subjective feeling with an event. Finally, nonlinear dynamic system theory (Camras, 2011; Fogel et al., 1992; Lewis, 2005) places emphasis on the nonlinear relationships between emotions components. This approach has been partially incorporated by other theories, such as basic emotions theory (Izard, 2007) and appraisal theory (Sander, Grandjean, & Scherer, 2005; Scherer, 2000). From a service perspective, for Holbrook (1995), emotions are physiological responses, cognitive interpretations, phenomenological feelings and expressions of behaviour derived from a consumption experience. This notion of consumption emotions is concerned with ‘the affective responses to one’s perceptions of the series of attributes that comprise a product or service’ (Dubé & Menon, 2000, p. 288). Understanding the emotions elicited by tourism experiences is an important challenge for destination marketers and tourism operators (Li, Scott, & Walters, 2015, p. 805). Emotional arousal is a major motivation for the purchase and consumption of tourist experiences. A number of authors have examined the effect of emotions on the judgments of consumer satisfaction in tourism (Ali et al., 2016; De Rojas & Camarero, 2008; del Bosque & San Martín, 2008; Hosany & Gilbert, 2010; Prayag, Hosany, & Odeh, 2013; Su & Hsu, 2013; Zins, 2002). del Bosque and San Martín (2008) suggested that emotions which arise during the tourist experience cause traces in the memory that are later recovered by the individual for the evocation and construction of satisfaction. For Kim and Fesenmaier (2015), emotions contribute to purchasing behaviour and travel choices. It has been identified that the emotions provoked during the tourist experience play a mediating or moderating role (Ali et al., 2016; De Rojas & Camarero, 2008; del Bosque & San Martín, 2008) between other variables and tourist satisfaction. Recently, Prayag et al. (2017) identified a relationship between specific emotional responses and tourist satisfaction and call for further research that examines this relationship.

*Satisfaction*

A review of the literature on the satisfaction variable identified that the majority of research can be classified into three main groups: (1) those that consider satisfaction as a process. The focus here is on the analysis of the background or elements involved in the formation of satisfaction and the importance of comparison processes. Satisfaction has a relative character as a consequence of the presence of a standard with which the result of the experience or consumption is compared. A distinction is made between the performance or perceived experience of a product and an element of comparison can be the needs of the individual, the desires, the values or the expectations (Oliver, 1981; Spreng, Mackenzie and Olshavsky, 1996); (2) definitions that consider satisfaction as an answer focus on the nature and origin of the concept rather than on its causes. Accordingly, satisfaction is a response to the experience of consumption and this response can be emotional in nature (Giese & Cote, 2000; Westbrook & Reilly, 1983), of a cognitive nature (Westbrook, 1980; Day, 1984) or may contain cognitive and emotional aspects (Singh, 1991 and, Wirtz & Bateson, 1999); (3) finally, a third group of definitions considers satisfaction as a process. These definitions combine the cognitive an affective approach, with the experience or emotional response derived from a cognitive evaluation that the subject performs through a disconfirmation process that compares the result of the live experience with a reference initially set (Oliver, 1997; Zeithaml, Berry, & Parasuraman, 1996; o Bigné & Andreu, 2004).

In the field of tourism, recent studies have adopted the cognitive-affective approach to satisfaction (Ali et al., 2016; Chen & Chen, 2010; De Rojas & Camarero, 2008; del Bosque & San Martín, 2008; Hosany, Prayag, Van Der Veen, Huang, & Deesilatham, 2017; Teixeira et al., 2012). This approach is adopted in this research with satisfaction defined as an individual’s cognitive-affective state derived from a tourist experience (del Bosque & San Martín, 2008).

*Relationship between Variables and Hypotheses*

There is an abundance of research exploring the influence of different variables on tourist satisfaction. Among these variables, and within the cognitive-affective approach of satisfaction, the Perceived Value, the Quality of Experience and Emotions have shown a positive and direct influence on satisfaction in tourism studies (Ali et al., 2016; Gallarza & Gil Saura, 2006b; Jin et al., 2015; Prebensen et al., 2016; Zins, 2002) and in the area of cultural tourism more specifically (Altunel & Erkut, 2015; Chen & Chen, 2010, 2013; De Rojas & Camarero, 2008; Domínguez-Quintero et al., 2018; Pandža Bajs, 2015). Therefore, these relationships constitute the object of the first three hypotheses of the proposed model:

H1: Quality of Experience has a positive influence on Satisfaction (a>0).

H2: Perceived Value has a positive influence on Satisfaction (b>0).

H3: Emotions have a positive influence on Satisfaction (c>0).

There is, however, limited research that examines the relationship between the variables of Quality of Experience and Perceived Value. Several studies have demonstrated the direct and positive influence of the Quality of Experience on Perceived Value in tourism (Chen & Chen, 2010, 2013; Jin et al., 2015). It is suggested that enhancing the quality of a tourist’s experience may positively influence the cos tbenefit balance that perceived value assesses. This study, therefore, seeks to offer an advance understanding of this relationship and proposes a fourth hypothesis to the model:

 H4: Quality of Experience has a positive influence on Perceived Value (d>0).

Regarding the possible relationship between Quality of Experience and Emotions, a number of authors provide theoretical arguments regarding these two variables (Chang & Horng, 2010; Hosany & Gilbert, 2010; Pine & Gilmore, 1998; Pine, Pine & Gilmore, 1999). It is suggested here that the affective or emotional nature of the quality of experience means that it must be related to the emotions that the tourist experiences when visiting a destination. Although Zins (2002) analysed how the different components and aspects of experience quality could influence the perception of emotions, his results were inconclusive. The data supports the hypothesis that there is a positive association between a number of the components of the experience quality and emotions, but fails to support the hypothesis for other components. This hypothesis is therefore only partially accepted. Furthermore, Lee (2015) identified the Emotions variable as having no direct positive influence on the Quality of Experience but that it does have an indirect influence via Nostalgia (this is defined as a state of mind experienced during the visit). It is evident that there is limited research analyzing the relationship between these two variables in the context of tourism. There is a gap in academic literature regarding the relationship between the variables Quality of Experience and Emotions that remains unexplored and therefore a fifth hypothesis is proposed:

H5: The Quality of Experience exerts a direct positive influence on the Emotions variable (e>0)

If the analysis of the data leads to the acceptance of H2, H3, H4 and H5 hypotheses then in this case it would be reasonable to propose the existence of two indirect effects: the Quality of Experience on Satisfaction via Perceived Value and the Quality of Experience on Satisfaction via Emotions. In order to ascertain whether such indirect effects exist, the following hypotheses are proposed:

H6: Via Perceived Value, the Quality of Experience positively influences Satisfaction (f=b\*d>0).

H7: Via Emotions, the Quality of Experience positively influences Satisfaction (g=c\*e>0)

Of particular interest in this study is the analysis of these two indirect effects, especially if Perceived Value is considered a construct of a cognitive nature and that the variable Emotions is a construct of an affective nature. In addition, in the case where both indirect effects are significant, one might ask: is the indirect effect via the affective variable greater than the effect via the cognitive variable? In order to answer this question, the eighth hypothesis is proposed:

H8: The indirect effect of the Quality of Experience on Satisfaction via the Emotions variable is greater than the indirect effect of the Quality of Experience on Satisfaction via the Perceived Value variable (h=g-f > 0)

In order to further analyse the direct and indirect relationships that are suggested above, and given that the data has been collected in two destinations, Seville (Spain) and York (UK), a multi-group analysis to investigate whether significant differences exist in the conclusions obtained between the two destinations are proposed:

H9: There are significant differences in the direct influence exerted by the Quality of Experience on Satisfaction in York compared to Seville (ay-as≠0)

H10: There are significant differences in the direct influence exerted by Perceived Value on Satisfaction in York compared to that in Seville. (by-bs≠0)

H11: There are significant differences in the direct influence exerted by the Emotions variable on Satisfaction in York compared to that in Seville (cy-cs≠0)

H12: There are significant differences in the direct influence exerted by the Quality of Experience on Perceived Value in York compared to that in Seville (dy-ds≠0)

H13: There are significant differences in the direct influence exerted by the Quality of Experience on the Emotions variable in York compared to that in Seville (ey-es≠0)

H14: There are significant differences in the indirect effect exerted by the Quality of Experience on Satisfaction via Perceived Value in York compared to that in Seville (fy-fs≠0)
H15: There are significant differences in the indirect effect of the Quality of Experience on Satisfaction via Emotions in York compared to that in Seville (gy-gs≠0)

The model proposed for their contrast and the set of hypotheses are represented graphically in Figure 1:

[Insert Figure 1]

**Methodology**

A quantitative research design was employed and a questionnaire developed that consisted of three parts. The first part contained questions regarding the socio-demographic characteristics of the interviewee (gender, age, place of origin, level of studies). The second section included basic information about the visit, such as the duration of stay, cultural events or attractions visited, and the primary purpose of the trip. This second part of the questionnaire included questions that allowed the researchers’ to study the affective and cognitive variables included in the research model. The constructs in the third part of the questionnaire were measured using question statements adapted from academic studies related to these topics. The questionnaire was translated into Spanish, English, French, German and Mandarin in order to include tourists of different nationalities.

The Quality of Experience variable used was adapted from Otto and Brent Ritchie (1996) and employs six items of measurements. The scale employed for the Perceived Value variable was an adaptation of the constructs utilized by Chen and Chen (2010, 2013). The Emotions construct is an adaptation of that used by De Rojas and Camarero (2008), and originates from the proposal by Russell (1980). The model is the most often adopted in the marketing literature to model the emotional state of individuals in a consumer experience. In the context of tourism, Wirtz and Bateson (1999) and Mattila and Wirtz (2000) have shown that this scale provides good predictive validity. The measurement of the Satisfaction variable is an adaption of the multi-dimensional scale provided by Oliver (1997). The researchers’ included two items which referred to the affective and cognitive evaluation of Satisfaction and a third item for a global evaluation of Satisfaction. The measurement of all the variables was in terms of the seven-point Likert scales, whereby the score 1 refers to strongly disagree, and 7 refers to strongly agree.

The main purpose of this study was to gain an international perspective of how cognitive factors such as perceived value and affective factors, such as quality of experience and emotions, influence tourist satisfaction. This research aims to address a gap in the academic literature regarding a lack of cross-cultural research in tourism (Liu & Liu, 2009). In this vein, the study was conducted in two typical tourist spaces in both case study locations, Seville and York. Both cities are well known heritage destinations and present similarities and differences with regards to their tourism offer. York is a mature destination with problems of potential decline in the face of competition, while Seville is a heavily invested destination where tourism is directly related to economic regeneration. Both cities are home to a range of cultural attractions and annual events. Seville, dating back 3000 years, rises on the banks of the River Gualdalquivir, is an important point of confluence of maritime and terrestrial routes. Roman and Muslim culture is visible in its historic sites, buildings and local citizens’ life. York, founded by the Romans in AD71, is located at the confluence of the Rivers Ouse and Foss. In the Middle Ages it became a Viking city, and today its medieval architecture, ancient Roman Walls, and the Gothic cathedral make the city one of the best historical sites in England. While the City of York maintains its traditional architecture as a tourist attraction, Seville is committed to a greater diversification of the patrimonial offer with a tendency towards the construction of more modernist buildings such as the emblematic structure known as ‘the mushrooms’ and the ‘Pelli tower’, both integrated in the historic centre of the city. Furthermore, different picturesque and colourful events and experiences are offered in the cities which affect the emotions generated during the visit. For these reasons, a cross-cultural study is necessary to achieve greater knowledge as to how the touristic offer in both cities could impact tourist satisfaction. The own idiosyncrasy and the cultural identity of both cities might condition the way in which the Destination Management Organizations (DMO) conduct marketing activity to facilitate a memorable experience. The understanding of how cognitive and affective factors enhance satisfaction leading to a memorable experience is of special relevance to the development of heritage tourism in both countries.

Prior to data collection, a pilot survey was conducted in both heritage destinations to ensure the validity of the survey. This allowed for the refinement of some items of the questionnaire prior to the start of data collection. In York, data were collected in November 2016 in the Visit York tourist information office and in the surroundings of the York Minster and the Castle Museum. In Seville, data was collected during the month of December 2016 which typically enjoys one of the largest influxes of visitors to the city. The data collection points in Seville included the surroundings of the Cathedral, the Reales Alcázares gardens, and the Museum of Flamenco Dance. Potential respondents were approached randomly and asked to complete the on-site self-administered questionnaire. The potential respondents were informed about the aim of the study and notified that the information provided would be strictly used for academic purposes only. Those who agreed to participate were given a copy of the survey which on average took10 minutes to complete. The questionnaire was provided in the participants native language to avoid potential problems of misunderstanding. As the personal interview method was used for data collection, participants were assisted by the research team when needed to assure accurate answers. To minimize response bias, potential respondents were targeted at different times throughout the day (morning, afternoon and evening) and during both weekdays and weekends. This led to the distribution of 452 questionnaires, of which 415 questionnaires (92%) were returned as completed, 210 in Seville and 205 in York. According to Green (1991), for an 80% confidence level and a 5% error level for a maximum of 4 predictors, the minimum sampling size required for the measurement of the medium-sized effects between the variables would be 84 surveys. Alternatively, the G\*Power was used to calculate the sample size based on statistical power which suggested that a sample size of 133 was necessary for a statistical power of 0.95 for model testing. Therefore, given that both sample sizes exceeded 133 and the statistical power exceeded 0.80, which are the minimum required in social research, the sample sizes for Seville and York were acceptable for the purposes of this study. The profile of the respondents is outlined in Table 1.

[Insert Table 1]

*Data Analysis*

Partial Least Squares (PLS) was used to estimate path coefficients and test the hypotheses in the research model. The choice of the PLS methodology (Roldán & Sánchez-Franco, 2012) is due to the following reasons: (i) the relatively small sample size (n = 210 for Seville, n = 205 for York) (Hair, Hult, Ringle & Sarsted, 2014); (ii) the nature of the variables included in the model which responds to a composite mode design (composite Mode A and composite Mode B); (iii) the complexity of the research model concerning the relationships established between the variables (direct and mediating effect); and (iv) the suitability of PLS-SEM for Multigroup Analysis (MGA) by including non-parametric techniques (Hair et al., 2014; Henseler, Ringle, & Sarstedt, 2016; Sarstedt, Henseler, & Ringle, 2011). In order to conduct the analysis, SmartPLS software (Ringle, Wende, & Becker, 2015) was used.

For the assessment of the research model in Seville and York, a two-stage procedure was conducted (Hair et al., 2017). First, the measurement model was evaluated (outer model) by evaluating the reliability and validity of composite Mode A constructs. For composite Mode B, the presence of multi-collinearity between the items was also analysed (Hair et al. (2017). Second, the structural model was evaluated (inner model) by assessing the path coefficients, explanatory power (R2), and the values of the Root Mean Square Residual (SRMR) as an approximate model fit for PLS-SEM (Henseler, Hubona & Ray 2016). Finally, the non-parametric methods, namely Henseler’s MGA (Henseler, Ringle & Sinkovics 2009) and the permutation test (Chin & Dibbern, 2010) were used to test the MGA for those indirect relations involved in the Model. Moreover, prior to performing the MGA, measurement invariance was evaluated using MICOM (Hair, Sarstedt, Ringle & Gudergan, 2018; Henseler et al., 2016).

**Empirical Results**

*Model Assessment*

During the first stage of analysis, the assessment of the measurement model allowed for 16 items to be observed. The evaluation is different depending on whether the construct is composite Mode A or composite Mode B. Firstly, assessment of the measurement model for Composite Mode A entails an evaluation of the validity and reliability of the data (Hair et al., 2014). Table 2 shows that the indicators of Composite Mode A variables in the two groups meet reliability requirements since, in general, they are higher than 0.7. In addition, there are some items with a loading of 0.4–0.7. These items should be considered for removal if they increase the Composite Reliability (CR) and AVE to a level above the threshold. However, the decision was to retain them to support the content validity of the scale. Table 2 shows that the CR are greater than 0.7 and the AVE of the constructs is higher than 0.5, and therefore convergent validity is acceptable (Hair et al., 2014). The fact that CR and AVE surpass the 0.5 threshold confirms that the removal of indicators in the two groups with loadings 0.4–0.7 was unnecessary .

[Insert Table 2]

Table 3 shows that all variables achieve discriminant validity following both the Fornell-Larcker and the HTMT90 criteria. HTMT inference tests show that none of the confidence intervals contains the value one, and hence this result suggests that each construct is distinct from the other constructs (Henseler, Ringle, & Sarstedt, 2015). Secondly, for the assessment of the measurement model of Composite B, we first have to ascertain whether there is any multi-collinearity between the items by calculating Variance Inflation Factor (VIF). Another aspect to consider is the analysis of the significance of each weight via a bootstrapping technique. [Insert Table 3]

Table 4 shows the items have no problems of multi-collinearity (VIFs less than 3) and the weights are significant at 0.5%.

 [Insert Table 4]

*Assessment of the Structural Model*

In the second stage of analysis, the structural models for both York and Seville were assessed. Table 5

shows the path coefficients and the hypothesis testing using 5000 bootstrap resamples. From Table 5

and Figures 2 and 3, it can be observed that the Quality of Experience exerts a positive and significant

influence on Satisfaction in York (ay = 0.197\*\*), but not in Seville (aS= 0.031 ns). Hence, Hypothesis H1 is partially confirmed. The Perceived Value positively and significantly influences Satisfaction in Seville (bs = 0.343\*\*\*) and in York (by = 0.148\*). Therefore, Hypothesis H2 is confirmed in the two cities. Hypothesis H3 is also supported since a positive and significant effect of the Emotions variable is observed on Satisfaction in both Seville and in York (cs = 0.523\*\*\* and cy = 0.471\*\*\*). Hypotheses H4 and H5 are confirmed for both cities on observing a positive influence of the Quality of Experience on the Perceived Value (ds = 0.592\*\*\* and dy = 0.583\*\*\*) and of the Quality of Experience on Emotions (es = 0.646\*\*\* and ey = 0.608\*\*\*). Table 5 also reports the mediating relationships in the model as the product of the coefficients of each of the causal relationships in the mediating chain (Hayes, Preacher, & Myers, 2011). Based on the one-tailed t-test, the indirect effect of the Quality of Experience through Perceived Value on Satisfaction (fs = ds \*bs = 0.203\*\*\* with t = 4.861; fy = dy \*by = 0.086\* with t = 1.666\*\*\*) is significant for both groups. The indirect effect of the Quality of Experience through Emotions on Satisfaction is also significant for the two groups (gs = cs\*es = 0.338\*\*\* with t = 6.784; gy = cy\*ey = 0.286\*\*\* with t = 4.589). This supports Hypothesis H6 and Hypothesis H7. The importance of these indirect effects on satisfaction was tested using 5,000 bootstrap resamples (Chin, Kim and Lee 2013). In York, the indirect effect of the Quality of Experience through the Emotions variable contributes more to Satisfaction than the corresponding indirect effect through the Perceived Value (Diff = hs = 0.20\*; t = 2.277). For Seville, it is also observed that the indirect effect of the Quality of Experience through the Emotions variable presents a higher effect on Satisfaction than the Perceived Value, although the difference is at the 10% significance level (Diff = hy = 0.135\*, t = 1.905). Therefore, Hypothesis H8 is supported. The Standardized Root Mean Square Residual (SRMR) as an approximate fit of the composite factor model (Henseler, Hubona, et al., 2016) is also computed for the two groups. The results revealed that the SRMR model fits values of 0.073 and 0.066 for York and Seville respectively. Since these values are lower than 0.08 they can be considered as acceptable for PLS-SEM. [Insert Table 5]

[Insert Figure 2]

[Insert Figure 3]

*Multi-Group Analysis (MGA)*

Testing the measurement invariance is a necessary requirement before performing the MGA. The measurement invariance of composites (MICOM) has been widely used with Henseler, Ringle, et al. (2016) suggesting that this technique is more suitable for PLS-SEM. Table 6 shows the results for the MICOM three-step procedure: (i) configural invariance assessment; (ii) the establishment of compositional invariance assessment; and (iii) assessment of equal means and variances. According to the results from the MICOM procedure, the measurement invariance of both groups has been established. [Insert Table 6]

Table 7 shows the structural models and results of the MGA. First, for the analysis of the difference of the direct paths across groups, the non-parametric methods, those of Henseler’s MGA (Henseler, Ringle, and Sinkovics 2009) and the permutation test (Chin and Dibbern, 2010), were used. According to Henseler’s MGA method, a p value of differences between path coefficients lower than 0.05 or higher than 0.95 indicates significant differences between specific path coefficients across two groups at a 5% level of significance. However, differences in the permutation test are only tested at the 5% level of significance if the p value is smaller than 0.05. Using both Henseler’s MGA and the permutation method to evaluate significant differences for direct effects, the results indicate two significant differences: first, the influence of Perceived Value on Satisfaction is higher in Seville than in York, and second, the influence of Quality of Experience on Satisfaction is higher in York than in Seville. Moreover, the results indicated non-significant differences between other path coefficients and hence relationships across the two groups. Therefore, the results support Hypotheses H9 and H10. However, Hypotheses H11, H12 and H13 are not supported by the results obtained. Second, in order to analyse the differences of the mediating effects across groups, the Henseler’s MGA has been used. The indirect effect of the Quality of Experience through the Perceived Value on Satisfaction is greater in Seville than in York. Hence, Hypothesis 14 is supported. On the other hand, there are no significant differences in the indirect effect of the Quality of Experience through the Emotions variable in York and Seville, and therefore Hypothesis H15 is not supported.

[Insert Table 7]

**Discussion and Conclusion**

This study was motivated by the need for research concerned with understanding the direct and indirect influence of the quality of experience via emotion and perceived value on tourist satisfaction. Responding to requests for further research in this area (Chen & Chen, 2010, 2013), this study provides a more informed understanding of the heritage experience in relation to tourist satisfaction. The study has shown that in the case of both York and Seville, the Quality of Experience positively and significantly influences Perceived Value and Perceived Value positively and significantly influences Satisfaction. These results correspond with previous research (Chen & Chen, 2013; del Bosque & San Martín, 2008; Gallarza & Gil Saura, 2006b; Jin et al., 2015; Prebensen et al., 2016). In addition, yet unexpectedly, the Quality of Experience positively and significantly exerts a direct influence on Satisfaction in York but not in Seville. This only partially confirms the results obtained in previous research (Altunel & Erkut, 2015; Chen & Chen, 2010; Kao et al., 2008). Also, there were significant differences in the effect of Perceived Value on Satisfaction when comparing York with Seville, being this effect higher in Seville than in York. This work goes beyond the typical analysis of the direct effects and also analyses the indirect effects. It was found that the Quality of Experience, through the cognitive variable Perceived Value, positively and significantly influences Satisfaction in both cities. This indirect relationship has not been analyzed in previous research. Also, there were significant differences in the effect of the Quality of Experience via Perceived Value on Satisfaction when comparing York and Seville. This indirect effect was greater in Seville than in York. If, when taking into consideration that in Seville the Quality of Experience has no direct effect on Satisfaction and that the effect of the Perceived Value on Satisfaction is greater in Seville than in York, it can be concluded that in Seville the influence of the Quality of Experience on Satisfaction is a full mediated relationship. While in York, however, this influence is directly and indirectly made and therefore is a partially mediated relationship. These results may be due to the fact that tourists who visit Seville gave more importance to the balance between costs and benefits implied by the Perceived Value for the final assessment of Satisfaction.

The study found that Emotions positively and significantly influences Satisfaction in both York and Seville. This result coincides with those obtained in previous research (Zins, 2002; De Rojas & Camarero, 2008; Rodríguez & San Martín, 2008; Ali et al., 2016). This study found that the Quality of Experience positively and significantly influences Emotions in both cities. These results confirm the idea suggested by Zins (2002) and provide the first statistically contrasted result for the academic literature. As a consequence of the positive contrast of the two previous relationships, this research also analyses the indirect effect of the Quality of Experience through the affective variable of Emotions on Satisfaction. The analysis found that the Quality of Experience, positively and significantly influences Satisfaction via Emotions in both cities. There are no significant differences in the indirect effect that the quality of experience exerts on satisfaction through the emotions variable if we compare the cities of Seville and York. This indirect effect has not been analysed in previous work. These findings draw attention to the significance of the Quality of Experience and Emotions on influencing tourist satisfaction which is yet to be identified and fully explored in the tourism literature. It is worth noting here that there were no significant differences in the effect of Emotions on Satisfaction and no significant differences in the direct influence exerted by the Quality of Experience on the Emotions variable in York compared to that of Seville.

Finally, the analysis found that the indirect effect of the Quality of Experience on Satisfaction through the Emotions variable was greater than that through the Perceived Value variable in both York and Seville. It is suggested here that this result is significant and leads us to highlight the value of the affective variable Emotions in satisfaction judgments of heritage tourists. Despite numerous studies that analyse the direct influence of the variables of Perceived Value and Emotions on Satisfaction (Ali et al., 2016; Chen & Chen, 2013; De Rojas & Camarero, 2008; del Bosque & San Martín, 2008; Gallarza & Gil Saura, 2006b; Jin et al., 2015; Mattila & Enz, 2002; Prebensen et al., 2016; Zins, 2002), there is limited and inconclusive research which explores the direct influence of the Quality of Experience on the Emotions variable. Indeed, there is limited research that analyses the indirect effects of the Quality of Experience on Satisfaction through the cognitive variable of Perceived Value and through the affective variable of Emotions. This paper, therefore, has contributed to our understanding of the direct and indirect effect of the quality of experience on tourist satisfaction. In particular, this study has shown that the Quality of Experience influences Satisfaction indirectly through Perceived Value and Emotions. Our work finds that the indirect influence of the Quality of Experience on Satisfaction through Emotions is greater than that exerted through Perceived Value. On the other hand, the multi-group analysis not only focuses on analyzing whether there are significant differences in the direct effects between the two cities, but also analyses whether there are significant differences in the indirect effects upon the two; the latter question is one that has not been previously analyzed in the literature.

**Theoretical Implications**

There are a number of theoretical implications that arise from this study. The first is the theoretical contribution that this work makes to the academic literature, with the results of this stud identifying the positive and direct influence of the Quality of Experience on Emotions. Previous studies on this relationship (Lee, 2015; Zins, 2002) have showen contradictory results. Second, this study has contributed to the identification of the indirect and positive influence of the Quality of Experience on Satisfaction through the variable Emotions. The third contribution includes the indirect and positive influence of the Quality of Experience on Satisfaction via Perceived Value. Finally, the comparison of these two indirect effects has resulted in the fourth theoretical contribution that the indirect effect of the Quality of Experience on Satisfaction via Emotions is greater than that realized via Perceived Value.

**Managerial Implications**

There are also a number of managerial implications that arise as a consequence of this research. In order to enhance the quality of the visitor experience and facilitate more meaningful engagement, tourism marketers, planners and policy makers are encouraged to recognize the importance of the quality of the visitor experience against the variables Perceived Value and Emotions.

In order to provide a positive cultural experience, it is important to meet the expectations of visitors with regards to architecture, the faithful restoration of buildings, harmony of the buildings with the scenery of the destination, and provide attractive and complete heritage information which enhances the perceived information quality. The information provided must be presented in an accessible and visual form, but also in an auditory or tactile manner, thus facilitating the use of the senses and a greater capacity for communication. Furthermore, the visitor experience improves if heritage managers design strategies to meet expectations regarding the components of peace of mind, cultural experience, and involvement in the traditions and customs of the local community. Consequently, it is crucial that cultural tourism authorities present the cultural heritage of a destination within a setting that allows tourists to immerse themselves in different historical periods with accurate and detailed information. To encourage the experimentation of positive emotions such as fun, surprise, enjoyment, and wonder, it is suggested that the decoration of the different scenarios include typical elements of the destination, for example, tapestries, colours, and the use of smell that would enhance the overall experience. In addition, gastronomic events are a good opportunity for visitors to interact with local people and their traditions and customs, improving the quality of the experience and allowing visitors to experience positive emotions. Policy makers are therefore encouraged to develop strategies to work with local residents in the development of tourism experiences.

Surprise is a positive emotion that should also be stimulated. Given that visitors usually remember destinations and experiences that have an element of surprise, it is recommended that this be incorporated into the tourism experience. This can facilitate a positive emotional state and have a positive impact on satisfaction.

Finally, in order to encourage a positive evaluation of the perceived value of the experience, policy makers should focus not only on the price of the experience but also on factors such as the ease of purchase and security. These recommendations to improve the perception of Perceived Value are especially important in Seville, given that it was here where this variable had a more important role derived from its direct effect and its mediating role in the effect of Quality of Experience on Satisfaction.

**Limitation of this study and suggestions for future research**

Finally, we draw attention to the possible limitations of this study and avenues that merit further research. Firstly, whilst the sample collected demonstrates a robust data set and met the sample size requirements for Partial Least estimation, a larger sample would strengthen the conclusions drawn. In addition, the moderating effects of the different demographic characteristics on each of the constructs in the research model were not analyzed. Further research which segments the sample using its demographic profile would provide valuable information particularly for destination managers in order to facilitate a more personalized and diversified offer to visitors. Secondly, no minimum period of stay was stipulated by the respondents. Consequently, it would be interesting to interview people who stayed at the destination for several days so that the involvement of tourists with the place visited and with its residents could be observed. The active participation of tourists in the cultural life of the city would therefore be encouraged. This could improve the quality of the experience and stimulate the experimentation of positive emotions during the visit which could lead to greater satisfaction. A longer duration of visit would allow for the mood variable and nostalgia variable to be studied. For Holbrook (1993), nostalgia refers to a longing for the past, a yearning for yesterday, or a fondness for possessions and activities associated with past times. This variable has been taken into account in recent tourist studies (Christou, Farmaki & Evangelou, 2018; Lee, 2015).

Another limitation is concerned with the time of data collection. In York, data was collected in November and in Seville, data was collected in December. Although cultural tourism is not dependent on climate and therefore less seasonal compared with other forms of tourism, it would be interesting to collect data through a wider period of time to observe any differences to the sample results. Comparisons between weekend visitors and weekday visitors might also be studied to see if there are any differences in how the cognitive variable, the perceived value, and the affective variables, such as quality of experience and emotions, influence satisfaction.

The analysis of causal relationships has hitherto been restricted to the cities of Seville and York and therefore limits the generalization of the study’s findings. It would therefore be interesting to contrast the relationships explored in the research model with those of other heritage destinations.

Finally, a more novel research initiative would be to survey a sample of those who have visited both York and Seville. This would allow for an analysis of which factors, either cognitive or affective, generates the most satisfaction and in which of the two cities the affective aspect results in greater satisfaction.

**References**

Ali, F., Amin, M. & Ryu, K. (2016). The role of physical environment, price perceptions, and consumption emotions in developing customer satisfactions in Chinese resort hotels. *Journal of Quality Assurance in Hospitality and Tourism*, 17(1), 45-70.

Altunel, M. C., & Erkut, B. (2015). Cultural tourism in Istanbul: The mediation effect of tourist experience and satisfaction on the relationship between involvement and recommendation intention. *Journal of Destination Marketing & Management*, 4(4), 213-221.

Barrett, L. F. (2006). Are emotions natural kinds*?. Perspectives on psychological science*, 1(1), 28-58.

Batson, C.D., Shaw, L.L. & Oleson, K. (1992). Differentiating Affect, Mood, and Emotion. Toward Functionally Based Conceptual Distinctions. Clark, M. (ed). *Emotion. Review of Personality and Social Psychology,* Sage, Newbury Park, 13, 294-326.

Bigné, J.E. & Andreu, L. (2004). Modelo Cognitivo-Afectivo de Satisfacción en Servicios de Ocio y Turismo. *Cuadernos de Economía y Dirección de la Empresa*, 21, 89-120.

Camras, L. A. (2011). Differentiation, dynamical integration and functional emotional development. *Emotion Review,*3(2), 138-146.

Chang, T. Y., & Horng, S. C. (2010). Conceptualizing and measuring experience quality: the customer's perspective. *The Service Industries Journal*, *30*(14), 2401-2419.

Chen, C.F., & Chen.F.S. (2010). Experience quality, perceived value, satisfaction and behavioral intentions for heritage tourists. *Tourism Management,* 31, 29-35.

Chen, C.F., & Chen, P.C. (2013). Another look at heritage tourism experience. *Annals of Tourism Research,* 41, 236-240.

Chin, W. W., & J. Dibbern. (2010). A Permutation Based Procedure for Multi-Group PLS Analysis: Results of Tests of Differences on Simulated Data and a Cross Cultural Analysis of the Sourcing of Information System Services between Germany and the USA. In *Handbook of Partial Least Squares: Concepts, Methods and Applications,* edited band V. Esposito Vinzi, W. W. Chin, J. Henseler, & H. Wang, 171–93. Heidelberg: Springer.

Chin, W. W., Kim, Y. J., & Lee, G. (2013). Testing the Differential Impact of Structural Paths in PLS Analysis: A Bootstrapping Approach. In *New Perspectives in Partial Least Squares and Related Methods* (pp. 221-229). Springer New York.

Christou, P., Farmaki, A. & Evangelou, G. (2018). Nurturing nostalgia? A response from rural tourism stakeholders. *Tourism Management,* 69, 42-51.

Day, R.L. (1984). Modeling Choices Among Alternative Responses to Dissatisfaction. *Advances in Consumer Research,* 11, 496-499.

De Rojas, C. & Camarero, C. (2008). Visitors’ experience, mood and satisfaction in an heritage context: Evidence from an interpretation center. *Tourism Management,* 29, 525-537.

Domínguez-Quintero, A.M., González-Rodríguez, M.R. & Brendan Paddison (2018). The mediating role of experience quality on authenticity and satisfaction in the context of cultural-heritage tourism. *Current Issues in Tourism*, DOI: [10.1080/13683500.2018.1502261](https://doi.org/10.1080/13683500.2018.1502261)

Dubé, L. & Menon, K. (2000). Multiple roles of consumption emotions in post-purchase satisfaction with extended service transactions. *International Journal of Service Industry Management,* 11(3), 287-304.

Fogel, A., Nwokah, E., Dedo, J. Y., Messinger, D., Dickson, K. L., Matusov, E., & Holt, S. A. (1992). Social process theory of emotion: A dynamic systems approach. *Social Development*, 1(2), 122-142.

Gallarza, M.G. & Gil, I. (2006a). Desarrollo de una escala multidimensional para medir el valor percibido de una experiencia de servicio. *Revista Española de Investigación en Marketing*, ESIC, 10(2), 25-60.

Gallarza, M.G. & Gil Saura, I. (2006b). Value dimensions, perceived value, satisfaction and loyalty: an investigation of university students’ travel behaviour. *Tourism Management,* 27, 437-452.

Giese. J. L. & Cote, J. A. (2000). Defining Consumer Satisfaction. *Academy of Marketing Science Review,* 1, 1-34.

Green, S.B. (1991). How many subjects does it take to do a regression analysis. *Multivariate Behavioral Research,* 26, 499-510.

Hair, J. F., G. T. M. Hult, C. Ringle, & M. Sarstedt. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Los Angeles, CA: Sage.

Hair, J.F., Sarstedt, M., Ringle, C.M., & Gudergan, S.P. (2018): *Advanced Issues in Partial Least Squares Structural Equation Modeling (PLS-SEM).* Thousand Oaks, CA: Sage.

Hayes, A. F., Preacher, K. J., & Myers, T. A. (2011). Mediation and the estimation of indirect effects in political communication research. *Sourcebook for political communication research: Methods, measures, and analytical techniques,* 434-465.Routledge.

Henseler, J., G. Hubona, & P. A. Raand. (2016). Using PLS Path Modeling in New Technology Research: Updated Guidelines. *Industrial Management & Data Systems* 116 (1): 2–20.

Henseler, J., C. Ringle, & M. Sarstedt. (2016). Testing Measurement Invariance of Composites Using Partial Least Squares. *International Marketing Review* 33 (3): 405–31.

Henseler,J., Ringle,C.M., & Sarstedt, M.(2015).A new criterion for assessing discriminant validity in variance-based structural equation modelling. *Journal of the Academy of Marketing Science,* 43, 115–135.

Henseler, J., C. Ringle, & R. Sinkovics. (2009). The Use of Partial Least Squares path Modeling in International Marketing. *Advances in International Marketing* 20 (1): 277–320.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2016). [Testing Measurement Invariance of Composites Using Partial Least Squares](http://www.emeraldinsight.com/doi/abs/10.1108/IMR-09-2014-0304). *International Marketing Review*, 33(3), 405-431.

Holbrook, M.B. (1995). *Consumer Research. Introspective Essays on the Study of Consumption*. Sage Publications, California.

Holbrook, M. (1993). Nostalgia and consumption preferences: some emerging patterns of consumer tastes. Journal of Consumer Research, 20(2), 245-256.

Hosany, S., Prayag, G., Van Der Veen, R., Huang, S., & Deesilatham, S. (2017). Mediating effects of place attachment and satisfaction on the relationship between tourists’ emotions and intention to recommend. *Journal of Travel Research*, 56(8), 1079-1093.

Hosany, S., & Gilbert, D. (2010). Measuring tourists’ emotional experiences toward hedonic holiday destinations. *Journal of travel research*, *49*(4), 513-526.

Izard, C. E. (2007). Basic emotions, natural kinds, emotion schemas, and a new paradigm. *Perspectives on psychological science,*2(3), 260-280.

Jin, N.P., Lee, S. & Lee, H. (2015). The effect of experience quality on perceived value, satisfaction, image and behavioral intention of water park patrons: New versus repeat visitor. *International Journal of Tourism Research,* 17(1), 82-95.

Kao, Y.F., Huang, L.S. & Wu, C.H. (2008). Effects of Theatrical Elements on Experiential Quality and Loyalty Intentions for Theme Parks. *Asia Pacific Journal of Tourism Research,* 13(2), 163-174.

Kim, J., & Fesenmaier, D. R. (2015). Measuring emotions in real time: Implications for tourism experience design*. Journal of Travel Research*, 54(4), 419-429.

Lazarus, R. S. (1991). Progress on a cognitive-motivational-relational theory of emotion. *American Psychologist,*46(8), 819.

Lee, Y. J. (2015). Creating memorable experiences in a reuse heritage site. *Annals of Tourism Research*, *55*, 155-170.

Lee, S., Phau, I., Hughes, M., Li, Y. F., & Quintal, V. (2016). Heritage tourism in Singapore Chinatown: A perceived value approach to authenticity and satisfaction. *Journal of Travel and Tourism Marketing,*33(7), 981-998.

Lewis, M. D. (2005). Bridging emotion theory and neurobiology through dynamic systems modeling. *Behavioral and brain sciences,* 28(2), 169-194.

Li, S., Scott, N. & Walters, G. (2015). Current and potential methods for measuring emotions in tourism experience: a review. *Current Issues in Tourism*, 18(9), 805-827.

Lin, C.H., Sher, P.J. & Shih, H.Y. (2005). Past Progress and Future Directions in Conceptualizing Customer Perceived Value. *International Journal of Service Industry Management*, 16 (4), 318-336.

Liu, A. & Liu, H., (2009), Government Approaches to Tourism: An International Inquiry. *International Journal Tourism Policy*, 2(3), 221-238.

Mattila, A. & Enz, C. (2002). The role of emotions in service encounters. *Journal of Service Research,* 4(4), 268-278.

Mattila, A. & Wirtz, J. (2000). The role of Preconsumption Affect in Postpurchase Evaluation of Services. *Psychology & Marketing*, 17(7), 587-605.

Oliver, R.L. (1981). Measurement and evaluation of satisfaction processes in retail settings*. Journal of Retailing,* Vol. 57(3), 25-48

Oliver, R.L. (1997). *Satisfaction: A Behavioral Perspective on the Consumer*. New York: The McGraw-Hill Companies, Inc.

Otto, J.E. & Brent Ritchie, J.R. (1995). Exploring the Quality of the Service Experience: A Theoretical and Empirical Analysis. In Teresa A. Swart , David E. Bowen, & Stephen W. Brown (Ed.), *Advances in Services Marketing and Management,* 4, 37-61.New York: Emerald Group Publishing Limited.

Otto, J.E. & Ritchie, J.R. (1996).The service experience in tourism. *Tourism Management,* 17(3), 165-174.

Pandža Bajs, I. (2015). Tourist perceived value, relationship to satisfaction, and behavioral intentions: The example of the Croatian tourist destination Dubrovnik. *Journal of Travel Research*, 54(1), 122-134.

Petrick, J.F. (2002). Development of a Multi-Dimensional Scale for Measuring the Perceived Value of a Service. *Journal of Leisure Research,* 34(2), 119-134.

Plutchik, R. (2001). The nature of emotions: Human emotions have deep evolutionary roots, a fact that may explain their complexity and provide tools for clinical practice. *American scientist*, 89(4), 344-350.

Prayag, G., Hosany, S., & Odeh, K. (2013). The role of tourists' emotional experiences and satisfaction in understanding behavioral intentions. *Journal of Destination Marketing & Management*, *2*(2), 118-127.

Prayag, G., Hosany, S., Muskat, B., & Chiappa, G. (2017). Understanding the Relationships between Tourists’ Emotional Experiences, Perceived Overall Image, Satisfaction, and Intention to Recommend*. Journal of Travel Research*, 56(1) 41–54.

Prebensen, N. K., Kim, H., & Uysal, M. (2016). Cocreation as moderator between the experience value and satisfaction relationship. *Journal of Travel Research*, *55*(7), 934-945.

Ringle, C., S. Wende, & J. Becker. (2015). SmartPLS 3 (Version 3.2.3). Boenningstedt: SmartPLS GmbH.

Rodríguez del Bosque, I. & San Martín, H. (2008): “Tourist Satisfaction: A cognitive-affective Model”. *Annals of Tourist Research*, 35(2) 551-573.

Roldán, J. L., & M. J. Sánchez-Franco. (2012). Variance-Based Structural Equation Modelling: Guidelines for Using Partial Least Squares in Information Systems Research. In *Research Methodologies, Innovations and Philosophies in Software Systems Engineering and Information Systems*, edited band M. Mora, O. Gelman, A. Steenkamp, & M. Raisinghani, 193– 221. Hersheand, PA: IGI Global.

Russell, J.A. (1980). A Circumplex Model of Affect. *Journal of Personality and Social Psychology,* 39(6), 1161-78.

Russell, J. A. (2003). Core affect and the psychological construction of emotion. *Psychological review*, 110(1), 145-172.

Sander, D., Grandjean, D., & Scherer, K. R. (2005). A systems approach to appraisal mechanisms in emotion. *Neural networks,* 18(4), 317-352.

Sarstedt, M., J. Henseler, & C. Ringle. (2011). Multigroup Analysis in Partial Least Squares (PLS) Path Modelling: Alternative Methods and Empirical Results. *Advances in International Marketing* 22 (1): 195–218.

Scherer, K. R. (2000). Emotions as episodes of subsystem synchronization driven by nonlinear appraisal processes. In M. D. Lewis & I. Granic (Eds.), *Emotion, development, and self-organization: Dynamic systems approaches to emotional development*, 70-99.

Scherer, K. R. (2009). The dynamic architecture of emotion: Evidence for the component process model*. Cognition and emotion*, 23(7), 1307-1351.

Shuman, V., & Scherer, K. R. (2014). Concepts and structures of emotions. In R. Pekrun & L. Linnenbrink-García (Eds*.) International handbook of emotions in education*, 13-35.

Singh, J. (1991). Understanding the Structure of Consumers’ Satisfaction Evaluations of Service Delivery. *Journal of the Academy of Marketing Science*, 19(3), 223-245.

Spreng, R.A., MacKenzie, S.B. y Olshavsky, R.W. (1996). A Re-examination of Determinants of Consumer Satisfaction. *Journal of Marketing,* 60, 15-32.

Su, L., & Hsu, M. K. (2013). Service fairness, consumption emotions, satisfaction, and behavioral intentions: The experience of Chinese heritage tourists. *Journal of Travel & Tourism Marketing*, *30*(8), 786-805.

Tarn, J.L. (1999). The Effects of Service Quality, Perceived Value and Customer Satisfaction on Behavioral Intentions. *Journal of Hospitality & Leisure Marketing,* 6(4), 31-43.

Teixeira, J., Patrício, L., Nunes, N. J., Nóbrega, L., Fisk, R. P., & Constantine, L. (2012). Customer experience modeling: from customer experience to service design. *Journal of Service Management*, *23*(3), 362-376.

Volo, S. (2017). Emotions in Tourism: from Exploration to Design. *Design Science in Tourism. Foundations of Destination Management*, edited by Daniel R. Fesenmaier and Zheng Xiang. Springer International Publishing Switzerland.

Westbrook, R.A. (1980). A rating scale of measuring product/service satisfaction. Journal of Marketing, 44, 68-72.

Westbrook. R.A. & Reilly. M. D. (1983). Value-percept disparity: an alternative to the disconfirmation of expectations theory of consumer satisfaction. *Advances in Consumer Research*, 10, 256-261.

Wirtz, J. & Bateson, J.E.G. (1999). Consumer Satisfaction with Services: Integrating the Environment Perspective in Service Marketing into the Traditional Disconfirmation Paradigm. *Journal of Business Research*, 44, 55-66.

Yüksel, A., Yüksel, F. & Bilim, Y. (2010). Destination attachment: Effects on customer satisfaction and cognitive, affective and conative loyalty. *Tourism Management*, 31, 274-284.

Zeithaml, V.A. (1988). Consumer perceptions of price, quality and value: a means-end model and synthesis of evidence. *Journal of Marketing,* 52(3), 2-22.

Zeithaml, V.A., Berry, L.L. y Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. *Journal of Marketing*, 60(2), 31-46.

Zins, A. H. (2002). Consumption emotions, experience quality and satisfaction: A structural analysis for complainers versus no complainers. *Journal of Travel and Tourism Marketing*, 12(2-3), 3-18.

Table 1.Respondent Demographics

|  |  |  |
| --- | --- | --- |
|  | Seville |  York |
| *Gender* |  |  |
| Male | 37.1% | 41.5% |
| Female | 62.9% | 58.5% |
|  |  |  |
| *Age* |  |  |
| 18-24 | 24.7% | 39.0% |
| 25-34 | 26.4% | 21.0% |
| 35-44 | 16.5% | 13.8% |
| 45-54 | 19.8% | 11.8% |
| 55-64 | 6.6% | 10.3% |
| Over 65 | 6.0% | 4.1% |
|  |  |  |
| *Level of studies* |  |  |
| Primary | 0.00% | 0.00% |
| Secondary | 14.42% | 22.11% |
| A-levels/Professional training  | 32.69% | 47.89% |
| University studies  | 52.88% | 30.00% |
|  |  |  |
| *Origin* |  |  |
| Spain | 11.54% | 62.19% |
| European Union | 45.19% | 11.94% |
| Rest of the world | 43.27% | 25.87% |
|  |  |  |
| *Main aim of the visit*  |  |  |
| Visit friends or family  | 2.86% | 13.66% |
| Cultural tourism  | 80.00% | 40.56% |
| Congress/Business | 0.48% | 0.00% |
| Studies | 1.43% | 14.15% |
| Shopping  | 0.00% | 11.22% |
| Other  | 15.24% | 20.41% |

**Table 2. Measurement Model Assessment**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Loading** | **CR** | **AVE** |
| **Constructs/ items** | **York** | **Seville** | **York** | **Seville** | **York** | **Seville** |
| **Experience Quality** |  |  | 0.828 | 0.848 | 0.591 | 0.631 |
| EQ1: I’ve had fun | 0.764 | 0.796 |  |  |  |  |
| EQ2: I’ve felt at ease and relaxed during the visit | 0.687 | 0.762 |  |  |  |  |
| EQ3: I believe that visiting a cultural heritage site has been a good learning experience and instructive | 0.734 | 0.789 |  |  |  |  |
| EQ4: I have escaped from the daily routine and done something really new in my visit | 0.609 | 0.684 |  |  |  |  |
| EQ5: I believe that my belongings and myself have been safe during the visit | 0.705 | 0.601 |  |  |  |  |
| **Perceived Value** |  |  | 0.950 | 0.924 | 0.827 | 0.753 |
| PV1: Compared to the money I spend, visiting heritage is worthwhile | 0.842 | 0.768 |  |  |  |  |
| PV2: Compared to time I spend, visiting heritage is worthwhile | 0.949 | 0.883 |  |  |  |  |
| PV3: Compared to the efforts I made, visiting heritage is worthwhile | 0.936 | 0.910 |  |  |  |  |
| PV4: Overall, visiting heritage sites is worthwhile | 0.907 | 0.903 |  |  |  |  |
| **Satisfaction** |  |  | 0.896 | 0.893 | 0.682 | 0.676 |
| SAT1: This is one of the best destinations I could have visited | 0.815 | 0.817 |  |  |  |  |
| SAT2: Overall, I am pleased with my decision to visit the cultural heritage in Seville / York | 0.853 | 0.858 |  |  |  |  |
| SAT3: My overall satisfaction towards visiting York´s cultural heritage | 0.864 | 0.882 |  |  |  |  |

**Table 3. Discriminant Validity. Fornell-Larcker Criterion**

Note: The square root of AVEs are shown diagonally in bold. QE: Quality of Experience; PV: Perceived Value; SAT: Satisfaction.

|  |  |  |
| --- | --- | --- |
|  | **Fornell-Larcker Criterion** | **Heterotrait–monotrait ratio Criterion** |
|  | **YORK** | **SEVILLE** | **YORK** | **SEVILLE** |
| **Constructs** | **QE** | **PV** | **SAT** | **QE** | **PV** | **SAT** | **QE** | **PV** | **SAT** | **QE** | **PV** | **SAT** |
| **QE** | **0.702** |  |  | **0.728** |  |  |  |  |  |  |  |  |
| **PV** | 0.583 | **0.909** |  | 0.592 | **0.868** |  | 0.673 |  |  | 0.705 |  |  |
| **SAT**  | 0.570 | 0.532 | **0.826** | 0.572 | 0.603 | **0.822** | 0.707 | 0.566 |  | 0.692 | 0.684 |  |

**Table 4. Measurement model. Outer weight and VIF**

|  |  |  |
| --- | --- | --- |
|  | **York** | **Seville** |
|  |  | Bootstrapping 95% Confidence Intervals BC |  |  | Bootstrapping 95% Confidence Intervals BC |  |
|  | Weights | Lower | Upper | VIF | Weights | Lower | Upper | VIF |
| EMO1: Enchanted | 0.178\*\*\*(t=2.719) | 0.108 | 0.241 | 1.775 | 0.329\*\*\*(t=4.097) | 0.178 | 0.491 | 2.020 |
| EMO2: Impressed | 0.521\*\*\*(t=5.052) | 0.320 | 0.721 | 2.051 | 0.290\*\*\*(t=3.787) | 0.134 | 0.437 | 1.799 |
| EMO3: Pleased | 0.434\*\* (t=3.668) | 0.203 | 0.660 | 2.156 | 0.479\*\*\*(t=5.799) | 0.312 | 0.634 | 1.772 |
| EMO4: Surprised | 0.133\*\* (t=1.992) | 0.021 | 0.324 | 1.595 | 0.129\*\*(t=2.01) | 0.050 | 0.289 | 1.732 |

Notes: BC: Bias Corrected. 5,000 bootstrap samples; \* p<0.05; \*\*p<0.01; \*\*\*p<0.001; t-values in parentheses

**Table 6: Results of Invariance Measurement Testing Using Permutation**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Compositional Invariance****(Correlation=1)** |  | **Equal Mean Assessment** | **Equal Variance assessment** | **Full Measurement Invariance Established** |
|  | **Configural invariance****(Same Algorithm for Both groups)** | **C=1** | **Confidence Intervak** | **Partial Measurement Invariance Established** | **Differences** | **Confidence Interval** | **equal** | **Differences** | **Confidence Interval** | **Equal** |  |
| **Constructs** |  |  |  |  |  |  |  |  |  |  |  |
| **QE** | Yes | 0.996 | [0.984;1] | Yes | 0.002 | [-0.168;0.159] | Yes | -0.002 | [-0.289;0.28] | Yes | Yes |
| **PV** | Yes | 1 | [0.999;1] | Yes | -0.03 | [-0.163;0.161] | Yes | 0.007 | [-0.298;0.297] | Yes | Yes |
| **EMO** | Yes | 0.972 | [0.963;1] | Yes | 0.00 | [-0.17;0.164] | Yes | 0.008 | [-0.366;0.378] | Yes | Yes |
| **SAT** | Yes | 0.999 | [0.997;1] | Yes | -0.03 | [-0.163;0.161] | Yes | 0.008 | [-0.362;0.350] | Yes | Yes |

**Table 7: Results of Hypothesis Testing**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **P-Value Difference (One-Tailed)** |  |
|  | **|Path Coefficient Difference|** | **Henseler’s MGA** | **Permutation Test** | **Supported** |
| **Relationship** |  |  |  |  |
| **H 9: QE->SAT (ay-as ≠ 0)** | 0166 | 0.965\* | 0.044\* | Yes/Yes |
| **H 10: PV-> SAT (by-bs ≠ 0)** | 0.195 | 0.034\* | 0.045\* | Yes/Yes |
| **H 11: EMO->SAT (cy-cs ≠ 0)** | 0.052 | 0.322 | 0.312 | No/No |
| **H 12: QE->PV (dy-ds ≠ 0)** | 0.009 | 0.462 | 0.909 |  |
| **H 13: QE->EMO (ey-es ≠ 0)** | 0.038 | 0.308 | 0.605 |  |
| **H 14: EQ\*PV->SAT (fy-fs ≠ 0)** | 0.108 | 0.9503\* |  | Yes |
| **H 15: EQ\*EMO->SAT (gy-gs ≠ 0)** | 0.102 | 0.9057 |  | No |

Note: In Henseler’s MGA method, the p value lower than 0.05 or higher than 0.95 indicates at the 5% level significant differences between specific path coefficients across two groups. \*p < 0.05, \*\*p < 0.01.

**Figure 1: Research Model**

Perceived Value

Experience Quality

Emotions

Satisfaction

H. 1

H. 2

H. 3

H. 4

H. 5

a >0

b >0

c >0

d >0

e >0

**Figure 2: Estimated Model in York**

**P. V.**

**R2 =0.341**

**Q2 =0.262**

**E. Q.**

**Emo.**

**R2 =0.370**

**Q2 =0.212**

**Sat.**

**R2 =0.503**

**Q2 =0.326**

ay = 0.197\*\*

by  = 0.148\*

(1.762)

cy =0.471\*\*\*

(5.313)

dy = 0.583\*\*\*

(16.619

ey =0.608\*\*\*

(9.388)

(2.327)

fy = by \* dy = 0.086\*

(1.666)

gy = cy \* ey = 0.286\*\*\*

(4.589)

hy = gy - fy = 0.200\*

(2.277)

**Figure 3: Estimated Model in Seville**

**P. V.**

**R2 =0.343**

**Q2 =0.260**

**E. Q.**

**Emo.**

**R2 =0.418**

**Q2 =0.254**

**Sat.**

**R2 =0.595**

**Q2 =0.391**

as = 0.031 n.s.

bs  = 0.343\*\*\*

(5.160)

cs = 0.523\*\*\*

(5.160)

ds = 0.592\*\*\*

(14.390

es =0.646\*\*\*

(16.619)

(0.391)

fs = bs \* ds = 0.203\*\*\*

(4.861)

gs = cs \* es = 0.338\*\*\*

(6.734)

hs = gs - fs = 0.135\*

(1.905)

**P. V.**

**R2 =0.343**

**Q2 =0.260**

**E. Q.**

**Emo.**

**R2 =0.418**

**Q2 =0.254**

**Sat.**

**R2 =0.595**

**Q2 =0.391**

as = 0.031 n.s.

bs  = 0.343\*\*\*

(5.160)

cs = 0.523\*\*\*

(5.160)

ds = 0.592\*\*\*

(14.390

es =0.646\*\*\*

(16.619)

(0.391)

fs = bs \* ds = 0.203\*\*\*

(4.861)

gs = cs \* es = 0.338\*\*\*

(6.734)

hs = gs - fs = 0.135\*

(1.905)

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