

Research Paper

# Satisfaction Scoring Index for a musical festival during and after the event: The NOS Primavera Sound Case Study

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#### **Abstract**

**Purpose:** We present a Satisfaction Scoring Index (SSI) for a musical festival during and after its occurrence, using the NOS Primavera Sound as a case study.

**Methodology:** Data from two random samples during and after the event were collected in the 2016 edition. The respondents were asked to rate their level of satisfaction throughout a five-point Likert scale (between 1 = "not satisfied" and 5 = "very satisfied"). The data were subjected to principal components analysis with varimax rotation to identify the weights of the level of satisfaction.

**Originality:** It is the first time that SSI is applied to a music festival. We created a new framework that allows the scoring and ranking of the level of satisfaction and, consequently, can be a tool to support decision-making.

**Findings:** The SSI during and after the festival is different. And the main difference is that the visitor attributes greater satisfaction to the musical stages during the event than after the event. This result is very relevant, and deserves a reflection on the part of the organization, since the stages are the core business of the event.

**Practical Implications:** Understanding satisfaction in the most famous musical festival of the North of Portugal and what attracts more foreign tourists, could support the organizers and other stakeholders to improve services for visitants, adapting them to their preferences and, ultimately, provide better service in subsequent editions.

**Research limitations:** We do not guarantee that the same festival visitors responded to the surveys during and after the event.

**Keywords:** Musical Festival, Satisfaction levels, Factorial Analysis.

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## 1. Introduction

Music festivals, as they are commonly known, emerged as a phenomenon after the Second World War. From the 1960s to the 1980s they were associated with the hippy counterculture. However, since the 1990s we saw the first wave of larger-scale commercialised festivals that at the turnoff of the millennium, ended up with the emergence of large scale national touring festivals and created a period of "super-festivals" (Simon et al., 2017). This tendency is still visible in the recent times, where we are assisting to an exponential growth of festivals and events at a global level (Vinnicombe & Sou, 2017).

With the growth of the festivals came the attraction of visitors, the elevation of the destination' image and an increasing range of leisure and cultural options for local residents. Thus, academic research in the festival and tourism area has been also growing during the times (Vinnicombe & Sou, 2017). The music festivals are currently challenged by intense competition. Consequently, many festivals have either folded or are currently struggling in the market (Simon et al., 2017).

This idea is also defended by Bowdin et al. (2010) who states that as it has become increasingly clear that festivals and cultural events play an important role in the potpourri of the tourist destination, there has also been a growing competition between city tourism and cultural events.

Therefore, the academic findings in the festivals area can potentially provide event and festival organizers with practical information to improve their planning and promotion to better attract first time and repeat visitors, helping them in process of facing the existent competition (Vinnicombe & Sou, 2017).

In fact, there is still room for research on the impacts of events, specifically on festivals and cultural events, in the economic and social environment, including the impact on tourism in the city and region and the relationship between events and public policies (Mair & Whitford, 2013).

These kinds of events are often encouraged by public sector authorities because of their positive externalities in terms of community impact development, which creates the need for a deeper understanding of the impacts on regional development (O'Sullivan et al., 2009).

Schofield and Thompson (2007) studied the motivation and satisfaction of visitors to participate in festivals and identified the dimensions of motivation highlighted in a variety of settings and in various cultural groups, often using different scale items regarding motivation and satisfaction. Some dimensions are event specific, while others occur repeatedly in several studies.

In this sense, it is important to determine the main factors of satisfaction with the event which have become an important management tool for the organization of the event and for local tourism.

In this article, the specific characteristics of the event such as: the organization, the type of music and the overall conditions of the venue were taken into account to be able to develop a Satisfaction Scoring Index (SSI). We create a new framework that allows the scoring and ranking of the level of satisfaction and, consequently, can be a tool to support decision-making. This will be an important framework for both management and marketing of the event NOS Primavera Sound, in the sense that the results can be used for the visitor segmentation through the identification of sociodemographic data and levels of satisfaction. In the next subsection it is clarified the concept of SSI.



## 1.1. Satisfaction Scoring Index (SSI)

During the times, customer satisfaction has been defined as a measure of how products and services meet or surpass customer expectation. Therefore, in a competitive marketplace, where businesses compete for customers, customer satisfaction is a key element of business strategy on the markets (Mangesh, 2017).

This idea is also supported by Cuadrado-Garcia (2017) that states that customer satisfaction usually is defined by means of comparing a product's perceived performance in relation to pre-existent expectations. Customers experience various levels of satisfaction or dissatisfaction after each service experience according to the extent to which their expectations were met or exceeded. This comparative process is related to affect cognitive elements, with the increasing attention to the former.

However, satisfaction judgments do not come solely from the comparison between product expectations and performance. A second line of research shows that product performance is not only compared with the expectations, but also with other elements depending on the situation of purchase or consumption, consumer desires or ideal performance (Cuadrado-García et al., 2017).

In fact, customer satisfaction has been studied in different directions. From measurement to relationships with other business aspects. Some researchers have provided possible means of measuring customer satisfaction. Other authors demonstrated some determinants of customer satisfaction to be product and service quality, price, personal and situational factors. Some researchers have looked into the relationship between total quality management and customer satisfaction (Mangesh, 2017).

Thus, satisfaction measurement in cultural events is not unique. Every researcher adapts the concept to the context under consideration making use of one of the two ways of making research, which are dependent on the considered timing for the satisfaction measurement: Global assessment of the experience or Evolving feeling during the course of an event (Cuadrado-García et al., 2017).

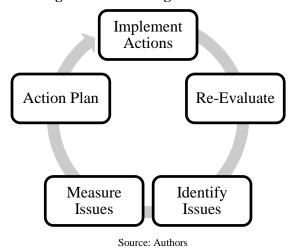
Grounding the research on the studied literature and considering both formal and augmented attributes of the product, as well as the specific traits of the object of study, we defined a five-item Likert scale for measuring satisfaction with an exhibition omitting the role of expectations, aiming to develop a SSI of the NOS Primavera Sound festival during and after the event, as will be stated later on this study.

The customer satisfaction index is a leading indicator of consumer behavior, measuring the satisfaction of consumers across the economy. The United States of America is one of the countries that have been using the customer service index successfully for over 12 years (Mangesh, 2017).

By applying this technique both management and marketing of the event NOS Primavera Sound will be able to take the necessary amendments and improve some key points identified as the low satisfaction items to take an action plan to the next years. This process is showed on Figure 1.



Figure 1: Measuring of Satisfaction



1.2. NOS Primavera Sound

Festivals are events held at a particular point in time aiming to please the public and tempt to occur on a regular basis, being distinct from the events (Wilson et al., 2017).

The NOS Primavera Sound Festival had its first edition in Barcelona in 2001 and has been gaining, over the last 14 years, a strong demand from the public and a growing importance in the media. The quality, the diversity of musical styles and artists, justify a part of the success of this event.

From 2013 to the present, ISAG - European Business School has a partnership with NOS Primavera Sound, whose main objective is to characterize the audience that participates in the event, a description of the main motivations, the main means of communication, the evaluation of the main factors of satisfaction, as well as the prospect of return, the economic and tourist impact for the city of Porto, and the general evaluation after the event.

All this information is a set of important data for the management, both for the organization of the local tourism, as well as for the evaluation of the performance and planning of the event. In fact, the comparison between levels of satisfaction during and after the festival has never been applied to NOS Primavera Sound.

This can bring a new point of view regarding the visitant' perception of the event and its own level of satisfaction. By having an inquiry during and after the festival we aim to be able to get an insight of the impact brought by the "excitement" of being in a festival. Awing from relevant literature, generally, the post-event response comprises recall, awareness and favourability when compared with the event response (Lobo, Meyer & Chester, 2014).

Thus, with this study we aim to develop a Satisfaction Scoring Index (SSI) for a musical festival during and after its occurrence. For that, we will use the NOS Primavera Sound as a case study. In fact, by understanding satisfaction we will be able to support Festival organizers and other stakeholders to improve services for visitants, adapting them to their preferences.

This study is organized as follows: first we start by detailing the main motivations and contributions of the study. After that we further detailed the importance of the generation of a SSI and the use of the NOS Primavera Sound Festival as a case study. In the third



section the methodology is detailed: The data and structure of the questionnaire as well as the main research methods applied. Finally, we state the main research findings and the main conclusions of the study.

## 2. Methodology

#### 2.1 Data Collection

In recent years, destination marketers have focused on event marketing. There has been increasing awareness of the potential financial benefits of events to local tourism marketing development (Li, Song & Collins, 2014).

In order to collect data during the event, the sampling technique was used for convenience and the questionnaire survey was applied through a direct and personal interview. The interviews were carried out on the three days of the event, by ISAG students duly prepared and subject to a quality control process, through follow-up.

The data entry was submitted to automatic error validation, and the validation directed to the detection of omissions. The sample collected during the event is made up of 937 respondents, whose applications were distributed as follows: 38% in 9 June, 2016; 24% in 10 June, 2016 and 38% in 11 June, 2016.

For the post-event data collection, the questionnaire survey, made available on social networks, was applied during one month after the event, in the main social networks of NOS Primavera Sound, 2016 and ISAG - European Business School. This sample is composed by 1366 complete answers.

Given the population of 77,000 visitors in each edition, the sample in each year should consist of a minimum of 658 respondents, with a confidence interval of 99% and a sample error of 5%, therefore the samples collected are representative of each of the populations under study.

As an example and for the size of the 2016 sample, it could be said that if 60% of the sample presented a given answer to a question of the questionnaire, the same answer would have been given by 55% to 65% of the respondents, with 99% of course, if it were addressed to all visitors to the event, that is, to the population of 77000 visitors to the event.

In order to avoid biases related to questionnaire structure, we performed a pilot survey. The purpose of the pilot test is to refine the questionnaire in order to ensure that there will have no problems in answering the questions (Sauders, Philips & Adrian, 2009). The respondents were informed that the research had a scientific aim. So, the impartiality of the analysis was ensured.

#### 2.2. Structure of the Questionnaire

The questionnaire is an instrument for collecting information. Our option for this method was directly related to:

In the case of the face-to-face questionnaire: considering the efficient way of collecting information from a large number of respondents; to avoid the non-response bias; to be able to provide clarification if the respondent does not perceive any question; to collect important inputs that sometimes cannot be placed in an online questionnaire (Sekaran & Bougie, 2016).



In the case of the online questionnaire: possibility of reaching large numbers of people from several geographical locations, on a low cost basis; allows anonymity of the answers, and consequently, the respondent is not exposed to the influence of the researcher; allows people respond to the survey at the moment that seems most appropriate to them and the easiness of application (Sekaran & Bougie, 2016).

Thus, by applying the two types of surveys we were able to combine advantages of both methods.

The questionnaire was developed in a continuous communication between ISAG – European Business School and the organization team of NOS Primavera Sound and the part of the questionnaire that we use in this research is organized as follows: i) sociodemographic data - gender, age, marital status, educational degree, work conditions, average net income, residence and nationality; ii) level of global satisfaction with the event and regarding event location, accessibility, organization of festival, the duration of the festival, the concerts' schedules, the settings, the conditions of the venue, the catering, the toilets, the merchandising and the stages - respondents used a five-point Likert scale that ran from 1 (unsatisfied) and 5 (very satisfied).

## 3. Research Findings

#### 3.1 Descriptive Analysis

During the event, our sample contains 55,9% females and 44,1% males and it has the following age breakdown: <20 (3,2%), 20-29 (35,8%), 30-39 (34,9%), 40-49 (23,5%) and more than 50 (2,6%). With respect to the marital status, 78,3% single, 17,5% married, 3,8% divorced and 0,4% windowed. Regarding the educational degree, 3,1% have the basic level, 27,3% the secondary education, 69,6% have a higher level (bachelor's degree or more). The majority of the respondents are employed (67,0%), 26,0% are students, 6,0% are unemployed and 1,0% are retired in the labour market. The average income has the follow breakdown: <=530€ (19,0%), between 531€-1000€ (29,0%), between 1001€-1500€ (27,0%), between 1501€-2000€ (12,0%) and more than 2000€ (13,0%). The majority are resident in Portugal (74,8%) and have Portuguese nationality (74,8%).

After the event, our sample contains 49,5% females and 50,5% males and it has the following age breakdown: <20 (15,0%), 20-29 (38,1%), 30-39 (32,2%), 40-49 (12,4%) and more than 50 (2,3%). With respect to the marital status, 77,4% single, 19,3% married, 3,2% divorced and 0,1% windowed. Regarding the educational degree, 1,8% have the basic level, 17,6% the secondary education, 80,6% have a higher level (Bachelor's Degree or more). The majority of the respondents are employed (73,1%), 22,9% are students, 3,0% are unemployed in the labour market. The Average income has the follow breakdown: <=530€ (32,8%), between 531€-1000€ (28,9%), between 1001€-1500€ (16,1%), between 1501€-2000€ (12,2%) and more than 2000€ (10,0%). The majority are resident in Portugal (81,9%) and have Portuguese nationality (81,9%).

These results can be seen on table 1.



**Table 1: Descriptive Analysis (During and After the Event)** 

Variables	During the Event (N=937)	After the Event (N=1366)	
Gender			
Female	55,9%	49,5%	
Male	44,1%	50,5%	
Age			
Less than 20	3,2%	15,0%	
Between 20-29	35,8%	38,1%	
Between 30-39	34,9%	32,2%	
Between 40-49	23,5%	12,4%	
More than 50	2,6%	2,3%	
Marital Status			
Single	78,3%	77,4%	
Married	17,5%	19,3%	
Divorced	3,8%	3,2%	
Windowed	0,4%	0,1%	
Educational Degree			
Basic Level	3,1%	1,8%	
Secondary Education	27,3%	17,6%	
Bachelor's Degree	48,3%	48,5%	
Master or PhD	21,3%	32,1%	
Work Conditions			
Self Employed	14,0%	21,3%	
Paid Employed	53,0%	51,8%	
Student	26,0%	22,9%	
Looking for the 1st job	0,0%	1,0%	
Unemployed	6,0%	3,0%	
Retired	1%	-	
Domestic	-	-	
Average Income			
<=530€	19,0%	32,8%	
531€ - 1000€	29,0%	28,9%	
1001€ - 1500€	27,0%	16,1%	
1501€ - 2000€	12,0%	12,2%	
>2000€	13,0%	10,0%	
Residence			
Portugal	74,8%	81,9%	
Other	25,2%	18,1%	
Nationality			
Portuguese	78,4%	81,9%	
Other	21,6%	18,1%	

Source: Authors

## 3.2. Degree of Agreement and Satisfaction

Within the scope of the satisfaction analysis, we analyzed the level of global satisfaction, during and after the event, taking into account the sociodemographic characteristics of the respondents. Looking to the global satisfaction during the event the visitants presented high levels of satisfaction with 52,0% very satisfied, 44,3% satisfied, 3,5% neither satisfied or unsatisfied, 0,1% were unsatisfied and 0,1% very unsatisfied. After the event, although the levels of satisfaction remained high, they have fallen from the highest rank



with 44,0% very satisfied, 49,0% satisfied, 6,0% neither satisfied or unsatisfied, 1,0% were unsatisfied and 0,0% very unsatisfied (see table 2).

After analyzing the level of satisfaction, we consider the satisfaction regarding the event location, accessibility, organization of the festival, the duration of the festival, the concerts' schedules, the settings, the conditions of the venue, the catering, the toilets, the merchandising and the stages. During the event, we could see that the visitants were satisfied or very satisfied with the local (97,8%), scenarios (92,7%), conditions of the (91,3%) and organization of the festival (91,1%). When talking about the festival stages 93,9% of the visitants were satisfied or very satisfied with the NOS stage and 89,3% with the Super Bock stage. After the event, the visitants were satisfied or very satisfied with the local (98,0%), scenarios (92,0%) and duration of festival (90,0%). In the context of festival stages, the visitant was satisfied or very satisfied with the Super Bock (87,0%), NOS (85,0%), Palco (71,0%) and Pitchfork (60,0%) (see table 2).

Table 2: Satisfaction Score: During and After the event

Variables	Satisfaction Score During the Event (N=937)			Satisfaction Score After the Event (N=1366)				6)		
	1	2	3	4	5	1	2	3	4	5
Global	0,1%	0,1%	3,5%	44,3%	52,0%	0%	1%	6%	49%	44%
Organization and Conditions										
Local	0,3%	1,8%	0,1%	12,5%	85,3%	0,9%	0,1%	0,9%	11,4%	86,7%
Accessibility	0,2%	1,2%	9,0%	29,0%	60,6%	1,3%	2,1%	11,3%	32,3%	53,0%
Organization of the Festival	0,3%	1,0%	7,6%	34,8%	56,3%	1,3%	2,4%	10,2%	40,6%	45,5%
Duration of the Festival	1,1%	1,6%	15,9%	39,1%	42,3%	1,0%	1,5%	7,4%	37,7%	52,4%
Schedule of the concerts	0,6%	2,0%	10,0%	38,4%	49,0%	2,2%	7,5%	16,8%	42,3%	31,2%
Scenario	0,1%	0,7%	6,5%	25,0%	67,7%	0,9%	0,9%	6,1%	28,0%	64,1%
Enclosure Conditions	0,3%	0,7%	7,7%	31,2%	60,1%	0,7%	2,4%	9,9%	38,2%	48,8%
Restauration	1,0%	1,6%	15,9%	39,1%	42,3%	2,1%	4,8%	18,3%	37,3%	37,5%
Bathrooms	4,0%	12,9%	29,8%	30,0%	23,3%	7,7%	14,6%	27,5%	32,9%	17,3%
Primavera Market	2,5%	4,6%	23,3%	36,6%	33,0%	2,4%	6,7%	35,2%	37,3%	18,4%
Stages										
Pitchfork	2,9%	4,3%	21,3%	36,7%	34,8%	1,9%	5,0%	21,7%	34,4%	37,0%
Palco.	1,6%	2,7%	16,7%	38,1%	40,9%	1,9%	5,0%	21,7%	34,4%	37,0%
Super Bock	0,3%	0,7%	9,7%	34,4%	54,9%	1,2%	2,0%	10,0%	44,0%	42,8%
NOS	0,4%	1,2%	4,5%	28,5%	65,4%	1,7%	3,1%	10,3%	39,1%	45,8%

Source: Authors. Note: The numbers on bold are the highest ones in each subsection. Likert scale that ran from 1 (unsatisfied) and 5 (very satisfied).

On table 3, it is possible to see the main differences regarding the global satisfaction scores, according to the various sociodemographic characteristics of the respondents and we can see that, in general, during the event, the respondents present the highest satisfaction scores. Through the information in table 3, it is possible to segment the respondents who presented similarities with the highest levels of durability satisfaction after the events and who stand out: female, residence and nationality outside of Portugal. This information is of particular relevance because festivals and cultural events are becoming part of the tourist destination portfolio (Bowdin et al., 2006), and our results indicate that the tourist (the respondents who have nationality and residence abroad) are the most satisfied with the event. In the existing situation of competition between city tourism and cultural events, the results indicate that the event is likely to continue to be held in Porto as it is the event in which foreigners show higher levels of satisfaction.



Table 3: Global Satisfaction Score and socio demographic characteristics

Variables	Global Satisfaction Score During the Event (N=937)	Global Satisfaction Score After the Event (N=1366)		
Gender		11101 1110 1110 (11 1000)		
Female	4,52	4,35		
Male	4,42	4,33		
Age	,	,		
Less than 20	4,36	4,34		
Between 20-29	4,50	4,25		
Between 30-39	4,48	4,50		
Between 40-49	4,36	4,31		
More than 50	4,33	4,30		
Marital Status	·	·		
Single	4,23	4,34		
Married	4,49	4,35		
Divorced	4,50	4,34		
Windowed	4,43	3,50		
<b>Educational Degree</b>		·		
Basic Level	4,23	4,38		
Secondary Education	4,49	4,34		
Bachelor's Degree	4,50	4,45		
Master or PhD	4,43	4,34		
Work Conditions	,	,		
Self Employed	4,49	4,27		
Paid Employed	4,33	4,37		
Student	4,52	4,35		
Looking for the 1st job	4,36	4,08		
Unemployed	4,25	4,29		
Retired	-	-		
Domestic	4,00	-		
Average Income	·			
<=530€	4,45	4,35		
531€ - 1000€	4,43	4,34		
1001€ - 1500€	4,46	4,34		
1501€ - 2000€	4,49	4,40		
>2000€	4,53	4,23		
Residence	·			
Portugal	4,47	4,35		
Other	4,50	4,35		
Nationality	·	·		
Portuguese	4,42	4,35		
Other	4,54	4,35		

Source: Authors. Note: The numbers on bold are the highest ones in each subsection. Likert scale that ran from 1 (unsatisfied) and 5 (very satisfied).

## 3.3 Satisfaction Scoring Index: during and after the event

For the construction of the satisfaction indexes, we submitted the data to the analysis of main components with varimax rotation to identify the satisfaction level weights. We also did pre-tests using the Kaiser–Meyer–Olkin (KMO) measure and Bartlett's test of sphericity to evaluate the adequacy of the analysis.

The data obtained during the event show us that KMO=0,854, the statistical value of  $X^2$  = 2256,38, Bartlett's test is significant (p=0.000), and the correlations between the variables are suitable to make a factor analysis (see table 4). We observe that three distinct factors emerged in the sample which explained 52,71% of the total variance for the data.



Factor 1 accounts for 32,84% of the variance in data and loads mainly on items relating to *organization of the festival*. Factor 2 accounts for 11,27% of the variance in data and loads on items related with *stages*. Factor 3 accounts for 8,60% of the variance in data and loads on items related with *festival Services*.

The data obtained after the event show us that KMO=0,911, the statistical value of  $X^2$  = 7076,42, Bartlett's test is significant (p=0.000), and the correlations between the variables are suitable to make a factor analysis (see table 5). Three distinct factors emerged in the sample which explained 54,5% of the total variance for the data. Factor 1 accounts for 37,80% of the variance in data and loads on items related with *organization of the Festival*. Factor 2 accounts for 8,90% of the variance in data and loads on items related to *festival Services*. Factor 3 accounts for 7,80% of the variance in data and loads on items related with *musical Stages*.

When we compare the SSI during and after the festival we observe that it presents three main differences: i) the total of the three after the event factors explains more the level of satisfaction that the factors during the event. However, in both cases, there are other factors that have not been evaluated that have importance in the level of satisfaction; ii) the weighting and order of the factors are different during and after the event. This result tells us that satisfaction is influenced by the moment being evaluated. In this case, the visitors present higher levels of satisfaction during the experience of the event; iii) the visitor attributes greater satisfaction to the musical stages during the event than after the event. This result is very relevant, and deserves a reflection on the part of the organization, since the stages are the core business of the event.

Table 4: Satisfaction Index: during the event

Table 4. Saustaction much, during the event				
Organization of the festival				
Accessibility				
Local				
Organization of the festival	32,84%			
Concerts schedule				
Settings				
Duration of the Festival				
Musical Stages				
NOS				
Palco.	11,27%			
Super Bock				
Pitchfork				
Festival Services				
Catering				
Merchandising	8,6%			
Conditions of the venue				
Toilets				

Source: Authors. Note: KMO= 0.854; Test de Bartlett's of Sphericity  $X^2 = 2256.38$  (p-value= 0.000).



Table 5: Satisfaction Index: after the event

Tuble 3. Butistaction index. after the event			
Organization of the festival			
Accessibility			
Local			
Organization of the festival	37,80%		
Concerts schedule			
Settings			
Duration of the festival			
Festival Services			
Catering			
Merchandising	8,90%		
Conditions of the venue			
Toilets			
Musical Stages			
NOS			
Palco. 7,80%			
Super Bock			
Pitchfork			

Source: Authors. Note: KMO= 0,911; Test de Bartlett's of Sphericity  $X^2 = 7076,42$  (p-value= 0,000).

## 4. Conclusion

Music festivals are very popular among the younger, and the NOS Primavera Sound is very well known in the North of Portugal because most of the artists and a high percentage of the visitants are foreigners. This type of event is of interest to the city of Porto because it allows positive externalities, both in the development of the impact to the community and in the attractiveness of the city as a tourist destination. In this paper we create a new framework, the Satisfaction Scoring Index (SSI), that allows the scoring and ranking of the level of satisfaction and, consequently, can be a tool to support decision-making.

Some results obtained need reflection and can be considered in the organization of the next edition. Among them, it is emphasized that although the satisfaction levels are high, during the event, the respondents present the highest global satisfaction scores.

In the case of global satisfaction, the female and the respondents with residence and nationality outside of Portugal were those who presented the highest levels simultaneously during and after the event.

When we analyze the level of satisfaction regarding different items of the festival (from the organization, services rendered and type of music), we concluded that three distinct factors of satisfaction emerged in the application of the factorial analysis: organization of the festival, musical stages and festival services. However, the weighting and order of the factors are different during and after the event. This result is similar to the one we got in the global satisfaction and we can state that the satisfaction is influenced by the moment being evaluated. In this case, the visitors present higher levels of satisfaction during the experience of the event. Furthermore, we also observe that the visitant attributes greater satisfaction to the musical stages during the event than after the event. This result is very relevant, and deserves a reflection on the part of the organization, since the stages are the core business of the event.

The SSI allows targeting the most satisfied visitants and possibly publicizing the positive word of mouth or electronic word of mouth of the event and therefore they are more likely to return in another edition. The SSI results are important not only for the organizers of



the festival, but also for local tourism, because it has the advantage of attracting tourists (repeating and new) to the city.

The main limitation of the article is that we cannot cross the respondents who responded during the event and after the event. It would have been interesting to further studies to consider this information and then analyze whether the satisfaction levels changed during the event. Moreover, a more detailed analysis of the importance of this event, both in promoting the city as a tourist destination and in the socio-economic impact of cultural activities for local development, would be an important complement of the research that serves both festival organizers and local tourism decision-makers.

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## References

- Bowdin, G., Allen, J., Harris, R. McDonnell, I. O'Toole, W. (2010). Events Management Paperback. 3rd edition. London and New York: Routledge.
- Bowdin, G., Allen, J., O'Toole W, et al. (eds) (2006) Events Management. 2nd ed. London: Elsevier Butterworth-Heinemann.
- Cuadrado-García, M.; Pérez-Cabañero, C. & Montoro-Pons, J.D. (2017). Managing satisfaction in cultural events. Exploring the role of core and peripheral product, Journal of Contemporary Management Issues, 22(1), 157-174.
- Li H, Song W, Collins R (2014) Post-event visits as the sources of marketing strategy sustainability: a conceptual model approach. Journal of Business Economics and Management, Vilnius, Vol. 15, Iss. 1,pp: 74;
- Lobo A, Meyer D, Chester Y (2014) Evaluating consumer response associated with sponsorship of major sporting events in Australia. *Sport, Business and Management: An International Journal* Bingley 4(1): 52-70.
- Mair J. & Whitford M. (2013). An exploration of events research: event topics, themes and emerging trends. International Journal of Event and Festival Management, 4(1) 16-30, doi: https://doi.org/10.1108/17582951311307485.
- Mangesh, K. (2017). How Satisfied is my Customer?: An Evaluation of Customer Satisfaction of Cellular Service Providers in the Region of Mumbai with Special Reference to Tata Docomo. International Journal on Customer Relations. New Delhi. 5(1): 31-36.
- O'Sullivan J. M, Sontam D. M., Grierson R., Jones B. (2009). Repeated elements coordinate the spatial organization of the yeast genome. *Yeast* 26(2):125-138.



- Sauders M, Philips L, Adrian T (2009). *Research methods for Business Students* 5th ed., Pearson Education:124-161.
- Schofield, P. & Thompson, K. (2007). Visitor motivation, satisfaction and behavioural intention: the 2005 Naadam Festival, Mongolia', International Journal of Tourism Research, 5, 329-344.
- Sekaran U., Bougie, R. (2016) Research Methods for Business: A Skill Builiding Approach, 7th edition, UK: John Wiley &Sons.
- Simon, A.; Parker, A.; Stockport, G. & Sohal, A. (2017). Towards an adapted MHP strategic capabilities model for moderating challenges to quality music festival management, International Journal of Event and Festival Management; ,Bingley,8(2),151-171.
- Vinnicombe T, Sou J (2017) Socialization or genre appreciation: the motives of music festival participants, *International Journal of Event and Festival Management*; Bingley, 8(3): 274-291.
- Wilson, J., Arshed, N., Shaw, E., Pret, T. (2017) Expanding the Domain of Festival Research: A Review and Research Agenda. International Journal of Management Reviews, 19 (2): 195-213.