THE MEDIATION OF EMOTIONS IN SPORT EVENTS.

A CASE STUDY IN BADMINTON.

This study examining the relationships between functional quality, outcome quality, satisfaction and future intentions, influenced by emotions, of spectators who attended the 2018 European Badminton Championships. The population studied was 686 spectators. The mean age was 36.08 ± 14.15 years, 39.1% were females, and 66.1% were local resident spectators. The results allow to affirm that functional quality and outcome quality have an impact on satisfaction, either directly or indirectly through emotions. In the same way it has been possible to observe the relationship between satisfaction and future intentions of the spectators. These results help to understand the factors that predict the loyalty of spectators of sports event of Badminton.

Keywords: quality; satisfaction; future intentions; emotions; spectators; badminton

INTRODUCTION

Badminton is one of the most popular sports in the world, with high levels of interest in some of the largest markets such as Asia and with significant growth in the Americas. It attracts 497 million fans, with a mean age of 37.9 years (Repucom, 2016). According to Nielsen (2016), badminton is the sixth most watched sport on television worldwide, 87% of badminton fans get their sports information from television and 62% through mobile devices. As well as the continental and national federations, the Badminton World Federation organises various competitions attended by thousands of spectators. Spectators who become service users when they receive a sports show.

A better knowledge of the evaluation made by the users of sports services is very useful to improve the management of them, in order to increase their loyalty, by satisfying their needs (García-Fernández, Fernández-Gavira, & Velez-Colón, 2015; Seetanah, Teeroovengadum, & Nunkoo, 2020). Bringing clients’ interests and needs closer to the offer of sports services is a crucial for sports marketing specialists. Sports administrators use different tools to assess service quality and satisfaction as predecessors to user loyalty (Nuviala, Tamayo-Fajardo, Ruiz-Alejos, Nuviala, & Dalmau-Torres, 2017). This also happens in the context of sports events (Calabuig, Prado-Gasco, Crespo, Nuñez-Pomar, & Año, 2016; Theodorakis, Alexandris, Tsigilis,
& Karvounis, 2013), since spectator sports are considered a part of the sports industry oriented towards sports results (Brady, Voorhees, Cronin, & Bourdeau, 2006). The management of different service variables influences the future intentions of sport service users, and this is why it is important for sport managers to be able to know how these variables relate to each other. The central element is satisfaction, since it is the consequence of a quality service (functional quality and quality of results) and a precedent for future intentions (Calabuig, Prado-Gascó, Crespo, Núñez-Pomar, & Añó, 2015). Some studies in the field of sport events have used the emotions of spectators as predictors of their future behaviour, studying the direct relationship between the two constructs (Biscaia, Correia, Rosado, Maroco, & Ross, 2012). Others studies have analysed the moderating effect of emotions in different groups of spectators grouped by levels of emotions, on the relationship between satisfaction and future intentions in a model that does not include the emotions construct (Calabuig et al., 2015).

The studies mentioned above in the field of sporting events have been carried out with great scientific rigor. The relationships between service quality, satisfaction and future intentions have been studied, leaving the outcome quality and emotions out of the models or without studying all possible relationships between constructs (Calabuig et al., 2016; Theodorakis et al., 2013). The present study introduces into the same model, in addition to functional quality, satisfaction and future intentions, the variables of outcome quality and emotions. The purpose of this work is to carry out the study of the relationships between these variables and their ability to predict the future intentions of spectators, depending on whether they are local spectators or tourists, in a sport such as badminton that is spreading in the West and is a reference sport in the East.

LITERATURE REVIEW

Effects of functional quality and satisfaction on future intentions
Zeithaml (1988) defined quality as a consumer judgment on the excellence or superiority of a product/service, stating that it is a prerequisite for success. Bitner and Hubber (1994) conceptualised it as the consumer’s overall impression of the relative superiority or inferiority of an organisation and its services. Customer satisfaction is a pleasurable response to a good, service, benefit or reward (Oliver, 1997), and is a summary of the evaluation of the overall experiences of customers with a service (Li & Petrick, 2010). Satisfaction is a different construct from quality of service and has affective elements (Taylor, 1997).

These consumer evaluations, quality and satisfaction, result in post-consumer behaviour, that is, determine the intentions of their behaviour. These behaviours are varied and diverse. It was Zeithaml, Berry, and Parasuraman (1996) who developed a scale that included a large number of these behaviours. Empirical studies show that satisfaction positively affects intention in various types of services, like tourist services (Han & Hyun, 2013) and equally in the field of sports services. Anderson and Fornell (2000) did so in the banking market. Carlson and O’Cass (2010) concluded that the quality of electronic service influences consumer satisfaction and behavioural intentions on websites. Theodorakis, Howat, Ko, and Avourdiadou (2014), in a study of sport and fitness centres, found that satisfaction is an antecedent to users' future intentions. In the context of sport events, there is empirical evidence of the influence of service quality and satisfaction on behavioural intentions. Bodet and Bernache-Assollant (2011) in a study with French first division ice hockey clubs, with a sample of 395 spectators, revealed that spectator satisfaction is the strongest predictor of intentions to attend
sporting events again. In a study conducted in the context of professional basketball in Spain, using a sample of 429 spectators, Calabuig et al. (2016) found a direct relationship between quality and satisfaction with future spectator intentions. On a sample of spectators from the United States and Japan, Yoshida and James (2010) found that quality is a predisposition to both service satisfaction and game satisfaction. Both types of satisfaction are antecedents to the future intentions of spectators in both contexts.

Outcome quality, satisfaction and future intentions

The quality of the dimension of output of a service was first proposed by Gronroos (1984). Later, Brady and Cronin (2001) used the term performance quality. This theoretical construct has recently been introduced in studies on sports events (Calabuig et al, 2016; Theodorakis et al., 2013). Studies by Cleses, Brush, and Collins (2011), Theodorakis et al. (2013) and Yoshida and James (2010) used outcome quality in a multidimensional nature in the context of sports spectators. For example, Calabuig et al. (2016) included a single item to assess the influence of the outcome of the match; Theodorakis et al. (2013) defined two dimensions "team performance and game quality" in "Outcome Quality"; Cleses et al. (2011) suggested four dimensions "game quality, stadium atmosphere, social environment match and day entertainment", to measure "Outcome Quality. These authors, during their research nor did they equally study the relationship between outcome quality, satisfaction and future intentions of the spectators.

Emotions and sports events

When attending a sports event, viewers expect to receive psychological and social benefits, such as emotions, fun and social interaction (Ko et al., 2011). Emotions are affective states characterised by episodes of intense feelings associated with a specific reference point (such as a person, an object or an event) that instigate a specific response or behaviour (Cohen & Areni 1991). Bagozzi, Gopinath, and Nyer (1999) define emotion as a state of preparedness that arises from cognitive evaluations of events or thoughts and can lead to specific actions to affirm or cope with emotion, depending on its nature and meaning to the person who has it. Emotion is a complex psychological phenomenon that directs us towards a behaviour in a consistent manner, and it can influence decision-making (Austin, 2002). The role of emotions in the behaviour of consumers has been increasingly recognised in the work on marketing, as illustrated by the constant development of the theory that incorporates concepts related to emotion as a background of commercial behaviour (Agarwall & Malhotra, 2005; Morosan, 2017). Few research papers have studied which components or characteristics of consumers’ emotional experience are better determinants of their future behaviors (Li, Walters, Packer, & Scott, 2019). There is a growing interest in knowing the emotions of spectators due to the unique form of experiential consumption in sports (Biscaia et al., 2012; Yoshida, Gordon, Nakazawa, & Biscaia, 2014). Sports events can evoke a wide range of pleasant emotions (joy and excitement) and unpleasant emotions (anger and dejection), which suggests that sports teams have the potential to capitalise on the emotional relationship shared with their followers (Couvelaere & Richelieu, 2005; Koenigstorfer, Groeppel-Klein, & Schmitt, 2010). It is important to note that context analysis is essential for the study of emotions (Lazarus, 2000) and previous studies have reported that unpleasant emotions can
negatively influence the satisfaction of spectators (Madrigal, 2003) and behavioural intentions, among which is returning to attend another sporting event (Bougie, Pieters, & Zeelenberg, 2003; Sumino & Harada, 2004; Venkatesh, Morris, Davis, & Davis, 2003), while pleasant emotions contribute positively to increasing these results (Biscaia et al., 2012), due to the influence of perceptions (Lerner & Keltner 2000).

After reviewing the literature, it can be observed that the functional quality and the result, has an influence on the affective state of the spectators, provoking emotions, and can affect both the satisfaction and the subsequent behaviour of the spectators (Figure 1).

Figure 1. Structural model predicting future intentions of sports spectators.

RESEARCH METHODS

Hypothesis

In summary, the research model tests the effects of four constructs (functional quality, Outcome quality, satisfaction and emotions) on future intentions and the possibility of differences depending on whether it is local spectators or tourist spectators who are attending a European Badminton Championships. Therefore, on the basis of the above reasoning and after reviewing the literature the following hypothesis were established:

Hypothesis $1_0$: There is no direct and significant relationship between functional quality and spectator satisfaction at sports events.

Hypothesis $1_a$: There is a direct and significant relationship between functional quality and the satisfaction of spectators of sports events.

Hypothesis $2_0$: Functional quality has neither direct nor any positive relationship with future intentions of sport event spectators.
Hypothesis 2: Functional quality has direct and positive relationship with future intentions of sport event spectators.
Hypothesis 3a: Satisfaction has neither direct, nor any positive relationship with future intentions of sport event spectators.
Hypothesis 3b: Satisfaction has direct and positive relationship with future intentions of sport event spectators.
Hypothesis 4a: Quality of the result has direct and positive relationship with satisfaction of sport event spectators.
Hypothesis 4b: Quality of the result has neither direct, nor any positive relationship with satisfaction of sport event spectators.
Hypothesis 5a: Quality of the result has direct and positive relationship with future intentions of sport event spectators.
Hypothesis 5b: Quality of the result has neither direct, nor any positive relationship with future intentions of sport event spectators.
Hypothesis 6a: Functional quality has no direct relationship with positive emotions.
Hypothesis 6b: Functional quality has a direct relationship with positive emotions.
Hypothesis 7a: Functional quality has a direct and negative relationship with negative emotions.
Hypothesis 7b: Functional quality has neither direct, nor any negative relationship with negative emotions.
Hypothesis 8a: The quality of the result has no direct relation to positive emotions.
Hypothesis 8b: The quality of the result has a direct relationship with positive emotions.
Hypothesis 9a: The quality of the result has neither direct, nor any negative relationship with negative emotions.
Hypothesis 9b: The quality of the result has a direct and negative relationship with negative emotions.
Hypothesis 10a: Positive emotions do not have a direct relationship with satisfaction.
Hypothesis 10b: Positive emotions have a direct relationship with satisfaction.
Hypothesis 11a: Positive emotions have no direct relationship to future intentions.
Hypothesis 11b: Positive emotions have a direct relationship with future intentions.
Hypothesis 12a: Negative emotions do not have a direct and negative relationship with satisfaction.
Hypothesis 12b: Negative emotions have a direct and negative relationship with satisfaction.
Hypothesis 13a: Negative emotions do not have a direct and negative relationship with future intentions.
Hypothesis 13b: Negative emotions have a direct and negative relationship with future intentions.

Participants and sampling

Given that it was not possible to know the profile of the spectators, the sample for this study was taken by convenience, with a total of 686 spectators attending matches held at the European Badminton Championships in 2018. The ages ranged from 16 to 89, with the mean age being 36.08 ± 14.15 years. 39.1% of spectators were female. The majority of spectators claimed to have a university degree (50.8%), more than half worked (58.3%) and 46.1% were single. 66.1% were local spectators, while 33.9% were not residents of the city.
Table 1. Sociodemographic variables of spectators who attended the European Badminton Championships

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>60.9%</td>
<td>39.1%</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>35.80±13.91</td>
<td>36.17±14.01</td>
<td>36.08 ±14.15</td>
</tr>
<tr>
<td>Studies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>9.9%</td>
<td>13.9%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Secondary</td>
<td>40.8%</td>
<td>33.1%</td>
<td>37.6%</td>
</tr>
<tr>
<td>University</td>
<td>49.4%</td>
<td>53.0%</td>
<td>50.8%</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work</td>
<td>63.1%</td>
<td>51.7%</td>
<td>58.3%</td>
</tr>
<tr>
<td>Retired</td>
<td>4.7%</td>
<td>2.6%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>2.1%</td>
<td>8.6%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Student</td>
<td>29.6%</td>
<td>28.5%</td>
<td>29.0%</td>
</tr>
<tr>
<td>Housework/tasks</td>
<td>6.6%</td>
<td>2.6%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Other</td>
<td>0.4%</td>
<td>2.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>48.1%</td>
<td>43.0%</td>
<td>46.1%</td>
</tr>
<tr>
<td>Married or lives with partner without children</td>
<td>12.0%</td>
<td>15.9%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Married or lives with partner with children</td>
<td>32.2%</td>
<td>33.1%</td>
<td>32.4%</td>
</tr>
<tr>
<td>Divorced</td>
<td>3.0%</td>
<td>5.3%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Widower/widowed</td>
<td>0.4%</td>
<td>.5%</td>
<td>.5%</td>
</tr>
<tr>
<td>Other</td>
<td>4.3%</td>
<td>2.6%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Tourism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local resident</td>
<td>65.7%</td>
<td>66.2%</td>
<td>66.1%</td>
</tr>
<tr>
<td>Tourism</td>
<td>34.3%</td>
<td>33.8%</td>
<td>33.9%</td>
</tr>
</tbody>
</table>

Measurements

The study constructs were measured using multi-item scales. Quality of service was evaluated through a specific scale of 28 items, which measures functional quality and outcome quality. Functional quality was measured, as with Theodorakis and Alexandris (2008) and Theodorakis, Koustelios, Robinson, and Barlas (2009), with five dimensions: tangibles, with six items (visually appealing, comfortable seats, bars/cafes for refreshments, cleanliness, lighting and air quality, maintenance of fittings and equipment); responsiveness, with four items (willingness to assist; individual attention; best interests of spectators at heart; prompt service); four items to measure access (general accessibility of stadium; public transport availability; car parking availability;...
ease of entry and exit); security, with four items (surrounds of stadium, inside the stadium, during the game, general sense of freedom from danger when attending games); and reliability, with four items (delivering services as promised, general trustworthiness, services provided right first time, response to complaints/problems). The internal consistency of the scale measured with Cronbach’s alpha was .897. To measure the outcome quality, two dimensions related to the results were adapted, from the studies by Brady et al. (2006), Koo et al. (2009) and Yoshida and James (2010): the quality of the game, with four items (spectacular games; competitiveness of the games; high level of play; games are usually fast and flowing); and quality of the players, with four items (well executed plays, plays with intensity, possibility of winning, great results). The reliability measured with Cronbach’s alpha was .830.

The satisfaction of spectators was measured with five items (happy to attend, satisfied experiences, enjoyed, excited with the experiences, attending is nice), adapted from Oliver (1997). According to Brady et al. (2006), the last match was the reference to measure satisfaction. Reliability was measured with Cronbach’s alpha, obtaining a value of .946. Three items were used to measure the future intentions of spectators (Zeithaml et al., 1996) providing a good Cronbach’s alpha (.870). Positive emotions were calculated through six items (Cronbach’s alpha = .961) adapted from Hosany and Gilbert (2010). Three items (Cronbach’s alpha = .960), adapted from Hosany and Prayag (2013), measured negative emotions.

Respondents were instructed to assess their degree of agreement. The level of agreement was identified in the questionnaire using a seven-point scale ranging from 1 (strongly disagree), to 7 (strongly agree). Several sociodemographic questions such as age, gender, studies, place of residence, marital status and some questions about the physical activity performed were added to the scales.

Procedure

During the European Badminton Championships held in Huelva (Spain) in 2018, research collaborators, previously trained, asked those attending the matches to respond to the questionnaire. The answers were given in the presence of the interviewer, who resolved any doubts that arose during the administration of the questionnaire. Those surveyed agreed to participate voluntarily. Work was carried out on days 4 and 5 of 6-day Championships. The research does have a positive report from the Ethical Commission.

Data analysis

We have based our analysis on the structural equation model (SEM) that allows us to test the goodness-of-fit in both local and tourist spectators. The study was carried out with the program AMOS (22). Specifically, the multi-group analysis is useful to explore to what extent the proposed relationships are consistent with the data observed in each of the samples. In addition, it allows to investigate to what extent the relationships are invariable in the different groups through the different samples. The aim of the analysis is to show whether the model that relates functional quality, outcome quality, positive emotions, negative emotions, satisfaction and future intentions studied, is the same for the two groups. For this purpose, the fit of the model in the total population studied was verified. The variation of the model between the two groups of spectators was then explored, which implied specifying a model in which the parameters were restricted to bethe same across the groups and then comparing that model with a less restrictive one,
in which the parameters were free to take any value. Typically, to measure the overall fit of structural equation models, the following indices are used: Chi-square (CMIN), degrees of freedom (DF), the CMIN/DF ratio, The Comparative Fix Index (CFI), the Root Mean Square Error of Approximation (RMSEA), and the Standardized Root Mean Square (RMR). Values less than 3 for CMIN/DF, values less than 0.08 for RMSEA and RMR, and for IFC values greater than 0.9 are considered acceptable (Schermelleh-Engel, Moosbrugger, & Müller, 2003; Schumacker & Lomax, 1996). Finally, regression coefficients were calculated for the relationships in the model.

RESULTS

Table 2 summarizes the means, standard deviations and correlations of the variables entered in the model. The means of five of the variables range from 6.17 to 6.29, and the standard deviation between .52 and 1.13. Only the mean of negative emotions had a very different value, 1.49 with a standard deviation of .91. Significant and positive correlations were observed between most of the variables, with correlation coefficients ranging from .156** to .611**. The correlations of emotions with the rest of the variables are negative in all cases.

Table 2.

| Constructs/objects of the study. Means, standard deviation & Pearson’s correlations among measurement instruments. Internal consistency in the diagonal |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                 | Media | St. Dev. | 1   | 2                   | 3   | 4                   | 5                   | 6                   |
| 1. Funtional Quality | 6.17  | .61     | (.897) | .318** | .401** | -.190** | .477** | .297** |
| 2. Outcome Quality | 6.33  | .52     | (.830) | .478** | -.270** | .443** | .156** |
| 3. Positive Emotions | 6.29  | .87     | (.961) | -.299** | .611** | .280** |
| 4. Negative Emotions | 1.49  | .91     | (.960) | -.337** | -.143** |
| 5. Satisfaction    | 6.54  | .70     | (.946) | .278** |
| 6. Future Intentions | 6.33  | 1.13    | (.870) |          |

The validity of the model that relates the functional quality, outcome quality, positive emotions, negative emotions, satisfaction and future intentions studied was checked. The results ($\chi^2 / df = 2.347$, GFI = .906, CFI = .944, IFI = .944, RMR = .065, RMSEA = .076) show that the goodness-of-fit indices of the model analysed are correct. The model shows significant relationships between functional quality, positive emotions and satisfaction. Moreover, outcome quality is related to emotions (positive and negative)
and satisfaction. Positive emotions are related to satisfaction. Lastly, satisfaction is related to future intentions (Table 3). Factor invariance tests were performed to assess whether there were differences in the model depending on the populations under study. First, the basic model (model 1) was found to have a reasonable fit to the data with a CFI close to .90 and values less than .06 for RMSEA and below .08 in RMR (Table 3). Consequently, the basic model was acceptable in its fit to the data. Later, several models were tested to which some more constraints were added to the previous model (model 2, factor loadings constrained; model 3, observed variable intercepts; model 4, residual variances; model 5, factor variances and covariances; model 6, factor means). All models' fits are acceptable. To check the factor invariance, a differential χ2 test was performed between model 1 and the rest of the models. Table 2 shows that there are no significant differences between model 1 and models 2 to 5. Table 3 shows differences between model 6 and model 1 in the χ2 difference test (p < .001). When studying the CFI values in models 1 to 6, with the exception of the value in model 6, they all have very similar values, with a difference between them of -.01, suggesting the factor invariance of the model. The coefficient chi-square divided by the degrees of freedom smallest corresponds to model 4. The smallest chi-square coefficient divided by the degrees of freedom corresponds to model 4. When comparing the values of the CFI, RMSEA and RMR adjustment indices of models 1, 2, 3 and 5 with model 4, there are no clear differences in the indices, therefore, this model is considered ideal for comparing two groups included in the study.

Table 3

Adjustment Statistics for the Models. Comparison between Models using Model 1 as the Correct One

<table>
<thead>
<tr>
<th>Model</th>
<th>CMIN</th>
<th>DF</th>
<th>p</th>
<th>CMIN/DF</th>
<th>CFI</th>
<th>RMSEA</th>
<th>RMR</th>
<th>Dif. CMIN</th>
<th>Dif DF.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>258.578</td>
<td>158</td>
<td>&lt;.001</td>
<td>1.637</td>
<td>.947</td>
<td>.052</td>
<td>.071</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>269.021</td>
<td>171</td>
<td>&lt;.001</td>
<td>1.573</td>
<td>.949</td>
<td>.049</td>
<td>.075</td>
<td>13</td>
<td>10.443</td>
<td>.657</td>
</tr>
<tr>
<td>3</td>
<td>274.463</td>
<td>180</td>
<td>&lt;.001</td>
<td>1.525</td>
<td>.951</td>
<td>.047</td>
<td>.074</td>
<td>22</td>
<td>15.885</td>
<td>.822</td>
</tr>
<tr>
<td>4</td>
<td>276.051</td>
<td>182</td>
<td>&lt;.001</td>
<td>1.517</td>
<td>.951</td>
<td>.047</td>
<td>.074</td>
<td>24</td>
<td>17.473</td>
<td>.828</td>
</tr>
<tr>
<td>5</td>
<td>292.384</td>
<td>184</td>
<td>&lt;.001</td>
<td>1.589</td>
<td>.943</td>
<td>.050</td>
<td>.084</td>
<td>26</td>
<td>33.806</td>
<td>.140</td>
</tr>
<tr>
<td>6</td>
<td>342.359</td>
<td>199</td>
<td>&lt;.001</td>
<td>1.720</td>
<td>.925</td>
<td>.055</td>
<td>.087</td>
<td>41</td>
<td>83.781</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Note. Model 1 indicates no parameters constrained to be equal across groups; model 2, factor loadings constrained to be equal; model 3, observed variable intercepts and factor loadings constrained to be equal; model 4, residual variances, factor loadings, and observed variable intercepts constrained to be equal; model 5, factor variances and covariances, factor loadings, and observed variable intercepts constrained to be equal; model 6, factor means, factor loadings, observed variable intercepts, factor variances, and covariances constrained to be equal.

Dif. CMIN, difference between model 1 and the other models; Dif DF. difference between model 1 and the other models; P significance level between models.

The results of the model which relates the proposed variables are shown in Table 4. It has been observed an impact of the variable pf functional quality on satisfaction (H1a: β = .366, p< .001), with the standardised values being slightly higher among local viewers (β = .381 versus β = .335). Satisfaction has a direct relationship with spectators'
intentions to return to sports events (H3a: $\beta = .447$, $p<.001$), with the standardised values being slightly higher among local spectators than tourist spectators ($\beta = .448$ versus $\beta = .380$). Hypothesis 4a has also been confirmed by the existence of a relationship between game quality and satisfaction (H4a: $\beta = .289$, $p<.05$), with the standardised value of this relationship being higher in local spectators than in tourist spectators ($\beta = .304$ versus $\beta = .268$). Hypothesis 4a has also been confirmed by the existence of a relationship between game quality and satisfaction (H4a: $\beta = .289$, $p<.05$), with the standardised value of this relationship being higher in local spectators than in tourist spectators ($\beta = .304$ versus $\beta = .268$). Hypothesis 4a has also been confirmed by the existence of a relationship between game quality and satisfaction (H4a: $\beta = .289$, $p<.05$), with the standardised value of this relationship being higher in local spectators than in tourist spectators ($\beta = .304$ versus $\beta = .268$). Hypothesis 4a has also been confirmed by the existence of a relationship between game quality and satisfaction (H4a: $\beta = .289$, $p<.05$), with the standardised value of this relationship being higher in local spectators than in tourist spectators ($\beta = .304$ versus $\beta = .268$).

Similarly, the quality of the game is related to negative emotions (H9a: $\beta = -0.605$, $p<.001$) being this association higher in local spectators ($\beta = -0.619$ versus $\beta = -0.576$). Positive emotions are directly related to satisfaction (H10a: $\beta = .265$, $p<.05$). The proposed model explains 53% of satisfaction and 27% of future intentions.

Table 4
Comparison between the Standardised and Non-standardise. Regression of the two Groups of spectators. Critical Ratios of Differences between the two Groups of spectators. Hypothesis testing results.

<table>
<thead>
<tr>
<th>Relation</th>
<th>Total spectators</th>
<th>Local residents</th>
<th>Tourists</th>
<th>C.R</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyp. 1a</td>
<td>SAT &lt;--- FQ</td>
<td>.366 ***</td>
<td>.381 ***</td>
<td>.335 ***</td>
<td>4.209 Accepted</td>
</tr>
<tr>
<td>Hyp. 2a</td>
<td>FI &lt;--- FQ</td>
<td>.130 .155</td>
<td>.171 .083</td>
<td>.128 .083</td>
<td>1.733 Not accepted</td>
</tr>
<tr>
<td>Hyp. 3a</td>
<td>FI &lt;--- SAT</td>
<td>.447 ***</td>
<td>.448 ***</td>
<td>.380 ***</td>
<td>4.300 Accepted</td>
</tr>
<tr>
<td>Hyp. 4a</td>
<td>SAT &lt;--- OQ</td>
<td>.289 .049</td>
<td>.304 .046</td>
<td>.268 .046</td>
<td>1.991 Accepted</td>
</tr>
<tr>
<td>Hyp. 5a</td>
<td>FI &lt;--- OQ</td>
<td>.014 .923</td>
<td>.031 .840</td>
<td>.023 .840</td>
<td>.202 Not accepted</td>
</tr>
<tr>
<td>Hyp. 6a</td>
<td>PE &lt;--- FQ</td>
<td>.323 ***</td>
<td>.321 ***</td>
<td>.300 ***</td>
<td>3.910 Accepted</td>
</tr>
<tr>
<td>Hyp. 7a</td>
<td>NE &lt;--- FQ</td>
<td>-.133 .082</td>
<td>-.142 .076</td>
<td>-.124 .076</td>
<td>-1.772 Not accepted</td>
</tr>
<tr>
<td>Hyp. 8a</td>
<td>PE &lt;--- OQ</td>
<td>.350 .001</td>
<td>.371 .001</td>
<td>.322 .001</td>
<td>3.243 Accepted</td>
</tr>
<tr>
<td>Hyp. 9a</td>
<td>NE &lt;--- OQ</td>
<td>-.605 ***</td>
<td>-.619 ***</td>
<td>-.576 ***</td>
<td>-3.986 Accepted</td>
</tr>
<tr>
<td>Hyp. 10a</td>
<td>SAT &lt;--- PE</td>
<td>.265 .013</td>
<td>.282 .008</td>
<td>.267 .008</td>
<td>2.632 Accepted</td>
</tr>
<tr>
<td>Hyp. 11a</td>
<td>FI &lt;--- PE</td>
<td>-.061 .542</td>
<td>-.061 .562</td>
<td>-.049 .562</td>
<td>-0.579 Not accepted</td>
</tr>
<tr>
<td>Hyp. 12a</td>
<td>SAT &lt;--- NE</td>
<td>-.093 .128</td>
<td>-.082 .179</td>
<td>-.083 .179</td>
<td>-1.343 Not accepted</td>
</tr>
<tr>
<td>Hyp. 13a</td>
<td>FI &lt;--- NE</td>
<td>-.025 .704</td>
<td>-.041 .552</td>
<td>-.035 .552</td>
<td>-0.595 Not accepted</td>
</tr>
</tbody>
</table>

Satisfaction variance explained 53
Future Intentions variance explained 27

*** $p<.001$; Hyp.=Hypothesis; FQ=Functional Quality; OQ=Outcome Quality; PE=Positive Emotions; NE=Negative Emotions; SAT=Satisfaction; FI=Future Intentions
DISCUSSION

This study, by using a case study of a badminton international event which took place in Spain, explores a model that relates the functional quality, the quality of the results, the emotions, the satisfaction and the future intentions of the spectators, distinguishing between local spectators and tourist spectators. It is necessary to highlight the existing correlation between all the constructs integrated in the model which adds to the evidence of the validity. In the same way it is important to mention that there is a negative correlation of the construct titled negative emotions with the rest of the variables. This is due to the fact that a low level of negative emotions implies the lack or inexistence of them, so positive values of other constructs imply low values in negative emotions. The results show the importance that functional quality and outcome quality have for satisfaction, either directly or indirectly through emotions. Likewise, it has been possible to observe the relationship between satisfaction and future intentions of the spectators.

The first results of this study are those that relate functional quality with satisfaction, that is to say hypothesis 1a. The hypothesis is confirmed following the line of results exposed by Clemes et al. (2011), who linked quality with satisfaction in spectator sports. It is important to add that Beta values are higher in functional quality in local spectators. This result is important when it comes to those responsible for the sport event managing quality. Satisfying local spectators means ensuring their loyalty, with the consequent effect that this has on future sports events, with it being more complicated when it comes to one-off events, since there is a lack of continuity over time or identification with a sports team for fans (Clemes et al., 2011). The results of the study a direct relationship of functional quality with future intentions has not been proven, hypothesis 2a. There are few studies in the context of sports events where the direct influence of quality of service on behavioural intentions of spectators has been revealed, as concluded by Calabuig et al. (2016). Unfortunately, despite the immediate relevance of those responsible for managing sports events in functional quality, there is no direct relationship between quality and future intentions of spectators.

The satisfaction does have a direct and significant relationship with future intentions of spectators, a result that corroborates previous studies (Calabuig et al., 2016; Clemes et al., 2011; Theodorakis et al., 2013; Yoshida & James, 2010) and confirms hypothesis 3a. It is the local spectators who have higher values in the satisfaction and future intentions relationship. This result is in line with the conclusion offered by Bodet and Bernache-Assollant (2011), although they did it for team sports, in which home loyalty became an important driver of attitudinal loyalty. Charleston (2009) similarly, for team sports, recognised that home loyalty can be an important driver of attitudinal loyalty towards a specific team, arguing that research in environmental psychology has validated a link between sports fans and the ground of their team, which becomes a symbolic home, and which could explain why the Beta values of local spectators were higher than those of tourist spectators.

The outcome quality is an antecedent of spectator satisfaction, which confirms hypothesis 4a. Result similar to that exposed by Clemes et al. (2011), who linked quality with satisfaction in spectator sports. The division of quality into functional quality and outcome quality allows us to observe which of them has the highest impact on satisfaction. Results are similar to those of Greenwell, Fink, and Pastore (2002) reported that functional quality has a greater influence on satisfaction, in contrast to the findings of other authors that highlighted that outcome quality had a higher impact than
functional quality (Brady et al. 2006; Theodorakis et al. 2013). It is important to highlight that Beta values are higher, both in functional quality and in outcome quality, in local spectators.

A direct relationship outcome quality with future intentions has not been proven, which does not confirm hypothesis 5a. There are few studies in the context of sports events where the direct influence of quality of service on behavioural intentions of spectators has been revealed, as concluded by Calabuig et al. (2016). This result does not support the efforts of sports event organisers to improve outcome quality as a strategy for improving the future intentions of spectators.

The impact of Emotions on the behaviour of customers is increasingly recognised (Agarwall & Malhotra, 2005; Morosan, 2017). Therefore, it is important to know whether or not quality are directly related to emotions, positive and/or negative, as precedents to the behaviour of spectators of sports events. Our findings show that functional quality and positive emotions are strongly interrelated, which confirms hypothesis 6a. However, the results do not allow confirmation of hypothesis 7a, since there is no relationship between functional quality and negative emotions. Outcome quality is related to positive and negative emotions, which confirms hypothesis 8a and 9a. The relationship between outcome quality and negative emotions is inverse, that is, an increase in outcome quality means a decrease in negative emotions. In all cases, the relationships have higher values in local spectators. Koo et al. (2009) obtained similar results and endorsed that sport events stimulate emotional reactions and can have an impact on spectator satisfaction.

A relationship between positive emotions and satisfaction of spectators has also been found, hypothesis 10a. Wong (2004) highlighted that the contact of a customer with frontline employees may determine positive behavioural responses. In another study it has been highlighted that the environment and ambiance on a stadium plays a major role in making the sport event more attractive (Koenigstorfer, Groeppel-Klein, Kunkel (2010). Overall, our results, are in the same line with the findings of other studies that highlight that by improving the functional quality of a sports event, satisfaction levels can be impacted (Biscaia et al., 2012) and this in turn can affect the behavioural intentions of the spectators, as suggested by Yoshida & James (2010). There is no relationship between positive emotions and future intentions hypothesis 11a. Nor could hypothesis 12a and 13a, which sought to test whether negative emotions are related to satisfaction and future intentions, be confirmed.

LIMITATIONS

Like any other type of cross-sectional study, this research work is not without its limitations. Firstly, the non-probability convenience sample that was used, could limit the generalizability of the results of this study. The presence of tourist spectators, who were not residents of the city, was less than that of local spectators who were very loyal to one of the players in the tournament. And this may have influenced the results, especially those results that refer to the local spectators. The study was carried out in Spain, specifically in the South of Spain, which could mean a limited applicability of the results due to the connotations that the socio-tourist environment may have. However, these limitations provide a potential for future research that could be replicated in other environments. This study investigated the differences in the incidence of quality, functional and outcome, in the emotions and subsequent behavioural intentions of spectators at an international sports event that is held on a one-off basis. Furthermore, only differences in relation to tourism were investigated, without
studying the incidence of gender, socioeconomic status or spectator sport practice. The study has tried to find out if the quality of the organisation affects emotions.

CONCLUDING SUMMARY AND MANAGERIAL IMPLICATIONS
The overarching aim of this study was to contribute to the exploration of the hypothesis that quality management of a sport event can have an impact on emotions. The findings supported that functional quality has a significant and positive impact on positive emotions. Similarly, outcome quality has a significant and positive relationship with positive emotions. Also, outcome quality shows a significant and negative relationship with negative emotions. It should be highlighted that the positive emotions are an antecedent of the viewers’ satisfaction. The data also show how important emotions are, especially for local viewers. Increasing them could mean greater fidelity. Sport managers should deepen their understanding of these interests and explore further and identify the specific emotional aspects that increase the satisfaction component of their activities. This study has shown the importance of quality management, functional and outcome, in the emotions of the spectators. In the same way, quality has a direct influence on satisfaction and indirectly on future intentions. Sport managers in charge of sports events must strive to ensure a high indicator of perceived quality in order to increase the overall experience of the event and therefore the level of "excitement" of the spectators. By doing so, they will increase the satisfaction of attending sports events. Therefore, new strategies should be sought to increase the excitement in the experience of attending the sports event.

The direct impact of emotions on the future intentions of spectators could be studied, as has happened in other research that did not have spectators of specific sporting events as its target population. In this case the emotions would not be the result of the quality of the sports event.

REFERENCES


Koenigstorfer, J., Groeppel-Klein, A., & Schmitt M. (2010). You’ll never walk alone – How loyal are soccer fans to their clubs when they are struggling to relegation?. *Journal of Sport Management, 24*(6), 649-675. doi: 10.1123/jsm.24.6.649


