



Cost–benefit analysis of sport events: The case of World Paddle Tour



Héctor V. Jiménez-Naranjo*, José Luis Coca-Pérez, Milagros Gutiérrez-Fernández, Mari Cruz Sánchez-Escobedo

Universidad de Extremadura, Facultad de Estudios Empresariales y Turismo, Avda. de la Universidad, s/n, 10071 Cáceres, Spain

ARTICLE INFO

Article history:

Received 22 January 2015

Accepted 28 April 2015

Available online 2 July 2015

JEL classification:

A13

C67

L83

Keywords:

Economic impact

Social impact

Cost/benefit analysis

Sports tourism

ABSTRACT

Nowadays tourism is one of the most important sectors of our country, and no one has any doubt about importance of sport for the economy. Both concepts create “sports tourism”, and “sporting events” are its greatest exponent that is having special importance both at academic and at the economic and social levels. Taking into account the above, this research aims to analyze socioeconomic impact of the paddle tournament “Caceres International Open 2013”. The CBA methodology will be used; its main objective is to calculate a benefit/cost ratio analyzing the contribution made by two groups of respondents (attendees and participants). Among final conclusions of this study we establish different groups of stakeholders, and this methodology can be applied to these groups to value the impact of sporting events. It has also been found out that the contribution made by public institutions has economic effects in other sectors of the city; so sporting events can be considered a complement of the tourism sector.

© 2015 AEDEM. Published by Elsevier España, S.L.U. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

Celebration of any event in a city requires its organizers to use several resources. The analysis of the type of event will determine if all necessary resources or just some of them have been contributed by public or private sector, or by both of them. The intervention of public administration in an event through the provision of resources is a result of several decisions of political and administrative authorities, and it is a demonstration of the fact that promotion of social events is above purely profit objectives.

However, the involvement of government in these events is not limited to the promotion of an activity taking place, but it also has different consequences for the area. These consequences or results are difficult to quantify, since in many cases there are no data for their analysis, or they may even be intangible elements, as, for example, the environment.

Moreover, we cannot forget that promotion of sport by the authorities follows the Constitutional requirement. Thus, the synopsis provided by the Parliamentary Counsel Pedro Peña in 2004 and updated by the Parliamentary Counsel Sara Sieira in 2011 in relation to the third paragraph of the Article 43 of the Spanish Constitution says: “guiding principle established for social and economic policy and falling to the public authorities is promotion of

health education, physical education and sports, as well as the obligation to encourage the proper use of leisure time”. This way the Spanish Constitution, as well as other modern Constitutions, such as the one of Portugal, highlights the importance of sport. According to the Parliamentary Counsels, the Autonomous Communities have reacted to the constitutional mandate of sport promotion, taking into account that the majority of the Autonomous Communities already has regulatory standards for sport.

As a result, sports events have an appropriate justification by the government in our society, combining sports promotion with leisure facilities for citizens. The type of events offered by the government are a result of decisions of the authorities in accordance to the perceived demand in society, taking into account budget constraints that affect them.

In addition, sports tourism through sports events can be considered an alternative way to complement the seasonality of tourism in a city. It is necessary to analyze such events in areas where they are organized with the aim to use these data for the decision-making and for the generations of the highest revenue. Promoting activities related to sports tourism can provide a number of resources to the tourism sector in areas where it is necessary to change the seasonality and to enhance the sustainability of the sector.

It should also be noted that when public funds are used, some studies quantifying economic gains related to the project more broadly should be commissioned (Howard & Crompton, 2005); in a way that, as Sánchez and Barajas (2012), studies of the economic

* Corresponding author.

E-mail address: hectorjimenez@unex.es (H.V. Jiménez-Naranjo).

impact let decide if an investment will produce returns to the area where it is made and to its inhabitants, as the decision to promote such investment may influence on generation of economic activity and job creation.

Considering the above, this research aims to carry out an analysis of socioeconomic impact of the paddle tournament “Caceres International Open 2013”, sports event held in Caceres city from the 20th till the 26th May 2013. To this end, having reviewed different possible techniques, the CBA methodology was applied; its main objective is to obtain a benefit/cost ratio. However, it is not enough to know the amount of the expense or benefit generated by the event, but it is also of great interest to know who has contributed to it and to find out its extent. Thus, it is essential to carry out a thorough analysis of respondents (attendees and participants) in order to deepen the research findings. Also, the study of these surveys will identify the external effects generated by the championship: respondents' satisfaction, improvement of the image of the municipality, or appreciation of the economic and social effects, among other things.

The paper has four sections, besides this introduction. A brief summary of the research on sports tourism is made in Section 2. The existing techniques are studied in Section 3, and the methodology used in this work is justified. In Section 4 we carry out an empirical study and analyze its results. In the last section final conclusions of the study are described, as well as some limitations and future research.

2. Theoretical framework: sports tourism

Nowadays tourism is one of the most important sectors of our country, and nobody has any doubt about its importance for the economy. In view of the above, and according to [Latiesa and Paniza \(2006: 133\)](#) who claim that “interconnection between tourism and sport is evident in advanced societies”, we consider essential to understand the connection between tourism and sport that's why we have carried out a literature review that allows us to deepen into the concept of “Sports Tourism”. In this research we have found out that “sport” and “tourism” are two complementary activities. Sports events generate tourism, and tourists do different activities including sports practices while enjoying their leisure time.

The relationship between tourism and sport was demonstrated for the first time in [Anthony's research \(1966\)](#); from that moment studies on tourism and sports began to be carried out ([Armstrong, 1985](#); [Baker & Gordon, 1976](#); [McDowell, Leslie, & Callicot, 1988](#); [Williams & Zelinsky, 1970](#)). However, any research on so called “sports tourism” had not been carried out until the 1990s with the study of [De Knop \(1990\)](#). During that decade many authors provided definitions of “sports tourism”; we can highlight among them some contributions by [Hall \(1992\)](#), [Gammon and Robinson \(1997\)](#) or [Standeven and De Knop \(1999\)](#).

Besides the above works, there were many authors who did literature reviews regarding this topic; we can mention those by [Delpy \(1998\)](#), [Keller \(2001\)](#), [Gibson \(2003\)](#) and [Weed \(2006, 2009\)](#).

The data we can find in the annual statistical directory published in 2013 and 2014 show that the trips of Spanish residents made basically on the occasion of some sport reason increased more than 60% from 2007 to 2012, being 1534.4 (thousand of trips) and becoming 2573.2 (thousand of trips); it caused an increase of 39.7% of the total spending caused by this kind of tourism that means 384.1 millions Euros spent in 2007 and 536.6 millions Euros spent in 2012. These data demonstrate the importance of this economic sector of Spain, showing that the sport one is one of the segments of the tourist sector that grows very quickly.

We should include a concept of “sports events” into sports tourism, because nowadays it has special importance and

promotion, being considered one of the most important components of sports tourism, and perhaps the most significant one in terms of number of tourists and its economic impact ([Deery, Jago, & Fredline, 2004](#); [Getz, 2003](#)). While the biggest sports events have been deeply analyzed in relation to their impact on the cities where they are held, we cannot forget the importance of smaller sports events which involve wealth creation in the environment where they take place, mainly due to the large number of attendees and participants ([Barajas & Sánchez, 2011](#); [Hurtado, Ordaz, & Rueda, 2007](#); [Wilson, 2006](#)).

3. Applied methodology: cost/benefit analysis

As it has been explained previously, the objective of this research is to analyze the economic impact generated for Caceres city by the paddle tournament “Caceres International Open 2013”. An adequate methodology will be applied to achieve this aim, and it will be explained in this section. Furthermore, the applied valuation method will be described, and it will be explained why it has been chosen, as well as different theories and tools that have helped us in our research. However, before we start with the exposition of the methodology, we would like to show different valuation methods used to measure the impact of sports events.

3.1. Techniques used to measure the economic impact of sports events

Assessing the economic impact of a sports event is a difficult task because of the difficulty for obtaining data for each of the stakeholders involved in the sports event; a choice of a suitable method for carrying out the analysis is also a difficult point. There are some researches that describe different methodologies that have been used to develop economic parameters of sport ([Barajas, Salgado, & Sánchez, 2012](#); [Barajas & Sánchez, 2011](#); [Hurtado et al., 2007](#); [Késenne, Taks, Chalip, Green, & Martyn, 2011](#); [Li, Blake, & Thomas, 2013](#); [Pedrosa & Salvador, 2003](#); [Salgado, Barajas, Lera, & Sánchez, 2013](#)). We can observe that the methods used more frequently in the studies of the economic impact of the sport events are:

1. *Satellite accounts (SA)*: through statistical tables based on the National Accounting System, this methodology is to provide a number of economic indicators on the analyzed sector or an economic activity, either from a national, regional or local point of view. This technique has been applied by authors such as [Weber \(1995\)](#), [Otero \(2000\)](#), [Ruiz et al. \(2010\)](#), among others.
2. *Input-output tables (IOT)*: as satellite accounts, they adopt a macroeconomic approach at national or regional level, allowing in this case to simulate economic impact in several settings by creating complex economic models ([Pedrosa & Salvador, 2003](#)). This methodology is applied in many sectors, but in sports sector we can highlight such authors as [Preuss \(2004\)](#), [Aza, Baños-Pino, Canal, and Rodríguez \(2007\)](#) and [Porter and Fletcher \(2008\)](#).
3. *Contingent valuation method (CVM)*: its purpose is to observe the reaction of an individual to hypothetical changes of prices or quantities of certain goods or services, trying to find out their economic value ([Leal, 2005](#)). This technique has been used by the authors such as [Bruce, Groothuis, and Whitehead \(2001\)](#), [Johnson, Mondello, and Whitehead \(2006\)](#), or [Walton, Longo, and Dawson \(2008\)](#).
4. *Computable general equilibrium model (CGE)*: it represents economy through equations. It takes into account production, consumption, trade, private and public sectors, so the economy is represented as realistic as possible. This methodology is mainly used in public finance or international trade, although it has

also been used to study the impact of certain events to generate tourism (Blake, Sinclair, & Sugiyarto, 2003).

5. *Cost/benefit analysis (CBA)*: it aims to calculate the cost/benefit ratio, generated by an event for a region or a country. Its benefits are calculated as a value increase in consumption of the local population, while the costs will be related to the factors of production needed to organize the event (Késenne, 2005). The authors such as Gratton, Shibli, and Coleman (2006), Hurtado et al. (2007), or Baade, Baumann, and Matheson (2008) have used this analysis in their studies of economic impacts.
6. *Regional and sectorial analysis*: it is based on carrying out of case studies on an institution, an individual, an event or a sector which can be applied to any level: international, national, regional or the local one (Barajas et al., 2012).

Basing on literature reviews of economic impacts (Gouguet & Nys, 1993; Halba, 1997; Késenne, 2001; Késenne et al., 2011; Otero, 1994; Pedrosa & Salvador, 2003), we can determine that this type of analysis in sports have several difficulties, because it speaks about considering amounts of money spent on an event as a profit. In addition, quoted literature indicates that it is appropriate to assess the impact, if the resources come from other region, and not from the analyzed one. Finally, the calculation of the value in the relation to the chosen multiplier effect is also considered to be a disadvantage by different authors.

In view of the above, and according to Hurtado et al. (2007), cost/benefit analysis (CBA) can be very useful for assessing socio-economic impacts originated by the celebration of sports events, becoming an important tool for the decision-making by those who are responsible for the organization. According to these authors, the cost/benefit analysis is a comprehensive and flexible methodology which assesses the socioeconomic impact of big public projects. This analysis is the most appropriate approach for assessing the impacts of a sports event, because it enables construction of measures such as the internal rate of return, the net present value of costs and benefits and the cost/benefit ratios, allowing to choose those alternatives that provide the biggest social benefits.

4. Sources of information, sample used and profile of respondents

Once the method of analysis is chosen, we will apply it to the sports event we analyze, so we can identify the costs and benefits of its holding. To do this it is essential to describe previously information sources we use, the sample used and the profile of the respondents.

4.1. Description of the sources of information

The sources used to obtain statistical data needed for carrying out this research were mainly the following: as a primary source we used a questionnaire elaborated by a group of researchers of the University of Extremadura and covering participants and attendees of the paddle tournament. As a secondary source we used all the data on the tournament provided by other companies, as, for example, the company organizing the event, Triple C, Barceló V Centenario Hotel, or the temporary employment agency Randstad, among others.

Regarding the questionnaire, we must say that we have tried to put together various aspects originated by the event, both positive (growth of economic activity at local level, its impact on tourism and improvement of the image of the city, etc.) and negative (traffic jam, disturbance of residents lifestyle, etc.). The respondents were also asked about an average expenditure made in this type of events, specifically in this one, in order to calculate the benefit

Table 1
Technical specifications of the study.

Features	Survey 1 (participant)	Survey 2 (attendee)
Universe	Professional players of paddle	Spectators from 18 till 63 years old
Sample unit	Person	Person
Geographical area	Caceres city	Caceres city
Information gathering method	Personal interview	Personal interview
Sampling procedure	Simple random sampling	Simple random sampling
Sample size	74	670
Date of field research	May 2013	May 2013

Source: Own elaboration.

of this type of sports events generated in Caceres city. They were also asked about their level of knowledge about the event and their valuation of activities held during its celebration.

4.2. The sample used

As we have previously said, the main source of data collection was an ad hoc designed questionnaire, allowing to find out participants' and attendees' perception, their average expenditure and valuation of the tournament. As it can be seen in Table 1 representing a technical specifications sheet, a personal interview of 74 participants and 670 attendees was carried out. These data are significant, considering that the population size was 138 participants and 10,088 attendees (according to the data provided by the organization).

5. Analysis of the economic impact

To study the economic impact Caceres had due to the International Open (World Paddle Tour), we will use the cost/benefit analysis (CBA). This requires an estimation of the costs and benefits generated by this sporting event. It should be noted that only the costs and benefits generated for Caceres city will be taken into account. It is very important, because in this kind of events many agents are involved (the stakeholders), each of them has a separate profit and loss account which could be analyzed. However, this is not the aim of this research, but to analyze the profit generated in the city for every Euro invested by public authorities.

This method should be applied following the steps as shown in Fig. 1.

5.1. Estimated costs

It is quite easy to estimate the tournament's costs, because we have information provided by different public institutions that have subsidized it (the City Council and the Regional Government of Caceres, the Government of Extremadura) and by the company responsible for its organization in Caceres (Triple C). These costs stand around 70,350 Euros, and they mainly include subsidies granted by the institutions and some extra expenses defrayed by the City Council of Caceres. In particular, the data can be found in Table 2. At the end of the study we will see how much each of these contributions has benefited Caceres city.

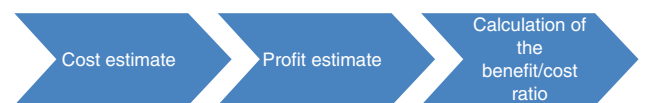


Fig. 1. Phases of cost/benefit analysis.

Source: Own elaboration.

Table 2
Spending entailed by the organization of the event.

Institution	Concept	Quantity
Government of Extremadura	Youth and Sports	33,000 €
	Foundation subsidy	
	General Administration of Tourism subsidy	
City Council of Caceres	Subsidy	15,000 €
	Several spendings	2350 €
	Subsidy	10,000 €
Provincial Council of Caceres		
Total		70,350 €

It should also be noted that public bodies did not have to invest in new infrastructures for this tournament, because the World Paddle Tour was in charge of all the setting up. Therefore, being the World Paddle Tour an external company, these costs will not be taken into account for the calculation of the cost/benefit ratio, since it is not an expense that belongs to Caceres.

5.2. Estimated benefits

Estimating the benefits, we should keep in mind that the direct revenue generated by ticketing cannot be used for calculation, because the beneficiary is the World Paddle Tour (the benefit does not impact Caceres).

Therefore, we have to take into account tourism revenues and external effects. This income may be considered within the induced economic effects; spending made by attendees, participants and staff for accommodation, meals, visits to museums, press, and others can be highlighted. To analyze in detail the average spending of the respondents (attendees and participants) we have to analyze Table 2, where significant differences between the different profiles of respondents are observed. Thus, while a participant spends an average of 109.50 Euros, attendee’s expenditure varies depending on whether he is resident or not, more specifically, whether he stays at night in Caceres or not. Thus, the average expenditure of an

attendee resident or non-resident who does not stay at night in Caceres is quite similar, and it turns around 55 Euros. However, when we look at the expenditure of the non-resident attendees who stay at night in the city, we can prove that the amount increases more than 300%, amounting to 188.39 Euros.

If the average expenditure is broken down by items, it is noteworthy that the expenditure of the participants in accommodation is much lower than that one of attendees, if they stay at night. This has two possible reasons. On the one hand, it is because the participants that were being knocked out were leaving, so sometimes they were not even coming to stay in the city (it decreases the total average); and on the other hand, it is because the above table does not include the subsistence allowances paid by the WPT to some players for accommodation and meals (data provided by the Manager of the Barceló V Centenario Hotel, the tournament’s headquarters; it will be explained later).

Regarding meals, it is the largest expenditure item for all profiles, as well as the expenditure on pubs and restaurants, and it represents between 40 and 50% of the budget of the respondents.

If we go on analyzing different items of expenditures, we can find two concepts that may seem similar, but they are different: transport and fuel. Transport expenditure consists on money paid for travelling within the city: buses, taxis, etc.; fuel spending refers to all the payments made at the gas stations in Caceres to fill in the tank and to be able to travel out of the city. The amount of fuel spending doubles the transport one; the participants and attendees that stay at night are those who contribute more to increase this amount.

The remaining expenditure represents a lower figure of respondents’ budget, but it cannot be neglected, since it also impacts the city in a positive way.

Once the above data is analyzed, we can begin to make conclusions regarding the economic impact that the WPT has made to Caceres city as a result of expenditure generated by the attendees and the participants. To do this, it is important to clarify the information in Fig. 2 that extrapolates the sample to the total population. The participants’ data are not reflected in this figure, since

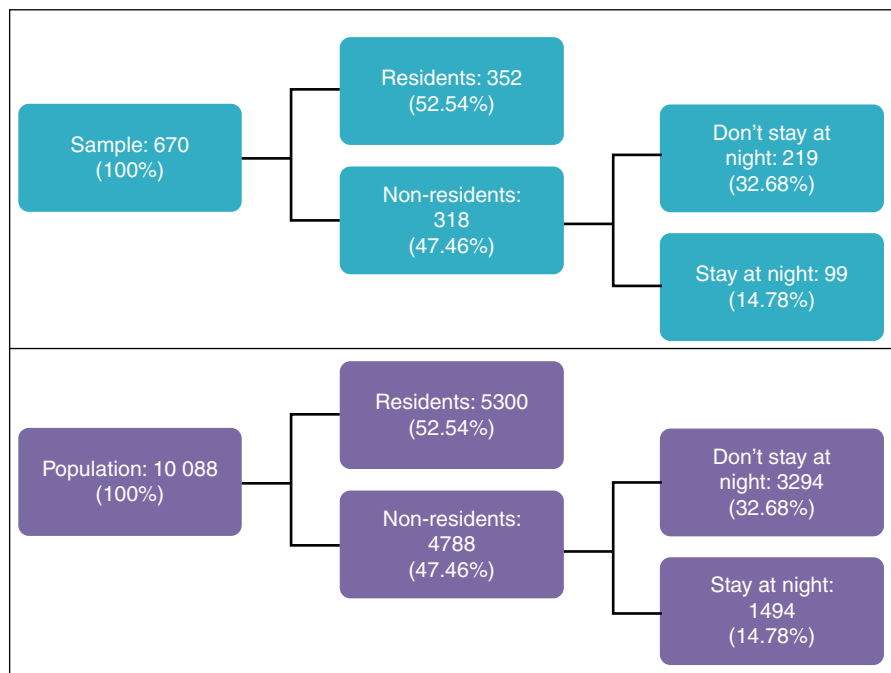


Fig. 2. Grossing-up of the sample to the total population number.

Source: Own elaboration.

it is already known information, because we know that 69 couples have competed.

Taking into account that the total average spending per participant was 109.50 Euros, and the number of participants was 138 (69 couples), total expenditure on this item amounts to 15,111 Euros. Regarding the attendees, as we can prove it in Table 2 and in Fig. 2, they were divided into residents and non-residents; and within the second group into those who do not spend the night in a hotel and those who do it; this division was made with the aim to calculate the expenditure as realistic as possible. In view of the above, and considering that the resident attendees represent 52.54% of the survey sample, we would calculate the total expenditure extrapolating this figure to the total population (10,088 persons according to the organizers). Thus, the total expenditure amounts to 300,139 Euros, a result that is calculated by multiplying the average expenditure per person (56.63 Euros) by the total number of the resident attendees (5300 persons). Once this case has been studied, we analyze the expenditure of the non-resident attendees, differentiating between those who do not spend the night in a hotel and those who do it. In the case of the non-resident attendees who do not spend the night in a hotel, they bring to the city 177,447.78 Euros; this number is obtained from an average expenditure of 53.87 Euros per person, and a population of 3294 persons (total population is 10,088 persons, so it is 32.68% of the total population). Finally, in the case of the non-resident attendees that do spend the night in the city, the expenditure amounts to 281,454.66 Euros, being 188.39 Euros expenditure per person and 1494 persons the population of this group (14.78% of the total population). Therefore, adding these amounts we can come to the conclusion that the benefit provided by the attendees and the participants as their expenditure and a result of holding the paddle tournament “Caceres International Open 2013” in Caceres amounted to 774,152.44 Euros.

However, the study would not be complete, if we finished our analysis this way; there are more items to be considered. Firstly, as we have already explained, there is some expenditure generated by the participants, but it is not reflected in the table, because it was paid by the WPT. Thanks to the politeness of the Barceló V Centenario hotel, we know that the expenditure of the participants and the organizers in this hotel on accommodation and meals amounted to 12,672 Euros. We also have to add to this amount rooms occupied by relatives and/or friends of them, expenditure in the bar-restaurant, contracted services of parking, minibar, etc.; that was an additional extra of 12,900 Euros for the hotel. Therefore, we can conclude that the tournament generated revenue of 24,420 Euros for the hotel.

We should also add the impact generated in these items in similar establishments; the organizers estimate them at 4000 Euros.

Now we should quantify hiring caused by the event. Thanks to the help of Randstad (a temporary employment agency), we have known that about 40 persons (ticket clerks, drivers, hostesses, fitters, etc.) were hired; they worked an average of 40–50 h that week. In view of the above and having analyzed relevant conventions, we have estimated that the total salary paid to these employees comes on 20,000 Euros approximately. We should also take into account that the company WPT was in charge of hiring security guards (2 persons 24 h a day during the entire week, and 4 persons 6 h a day during five days of the tournament). Knowing the wage paid per hour (provided by Triple C), we were able to find out that the expenditure made by the WPT on the security item amounted to 10,032 Euros.

Other type of income we should analyze is those related to hiring ambulances, cleaning services, healthcare, and expenditure at the Bahia Disco, posters or T-shirts. All these expenses are revenues from the point of view of Caceres city, so we are interested in estimate it, making a total of 6950 Euros.

Last but not least, we should estimate the economic impact made by the appearance of Caceres city in the mass media as a result of this sporting event. We asked for the information a media agency that estimated the full cost of the media presence at 134,421 Euros. This figure has been calculated taking into account the presence of the tournament in different media (Table 3), the public rate of each media, and its estimated audience.

In the case of the TV, we have estimated a fixed cost of each appearance in different TV channels; multiplying this cost by the number of appearances the result is about 45,000 Euros.

Speaking about an estimation of the full cost of the appearance in written press, we suppose that it was a basic format, so we multiply its rate by the number of appearances in each newspaper; the result is 35,337 Euros.

Finally, in the case of digital media we estimated daily audience and multiplied it by the number of times each web spoke about the tournament and also by the rate for a most common format (Mid Page Unit); the result is 54,084 Euros.

It is important to take into account that we are speaking about estimated numbers, since in many cases the advertisement has not a normal format for selling, so we used the rate applied to the most similar format. However, this study gives us an idea of the cost caused by this advertising campaign for Caceres city; in other words the cost of this advertising in the mass media during a certain period of time.

Table 3

Average spending estimate (in Euros) per participant and attendee to the World Paddle Tour.

Average spending on ...	Participants	Attendee		
		Residents	Non-residents	
			Don't stay at night	Do stay at night
Accommodation	14.78	0.00	0.00	32.63
Meal	20.80	14.24	13.68	46.59
Transport	11.62	1.84	4.96	10.35
Press and books	5.81	1.68	0.61	2.51
Pubs and restaurants	14.48	19.27	14.77	38.90
Clothes	5.61	5.70	2.78	11.76
Souvenirs	5.20	2.85	1.21	6.90
Fuel	19.17	3.35	10.29	25.41
Museums	4.28	0.67	0.24	1.57
Sports equipment	4.59	6.02	4.24	8.95
Other spendings	3.16	1.01	1.09	2.82
Total average spending	109.50	56.63	53.87	188.39

Source: Own elaboration.

Table 4
“Caceres International Open” appearance in press.

Media	Kind	Presence
Diario Hoy	Written press	37
El Periódico Extremadura	Written press	40
Mundo Deportivo	Written press	7
La Vanguardia	Digital press	9
20 Minutos	Digital press	12
PadelSpain	Digital press	36
TVE	TV	2
TVE internacional	TV	1
BBC	TV	1
MARCA TV	TV	10 h live broadcast
Canal Extremadura TV	TV	10 h live broadcast
Hoy.Es	Digital press	37
Elperiodicoextremadura.Com	Digital press	40

Source: Triple C.

Table 5
Profit generated by the WPT for Caceres city.

Attendees and participants	774,152.44 €
Hotel Barceló V Centenario	24,420 €
Other accommodation establishments	4000 €
Hiring	30,032 €
Other spendings (ambulance, cleaning, posters, etc.)	6950 €
Mass media repercussion	134,421 €
Total profit	973,975.44 €

Source: Own elaboration.

Once all the necessary data have been analyzed, we can estimate the total benefits generated by the WPT. We should add all the amounts we got previously. As we can see in Table 4 that summarize all the information collected previously, the total benefits generated by the tournament for Caceres city are 973,975.44 Euros (Table 5).

5.3. Getting the benefit/cost ratio

The total cost of the World Paddle Tour held in Caceres is 70,350 Euros, and the benefits are 973,975.44 Euros. These data reflect only amounts spent and received by Caceres city; the benefic/cost ratio of this sporting event is 13.85 Euros: it means that every Euro invested in the event by public institutions has revenue of 13.85 Euros.

If we want to study how each public institution contributed to the city through this sporting event, we should just multiply their contribution by the benefit/cost ratio. Thus, if we look in Figs. 3 and 4, we can see the way 43,000 Euros invested by the Government of Extremadura (through Tourism and the Youth and Sports Foundation) have produced 595,322.5859 Euros of benefit for Caceres city. On the other hand, the investment of the City Council of Caceres (17,350 Euros) has produced 240,205.7411 Euros of benefit. Finally, 10,000 Euros invested by the Provincial Council of Caceres produced 138,447.113 Euros of benefit.

6. Analysis of social impact

Until now economic impact generated by this sporting event has been analyzed. However, we should take into account that an event of this nature also causes a significant social impact on the city where it is held. The social impact is shown in Fig. 5, and in general terms, it was valued positively by the respondents.

We asked the respondents to give their opinion about certain statements that would show their point of view on this type of sporting events with the aim to find out a generalized opinion both of the participants and the attendees. We believe that we have to represent these opinions in two groups, so they can be compared,

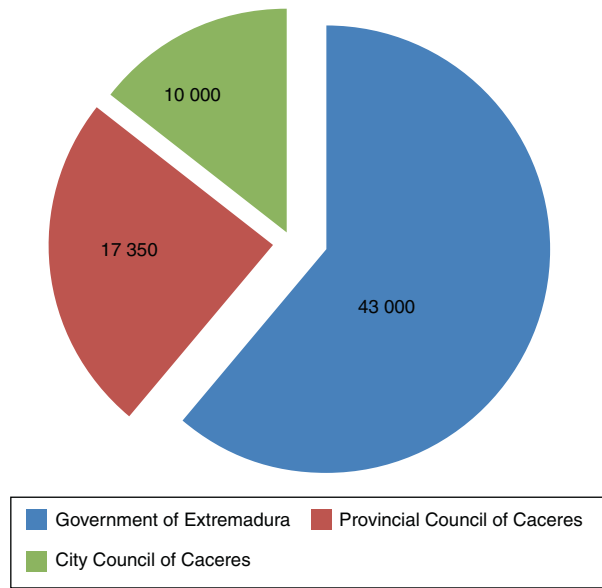


Fig. 3. Subsidies granted by public institutions.

Source: Own elaboration.

and we can find out if they depend on the group (the participants or the attendees) to which the respondent belongs.

As for the questions posed in this questionnaire and according to the work of Hurtado et al. (2007), Navarro-García, Reyes-García, and Acedo-González (2013), Reyes (2013), Yingzhi, Xiaoming, and Liu (2013); Kim, Jun, Walker, and Drane (2015), they can be grouped in a following way: (1) those related to the assessment of social impact; and (2) those related to the assessments of the economic impact.

Fig. 5 shows the collected data.

It is very important to highlight that both groups showed a similar trend in respect of their points of view about the questions. We can observe that the results obtained for each statement are very similar for both the participants and the attendees, and we believe

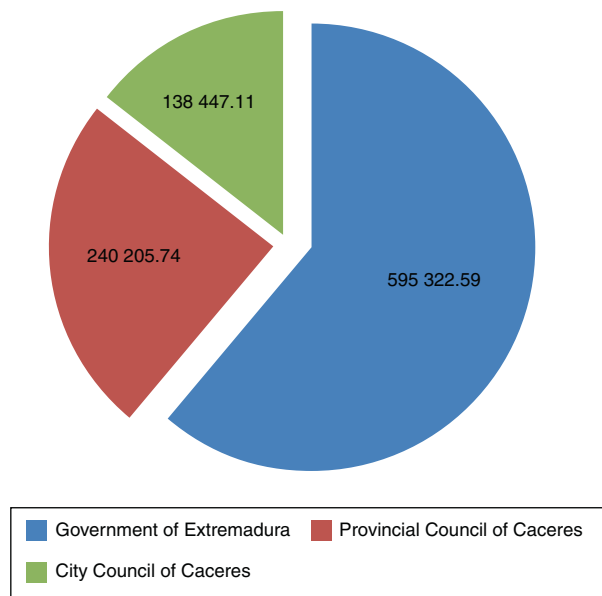


Fig. 4. Profits achieved by Caceres city due to the subsidies granted by public institutions.

Source: Own elaboration.

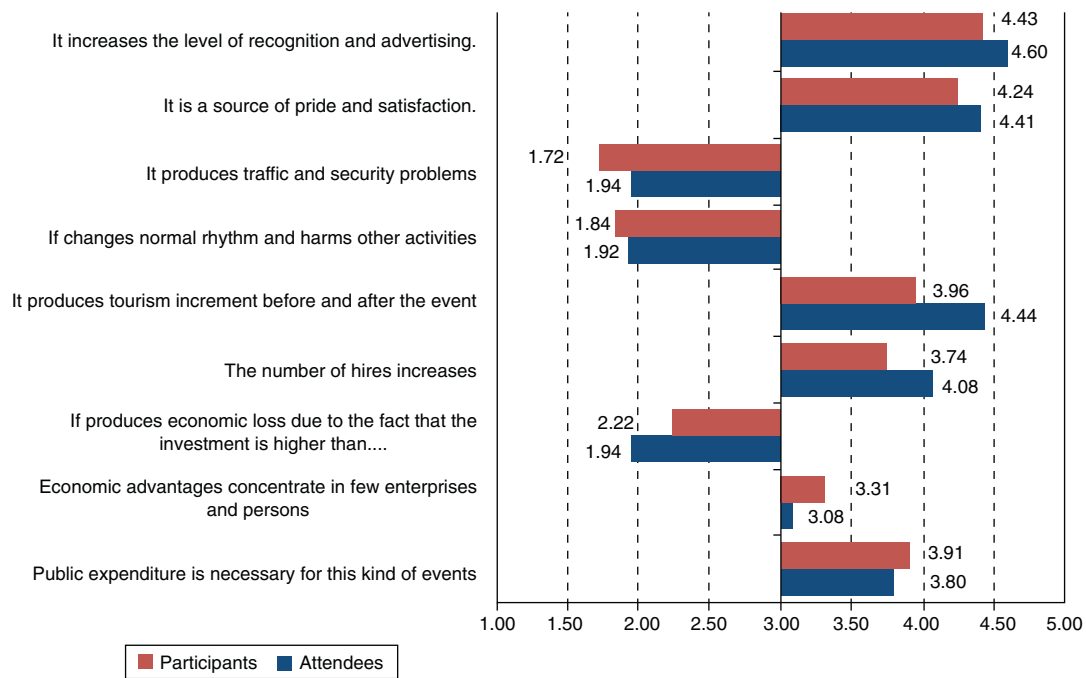


Fig. 5. Social and economic perception of the event by its assistants and its participants.

Source: Own elaboration.

that the fact of belonging to one or another group does not affect the opinion they have about sports events.

7. Discussion, conclusions and implications

The relationship between tourism and sport was established for the first time in Anthony's work (1966); from that moment, studies on tourism and sport were started to be carried out. In addition, sports tourism through events can be considered an alternative way to complement the seasonality of tourism in a city. To this end, it is necessary to analyze such events with the aim to collect relevant data that can help to make decisions and to generate the highest return, as well as to provide a number of resources that can help to complement seasonality and to enhance the sustainability of the sector.

We can fit a concept of "sporting events" within sports tourism that nowadays is having special importance and development, being considered one of the biggest components of sports tourism and perhaps the most important in terms of number of tourists and its economic impact (Deery et al., 2004; Getz, 2003). Sports events, even smaller ones, are to help with wealth creation in the area where they take place, mainly due to the number of the attendees and the participants (Barajas & Sánchez, 2011; Hurtado et al., 2007; Wilson, 2006).

As for the conclusions of this study, we can say that it provides different stakeholders, and the methodology for valuation of the impact of sporting events can be applied to them. The information obtained from different stakeholders through the questionnaires and the personal interviews with the organizers and the public institutions gave us the data enough to value in a positive way the celebration of the event in the city. It has also been found out that contribution made by public institutions has economic effects in other sectors of the city; so the sporting events can be considered a complement of the tourism sector.

Regarding the results, we have found out that the tournament had benefits, its benefit/cost ratio is 13.85 Euros; it means that every Euro invested in the event has a revenue of 13.85 Euros. Therefore,

we can speak about positive socioeconomic impact of the tournament, having a benefit of 973,975.44 Euros and a total cost of 70,350 Euros.

Finally, we can say that a global valuation of the event by stakeholders has been very positive, highlighting the fact that the public expenditure is very important for a celebration of this type of events. According to them, this type of events increase recognition and promotion of the city, it is a reason to be pride and satisfied, and it causes an increase in tourism. This last item was more valued by the attendees rather than by the participants.

Regarding the limitations of this study in its theoretical part, we are aware of the fact that in spite of having made a thorough literature review, we may have skipped some articles that could complement our work. As to the empirical part, although the results obtained in two groups of stakeholders (the participants and the attendees) are representative; we understand that a higher response rate could provide us more detailed information about some of the questions with the aim to increase promotion of the city as a point of reference for a celebration of any type of sporting events.

As for the future research, on the one hand, we have thought to carry out some comparative studies between different sporting events held in Caceres city throughout the year, and to study economic and social impact generated by them. On the other hand, we would like to do the same comparative analysis between the cities that organize every year these events at national level in order to calculate the cost/benefit ratio and to analyze their effects.

References

- Anthony, D. (1966). *Sport and tourism*. London: Central Council for Physical Recreation.
- Armstrong, J. (1985). International events and popular myths. In *Proceedings of the Canada travel and tourism association annual conference, international events: The real tourism impact* Edmonton, Canada.
- Aza, R., Baños-Pino, J., Canal, J. F., & Rodríguez, P. (2007). The economic impact of football on the regional economy. *International Journal Sport Management and Marketing*, 2, 459–474.

- Baade, R., Baumann, R., & Matheson, V. (2008). Slippery Slope? Assessing the economic impact of the 2002 Winter Olympic Games in Salt Lake City, Utah. *Région et Développement*, 31, 79–89.
- Baker, M. J., & Gordon, A. W. (1976). *Market for winter sports facilities in Scotland*. Edinburgh: Scottish Tourist Board.
- Barajas, A., & Sánchez, P. (2011). Aplicación del análisis coste-beneficio (ACB) al Campeonato de España de Natación Master 2011. In *Comunicación presentada al I Gijón Workshop de Economía del Deporte: El Impacto Económico en el Deporte*. Gijón: Universidad de Oviedo.
- Barajas, A., Salgado, J., & Sánchez, P. (2012). Problemática de los estudios de impacto económico de eventos deportivos. *Estudios de Economía Aplicada*, 30(2), 441–462.
- Blake, A., Sinclair, T., & Sugiyarto, G. (2003). Quantifying the impact of foot and mouth disease on tourism and the UK economy. *Tourism Economics*, 9(4), 449–465.
- Bruce, J., Groothuis, P., & Whitehead, C. (2001). The value of public goods generated by a major league sports team. *Journal of Sports Economics*, 2(1), 6–21.
- De Knop, P. (1990). Sport for all and active tourism. *Journal of the World Leisure and Recreation Association*, 32(3), 30–36.
- Deery, M., Jago, L., & Fredline, L. (2004). Sport tourism or event tourism: Are they one and the same? *Journal of Sport Tourism*, 9(3), 235–245.
- Delpy, L. (1998). An overview of sport tourism: Building towards a dimensional framework. *Journal of Vacation Marketing*, 4(1), 23–38.
- Gammon, S., & Robinson, T. (1997). Sport and tourism: A conceptual framework. *Journal of Sport Tourism*, 4(3), 11–18.
- Getz, D. (2003). Sport event tourism: Planning, development, and marketing. In S. Hudson (Ed.), *Sport and adventure tourism* (pp. 49–85). New York: Haworth Hospitality Press.
- Gibson, H. J. (2003). Sport tourism. In J. B. Parks, & J. Quarterman (Eds.), *Contemporary sports management*. Champaign, IL: Human Kinetics.
- Gouguet, J. J., & Nys, J. F. (1993). *Sport et développement économique régional*. Paris: Dalloz.
- Gratton, C., Shibli, S., & Coleman, R. (2006). The economic impact of major sports events: A review of ten events in the UK. *The Sociological Review*, 54, 41–58.
- Halba, B. (1997). *Économie du sport*. Paris: Economica.
- Hall, C. M. (1992). Adventure, sport and health. In C. M. Hall, & B. Weiler (Eds.), *Special interest tourism*. London: Pluto Press.
- Howard, D., & Crompton, J. (2005). *Financing sports* (2nd ed.). Morgantown: Fitness Information Technology.
- Hurtado, J. M., Ordaz, J. A., & Rueda, J. M. (2007). Evaluación del impacto económico y social de la celebración de grandes eventos deportivos a nivel local: El caso del Campeonato de Tenis femenino de la ITF en Sevilla en 2006. *Revista de métodos cuantitativos para la economía y la empresa*, 3, 20–39.
- Johnson, K., Mondello, J., & Whitehead, C. (2006). Contingent valuation of sports: Temporal embedding and ordering effects. *Journal of Sports Economics*, 7(3), 267–288.
- Keller, P. (2001). *Sports & tourism: Introductory report*. Madrid: World Tourism Organization.
- Késenne, S. (2001). El problema de los estudios de incidencia económica en el deporte. In J. M. Otero Moreno (Ed.), *Incidencia económica del deporte* (pp. 91–99). Málaga: Instituto Andaluz del Deporte.
- Késenne, S. (2005). Do we need an economic impact study or a cost-benefit analysis of a sports event? *European Sport Management Quarterly*, 5(2), 133–142.
- Késenne, S., Taks, M., Chalip, L., Green, B. C., & Martyn, S. (2011). Economic impact analysis versus cost benefit analysis: The case of a medium-sized sport event. *International Journal of Sport Finance*, 6, 187–203.
- Kim, W., Jun, H. M., Walker, M., & Drane, D. (2015). Evaluating the perceived social impacts of hosting large-scale sport tourism events: Scale development and validation. *Tourism Management*, 48, 21–32.
- Latiesa, M., & Paniza, J. L. (2006). Turistas deportivos. Una perspectiva de análisis. *Revista Internacional de Sociología*, 64(44), 133–149.
- Leal, C. L. (2005). *Valoración económica del medio ambiente: Caso de la reserva de la biosfera de los Tuxtles* (Tesis Licenciatura). Departamento de Economía, Escuela de Ciencias Sociales, Universidad de las Américas.
- Li, S., Blake, A., & Thomas, R. (2013). Modelling the economic impact of sports events: The case of the Beijing Olympics. *Economic Modelling*, 30, 235–244.
- McDowell, D., Leslie, D., & Callicot, R. (1988). The Birmingham Olympic bid: Selling a city. In *Proceedings of the 1st international conference, planning for tourism and leisure*. Newton Abbey, NI: University of Ulster at Jordanstown.
- Navarro-García, A., Reyes-García, M. E., & Acedo-González, F. J. (2013). Calidad percibida y satisfacción de los espectadores de fútbol. *Investigaciones Europeas de Dirección y Economía de la Empresa*, 39, 1–8.
- Otero, J. M. (1994). Uso y abuso de los multiplicadores regionales. In *XX Reunión de la Asociación Española de Ciencia Regional* noviembre, Las Palmas de Gran Canaria.
- Otero, J. M. (2000). *Estudio socioeconómico del deporte en Andalucía 1998–1999*. Sevilla: Junta de Andalucía, Consejería de Turismo y Deporte.
- Pedrosa, R., & Salvador, J. A. (2003). El impacto del deporte en la economía: Problemas de medición. *Revista Asturiana de Economía*, 26, 61–84.
- Porter, P. K., & Fletcher, D. (2008). The economic impact of the Olympic Games: Ex ante predictions and ex-post reality. *Journal of Sport Management*, 22(4), 470–486.
- Preuss, H. (2004). *The economics of staging the Olympics. A comparison of the games 1972–2008*. Cheltenham: Edward Elgar Publishing.
- Reyes, M. E. (2003). *Calidad percibida y satisfacción del consumidor con un evento deportivo. Una aplicación al ámbito del fútbol* (tesis doctoral). Sevilla: Universidad de Sevilla.
- Ruiz, A., Muñoz, E., & Mesa, R. (2010). Medición económica del deporte en Colombia. Una propuesta metodológica de cuenta satélite. *Lecturas de Economía*, 72(1), 141–167.
- Salgado, J., Barajas, A., Lera, F., & Sánchez, P. (2013). Impacto Económico de Eventos Deportivos: Modelo y Praxis. *Revista Intercontinental de Gestión Desportiva*, 3(1), 38–50.
- Sánchez, P., & Barajas, A. (2012). Los eventos deportivos como generadores de impacto económico: Factores clave y medición. In *Paper presented at the XXI International Congress of AEDEM* Budapest, Hungría, 3–4 September.
- Standeven, J., & De Knop, P. (1999). *Sport tourism*. Illinois: Human Kinetics.
- Walton, H., Longo, A., & Dawson, P. (2008). A contingent valuation of the 2012 London Olympic Games: A regional perspective. *Journal of Sports Economics*, 9(3), 304–317.
- Weber, W. (1995). *L'importance économique du sport*. Schlöndorff: Hoffmann.
- Weed, M. E. (2006). Sports tourism research 2000–2004: A systematic review of knowledge and a meta-evaluation of method. *Journal of Sports & Tourism*, 11(1), 5–30.
- Weed, M. E. (2009). Progress in sports tourism research? A meta-review and exploration of futures. *Tourism Management*, 30, 615–628.
- Williams, A., & Zelinsky, W. (1970). On some patterns of international tourist flows. *Economic Geography*, 46(4), 549–567.
- Wilson, R. (2006). The economic impact of local sport events: Significant, limited or otherwise? A case study of four swimming events. *Managing Leisure*, 11, 57–70.
- Yingzhi, G., Xiaoming, L., & Liu, D. (2013). A case study of tourists' perceived motivation and impacts of sport tourism event. *Journal of Tourism and Hospitality Management*, 1(2), 89–94.