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ORIGINAL

THE ECONOMIC IMPACT OF ELITE AND SENIOR BADMINTON EUROPEAN CHAMPIONSHIPS

EL IMPACTO ECONÓMICO DE LOS CAMPEONATOS DE EUROPA DE BÁDMINTON ELITE Y SENIOR

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ABSTRACT

The current study analysed, with identical methodologies (Cost-Benefit Analysis), the economic impact of two international sporting events (European Championships Elite and Senior) of the same sport discipline (Badminton), organized during the same year (2018), in the same country (Spain), aiming at identifying how determining factors affect the economic impact.

Data was collected from the organization and via surveys (3 dimension, 12 questions) during the days of the event (437 surveys in Huelva and 162 surveys in Guadalajara).

The main conclusions are: (1) for the economic impact, is that the variable “event category” (Elite or Senior) determined the typology and number of participants which, were the main determining factors of expenditure; and (2) for the tourism impact, we were able to conclude that the sporting event is a powerful tool to attract spectators in elite events and competitors in senior events.

KEY WORDS: Direct Economic Impact; Sport event; Badminton.

RESUMEN

El presente estudio analiza, aplicando idéntica metodología (Análisis Coste Beneficio), el impacto económico de dos eventos deportivos internacionales (campeonato de Europa élite de Huelva y sénior de Guadalajara) de la misma modalidad deportiva (bádminton) celebrados el mismo año (2018) y en el mismo país (España) con el objetivo de identificar si los factores determinantes pueden influir en el impacto económico y en el impacto turístico de un territorio.

La recogida de datos se realizó mediante una entrevista al organizador y un cuestionario (3 dimensiones, 12 preguntas) durante los días de los campeonatos (437 cuestionarios en Huelva y 162 cuestionarios en Guadalajara).

Las principales conclusiones fueron: 1) sobre el impacto económico, la categoría “tipología de evento” (elite o sénior) está relacionado con el subgrupo y número de participantes siendo el factor más determinante de gasto; y 2) en relación con el impacto turístico, se puede considerar que los eventos deportivos de élite son una buena estrategia para atraer espectadores mientras que los eventos seniors lo son para atraer competidores.

PALABRAS CLAVE: Impacto económico directo; Evento deportivo; Bádminton.

1. INTRODUCTION

1.1. THEORETICAL BACKGROUND

Over the last years, many researches have concluded that sporting events have an impact on the host city (Cashman *et al.*, 2004; Gratton, 2005; Magaz-González *et. al.*, 2012; Parra *et al.*, 2014; Shibli and Coleman, 2005; Slender, 2014). Preuss (2007) distinguishes five different sport events impacts: (1) sporting legacy; (2) economic legacy; (3) infrastructural legacy; (4) urban legacy; and (5) social legacy.

So as to prove the benefits of the organization of said events, the economic impact is the factor most used by organizers, promoters and public administrations: firstly, to justify the relevant investments and secondly, to audit the public investment (Li and Jago, 2013; Barajas *et al.*, 2016). Studies of economic impact allow for the assessment of the potential economic profitability generated by the organization of a sporting event.

In the context of sport, Turco and Kelsey (1992: 79) define economic impact as "*the net economic change in a host community that results from spending attributed to a sports event or facility*". By measuring the net economic change, this considers cash inflows (positives) as well as outflows (negatives). The key elements of economic impact are Visitor Spend and Organizer Spend. Visitor Spend refers to additional expenditure within a defined geographical area from event-related visitors such as spectators and attendees. For most events, Visitor Spend forms the major component of economic impact. However, the Organizer Spend in staging an event can also generate additional expenditure in the host economy. Collectively, visitor and organizer spending in the host economy that is directly attributable to the staging of an event can be termed Direct Economic Impact. Visitor Spend refers to additional expenditure within a defined geographical area from event-related visitors such as spectators and attendees. For most events, Visitor Spend forms the major component of economic impact. However, the Organizer Spend in staging an event can also generate additional expenditure in the host economy. Collectively, visitor and organizer spending in the host economy that is directly attributable to the staging of an event can be termed Direct Economic Impact.

Some authors highlight the complexity and predicament of applying the economic impact analysis in sporting events (Barajas *et al.* 2012; Gratton, 2011; Li *et al.* 2013; Wassmer *et al.* 2016). To achieve this they propose the use of the following methodology: 1- to define the typology of the event, 2- to identify the features of the event, 3- to choose the most appropriate tool for assessment: (a) the satellite accounts (Lera, 2010; Kurscheidt, 2000), (b) Input-Output tables (Pedrosa and Salvador, 2003) , (c) the Model of General Quantifiable Equilibrium (Harberger, 1962, Shoven and Whalley, 1972, 1984, 1992), (d) Analysis of Cost-Benefit (Késenne, 2005), (e) the Contingent Valuation (Leal, 2005) and (f) the Sectorial-Regional Analysis, and, finally, issues of economic assessment in sport will have to be tackled; according to Pedrosa y Salvador (2003), these are three: conceptual, statistical and methodological,

Once the predicaments solved and the methodologies of study structured, the first researches looked into studying large sporting events and after, smaller events (Crompton, 1995, 2006; Li and Jago, 2013; Saayman and Saayman, 2014; Salgado-Barandela *et. al.* 2017; Sánchez-Fernández *et al.* 2013). These studies allowed to conclude that the organization of sporting events can indeed generate a positive impact, *i.e.*, on the local economy of an area. However, the following questions remained: can any sporting event have the same result? Do

all events generate the same impact? If not, what are the features that may imply a higher impact?

The current study carried out a calculation on the economic impact, applying the same methodology, on two sporting events of the same sport discipline and, for the first time, it compared the results.

The study carried out the following tasks: a) analysis of the intangible aspects: it measured and identified the influence of the organization and, b) analysis of the decisive expenditures: economic repercussion (direct), identifying spending patterns and the variables with the highest impact. The objectives being: to find out how sporting events impact the host area; and in what range their features influence the decision-making process for the organization of medium-sized sporting events, – which, even though they do not generate as much income as large events, they can provide both a sound economic potential and a good opportunity for the development of the areas, if organized efficiently –.

1.2. CASE STUDY

Two sporting events were analyzed for this study: the European Elite Badminton Championships held in Huelva, Spain, in April 2018 (hereafter “EC Huelva”) and the European Senior Badminton Championships, held in Guadalajara, Spain, in September 2018 (hereafter “ESC Guadalajara”).

As explained above in the theoretical framework, we proceeded with the analysis of the typology of the sporting events under study and we identified the decisive factors on the economic impact.

The specialized literature identifies five typologies (A, B, C, D and E) of sport events, considering the following features: (1) the spectators and/or competitors' typology and volume of attendance; (2) if the event is periodical or not (periodicity of organization); (3) its relevance for the media; (4) the frequency of organization (similar events organized in the host city/country within a year); (5) the capacity to generate profit not directly related with the sporting event; and (6), the interest generated among spectators (Gratton *et al.* 2000; Wilson, 2006).

According to the above, the sporting events object of this study belonged to category C1, with the following general features: they were irregular and unique; the host city always varied; there were international spectators and competitors; and, from an economic viewpoint, the economic impact is uncertain as these events generate a limited economic activity.

With an identified typology, the next step was to identify the conditioning factors of the economic impact. The specialized literature (Barajas *et al.* 2012; Gratton, 2011; Li *et al.* 2013; Sánchez *et al.* 2012; Wassmer *et al.* 2016) highlights the following main ones: (1) sport discipline; (2) type of competition: league, championship, event, periodicity; (3) geographic scope: local, national or

international; (4) duration; (5) typology of the participants: age, gender, category, number; (6) kind of competition: official – federated –, or not – private –, elite or amateur; (7) spectators; (8) venue: open or indoor, with ticketing or not.

Considering all of the above, the sporting events presently studied were as follows (table 1):

Table 1. Typology and features of the events studied

	Elite European Badminton Championships (EC Huelva)	Senior European Badminton Championships (ESC Guadalajara)
Typology	C1	C1
Sport discipline	Badminton	Badminton
Events	Men and Women Individual; Men and Women Doubles; Mixed	Men and Women Individual; Men and Women Doubles; Mixed
Competition	International (European Championships)	International (European Championships)
Category	Elite	Senior
Qualifying	Yes (for World Champs.)	Yes (for World Champs.)
Duration	6 days (22-27 April 2018)	6 days (23-28 September 2018)
Lugar	Huelva, Spain	Guadalajara, Spain
Type of competition	Official (Federation)	Official (Federation)
Organizer	Spanish Badminton Federation	Spanish Badminton Federation
Venue	Sport Pavilion	Sport Pavilion
Number of athletes	250	1,250
Spectators	Ticketing	Free entrance
Broadcasting	Live streaming	Live streaming
Accredited Media	100	10

Therefore, the events belonged to the same typology, category, discipline and event; both were international and qualifying for their relevant higher competition level; they had the same duration and were held on the same year, in Spain; they were official events and organized by the Spanish Badminton Federation; they were held in a sport pavilion were broadcasted live online. However, they differed in the competition category, dates and host cities, in the number of participants and the organization or not of ticketing.

It should be noted that in elite sport events, the organization takes care of all the expenses (travel, food and accommodation) of the competitors and technical equipment; while in senior sport events each participant will be the one who assumes their own expenses.

Both events allowed to analyze if the typology and the number of competitors, an existing ticketing system or not had any economic impact on sporting events. It was the first time a study was carried out on such similar events thus allowing for a comparison of the effects of the number and typologies of the competitors and the organization of a ticketing system, or not.

2. RESEARCH DESIGN AND METHODOLOGY

The following aspects must be studied to choose the methodology for a study of the economic impact of sporting event: available data; type of approach according to the type of event; aims to achieve; pros and cons of each method; and the clarity and accuracy of the results obtained from one tool or another.

According to Barajas (2012), we must highlight that the different existing methods, instead of being excluding, are complementary. Satellite Accounts or Input-Output Tables methods bring out useful data to carry out calculations from a Cost-Benefit Analysis (CBA) viewpoint. On the other hand, the Contingent Valuation brings out measurements of benefit and cost of the consumers, or data on the non-use value that improves and enhances the scope of other methods.

According to Késenne (2005) and Preuss *et al.* (2010), the CBA method is the most appropriate tool to assess the economic impact of sporting events in general, and of those of the C1 category, in particular. CBA method is broad and flexible and it allows for the assessment of the socio-economic repercussions of large public projects, with the estimation of the net current value (NCV) of the costs and profits: the quantitative and qualitative impacts, positive and negative, generated by the event.

CBA aims at comparing the benefits of sporting events for a region or a country: the growth of the consumption value of the local inhabitants compared with the costs of necessary production factors for the event's organization (Késenne, 2005). The decision criteria for this specific case is the acceptance of the project if the NCV is positive, given that it is difficult to identify a wasted alternative or an opportunity cost in this type of event. CBA allows for measurements such as: internal profitability rates, net updated values of the costs and benefits balance, and ratio of benefits on costs, thus allowing to choose the solution that will produce the best social vantages (Hurtado *et al.*, 2007). This study used the CBA method, applying it in similar ways to both events.

In line with Lee and Taylor (2005) and Baade and Matheson (2006), the direct expenditure should be taken as a starting point for calculating the economic impact of a sporting event. This direct expenditure includes spending by the (out-of-town) spectators, competitors and the organizer as generators of economic impact. This study estimated the direct monetary effect of the event. We did not attempt to estimate neither the opportunity cost nor the consumer surplus attributed to the event. For a CBA of the two European Badminton Championships, both opportunity cost and consumer surplus were necessary (Taks *et al.*, 2011), but we were only interested in the economic impact analysis in this study. We therefore considered only tangible direct effects related to cash in flows and out flows from the main actors related to the events.

2.1. IDENTIFYING THE SOURCES OF CASH FLOWS

The first step in order to estimate the economic impact of the two European Badminton Championships was to identify the agents that were going to bring or draw money to the selected area of study. In our case, the sources of cash flows were the *spectators, competitors, media staff, and the organizers*. All four were identified and detailed information about them can be obtained (Maennig and Zimbalist, 2012; Mitchell and Stewart, 2015).

2.2. ESTIMATING THE EXPENSES FROM THE DIFFERENT AGENTS

In this section, the groups of participants were identified, together with an estimation of the visitor's expenses (spectators, competitors, mass media and the organization).

2.2.1. IDENTIFYING THE DIFFERENT AGENTS INVOLVED

Expenses from spectators. In addition to the number of spectators, to estimate the economic impact of the event it was necessary to have data on the length of stays and the average amount spent per person. In a ticketed Championship, like the EC Huelva, we were able to know how many people attended and how many were non-local. Quite the opposite, in a non-ticketing Championship, like the Senior ESC Guadalajara, we did not have data, so we calculated the average attendance through the questionnaire.

Inflows from the competitors. The competitors (including players, trainers and other auxiliary staff) represented the second group of persons that brought monetary inflows to the area. The number of competitors was limited and they had to be registered before the Championship, for that reason we knew their exact number and it was possible to interview the spokesperson of each team or get their email contact. The interviews included questions about the team average spending in the area and the length of stays.

Inflows from the media. Mass media plays a fundamental role in an Elite European Badminton Championship but not in a Senior European Badminton Championship. The staff here included journalists, photographers, cameramen and, in general, any person authorized by a media provider to cover the event. As with spectators and competitors, all who travelled from out of town generated an economic impact on the community through the expenditure incurred during the time they stayed in town. All of them were recognized and identified by the organizer, so it was possible to have the exact number of them and interview each of them. Responders were asked about their spending, the length of stays and the average amount spent per person.

A different issue is the impact of the event on the media, which was not analyzed in this study. Specialized companies produce reports which provide estimates of the economic value to the city through advertising campaigns on television and radio, in the press and via the Internet. These studies attempt to

assess the number of viewers, listeners or readers that the media coverage of the event produces and the costs of such coverage had the local council or government purchased these advertisements. However, these savings are purely theoretical since the local government may never have undertaken such campaigns. Moreover, the real benefit of the media coverage is increased visitors in the future, something that should be tracked to learn the influence that the media had on tourist spending (Porter, 1999).

Inflows and outflows from the organizer. The organizer includes staff, technical officials, delegates, voluntary and others related with the sporting event organization. The difference between the money that the organizing committee attracts from outside the area and the money that it spends with external suppliers will be the direct monetary economic impact. The information about revenues split by their origin and expenses identified by destination is crucial to estimate the impact. There are some companies or institutions that clearly are sited in an external area, but in some cases the institution may cover a wider area that includes the local area. For example, if the regional government provides some funds, the town is included in the region. In that sense a pro rata distribution should be done to determine the proportion of funds that really comes from outside the area. All data is provided by the organizer (Brückner and Pappa, 2015).

2.2.2. ESTABLISH THE VISITOR SPEND FROM SPECTATORS, COMPETITORS, MASS MEDIA AND THE ORGANIZATION

According to Barajas *et al.* (2016) there are two basic parts to this work: (1) to calculate eligible people numbers from each group. This process takes the total number of spectators present at the event and down-weights this in order to account for residents and casual visitors; (2) to apply spectator spending patterns. This involves taking survey data regarding spectators' spending patterns and applying them to the eligible spectator numbers.

To calculate the eligible spectators, competitors, mass media and organizer staff numbers are: (1) to define total event admissions; (2) to remove duplicated people; (3) to discount local residents; (4) to discount casual visitors (in case of spectators); and (5) considering the different samples.

Events involve different types of spectators, competitors, mass media and organization who can be grouped by the nature of their economic involvement: (a) Commercial Stayers. Visitors making use of hotels, guest houses or other commercial accommodation in the Host Economy; (b) Non-Commercial Stayers. Visitors staying overnight in the Host Economy but in unpaid accommodation, for example with friends or relatives; and (c) Day Visitors. Visitors not staying overnight in the Host Economy. This sub-group may include someone staying either commercially or non-commercially outside the Host Economy.

The rationale for this classification is that the spending patterns of these sub-groups are not the same. In short, Commercial Stayers are likely to spend more than Non-Commercial Stayers or Day Visitors. Similarly, those staying non-commercially have a greater opportunity to interact with the Host Economy than Day Visitors because their dwell time is longer. Therefore, it is good practice to treat these sub-groups separately (Késenne, 2005; Barajas *et al.*, 2016).

2.2.3. IDENTIFYING THE EXPENDITURES OF EACH GROUP

It was expected that the main expenditures from spectators, competitors and mass media would be accommodation, food and drink, entertainment, merchandise, shopping and souvenirs, local travel and other (Porter and Chin, 2012).

From the point of view of the organization, the main income would be ticket sales, merchandise, sponsorship, accommodation and transport, host economy (financial support from agency, association or company). On the other hand, the main expenditure would be right fees, suppliers and staff, prize money, tv production, publicity and communication, official staff clothing, competition material, promotion, communication, catering organization, transport, organization meetings and others (England, 1999).

2.3. ESTIMATING THE DIRECT MONETARY ECONOMIC IMPACT

Once the direct impact from the different agents involved in the European, Elite and Senior, Badminton Championships was estimated, the total direct economic impact was just to add those figures. Table 2. summarizes the different components of the direct monetary economic impact.

Table 2. Estimation of the direct monetary economic impact of a sport event.

	Data	Information required	Direct impact
(A) Spectators	Average attendance Average expense	Non-local: Commercial stayers Non-commercial stayers Day visitors Expenses: Accommodation Food Transport Others	Inflows from spectators: Average attendance x average expenditure (1)
(B) Competitors	Average attendance Average expense	Non-local: Competitors Technical staff Expenses: Accommodation Food Transport Others	Inflows from competitors: Average attendance x average expenditure (2)
(C) Mass Media	Average attendance Average expense	Non-local: Personnel Expenses: Accommodation Food Transport Others	Inflows from Media: Average attendance x average expenditure (3)
(D) Organization	Revenues and expenses	Inside the town Outside the town	Net cash flow: Revenues from inside the town- expenses outside the town (4)
TOTAL DIRECT EFFECT			(1) + (2) + (3) + (4)

2.4. QUESTIONNAIRE

A questionnaire for this study was developed with twelve specific questions about spending on the most common items and tourism information (table 3). For its design, the proposal made by Barajas et al., 2016 is followed.

Table 3. Questionnaire dimension, variables and indicators

Dimensions	Variables	Indicators
Socio type	(Q1) Gender	Man; Woman; other
	(Q2) Age	Number
	(Q3) Education background	Primary school; Secondary school; University studies
	(Q4) Current residence	Spain (zip code); Not Spain (country)
	(Q5) Relationship with event	Fan; Athlete companions; Mass media; Organization staff
	(Q6) Average household income per month	€0-1000; €1001-2499; €2500-4999; More than €5000
Economic	(Q7) People travelled with	Number
	(Q8) Total days will be in Huelva / Guadalajara	Number: before event; during event; after event
	(Q9) Amount money spend	Person/day: accommodation; food and drink; entertainment; merchandise; shopping / souvenirs; local travel; other
Tourism	(Q10) Have been in Huelva / Guadalajara before	Yes; No
	(Q11) Reason why you come to Huelva /-Guadalajara	Likert (1-5): sport event; know new places; visit relatives or friends; others
	(Q12) Will visit Huelva / Guadalajara again	Yes; No

2.5. PROCEDURE

This section presents the overview of the process step by step

Step 1. Defining the host economy

Step 2. Measuring the spending of spectators.

Establishing eligible spectator numbers

Define Total Spectator Admissions

Remove Repeat Spectators

Discount Local Residents

Discount Casual Spectators

Consideration of Spectator Types

Applying Spectator Spending Patterns

Calculate Spectator Spend on Accommodation

Calculate other Spectator Spend

Deduct Direct Leakages

Step 3. Measuring the spending of attendees

Establish Attendee Sub-Groups

Repetition of Spectator Process (noting differences)

Step 4. Measuring the spending of the Event Organizer

Subtract local income from local expenditure

Considerations for commercial promoter-driven events

Step 5: Calculate the Economic impact

2.6. DATA COLLECTION PROCESS & SAMPLE

Data collection process was the same in both events.

Spectators data was collected via surveys during the days of the event. Surveys were directly carried out in the grandstands of the sport pavilion over the days of the event. 437 surveys were collected during the EC Huelva (1,233 individuals) on a total of 1,908 sold tickets, representing 64.62% of surveyed individuals; during the ESC Guadalajara there was no ticketing and entry was free so there was no data on the number of spectators. 162 surveys were carried out (339 individuals) in the grandstands of the pavilion during the days of the competitions. 100% of the respondents were competitors.

Competitors data during the EC Huelva was collected via their delegations with a 100% answer rate; During the ESC Guadalajara, the data was collected via surveys in the grandstands of the pavilion during the days of the competition (162 surveys, 339 individuals) and via mailing at the end of the competition (122 surveys, 217 individuals). We obtained a total of 556 individuals answering the survey over a total of 1,330 competitors, a 41.80%.

Mass media data was known through the organizers. It was obtained by emailing the surveys through the organizers of both events with a 100% answer rate.

Data on the organizers was directly produced by both organizers.

3. RESULTS

Following the methodology described previously, this section presents step by step the results obtained in the study of the two European Badminton Championships.

3.1. ESTIMATION OF THE ELIGIBLE PEOPLE NUMBERS

The estimated number of spectators, competitors, mass media and organization's spending are shown in Table 4.

Table 4. Estimated of eligible spectators; competitors; mass media and organization people numbers

	Spectators	Competitors	Mass media	Organization
Huelva				
Total number	1,908	300	100	165
Eligible number	1,908	300	25	80
Commercial bed-nights	1,181	300	25	56
Guadalajara				
Total number	0	1,330	10	156
Eligible number	0	1,279	0	44
Commercial bed-nights	0	1,279	0	44

Results highlighted the difference in the number of spectators and competitors in both events with an inversely proportional relation. Additionally, the organizers in both events employed a similar number of individuals.

As for spectators, their total number and the total of commercial bed-nights were practically divided by two, whereas, for competitors, it remained similar (EC Huelva) or barely inferior (ESC Guadalajara).

3.2. INFLOWS FROM THE DIFFERENT AGENTS

Tables 5. and 6. summarize the estimation of inflow in both the EC Huelva and the ESC Guadalajara, identifying the main expenditures of each group.

Table 5. Estimation of inflow for the EC Huelva (in €)

	Spectators	Competitors	Mass media	Organization
Accommodation	€305,105.16	€50,500.00	€10,873.00	€31,484.80
Food & Drink	€25,280.85	€36,750.00	€11,550.00	€6,550.00
Entertainment	€26,446.71	€0.00	€0.00	€0.00
Merchandise	€2,781.26	€0.00	€0.00	€0.00
Shopping /souvenirs	€8,836.02	€0.00	€1,050.00	€0.00
Local travel	€17,303.88	€11,284.00	€7,350.00	€1,024.00
Other	€1,472.67	€0.00	€0.00	€0.00
Total Visitor spend	€387,206.55	€98,534.00	€30,823.00	€39,058.80

Table 6. Estimation of inflow for the ESC Guadalajara (in €)

	Spectators	Competitors	Mass media	Organization
Accommodation	€0.00	€685,967.50	€0.00	€0.00
Food & Drink	€0.00	€340,536.25	€0.00	€0.00
Entertainment	€0.00	€0.00	€0.00	€0.00
Merchandise	€0.00	€0.00	€0.00	€0.00
Shopping /souvenirs	€0.00	€0.00	€0.00	€0.00
Local travel	€0.00	€111,250.00	€0.00	€0.00
Other	€0.00	€680,293.75	€0.00	€0.00
Total Visitor spend	€0.00	€1,818,047.50	€0.00	€0.00

In the EC Huelva, the main impact generating agent were the spectators (69.68%), followed by the competitors (17.73%). During the ESC Guadalajara, the sole impact generating agent were the competitors (100%). It should be noted that in both events mass media and organizers had a residual impact (approximately 6% in Huelva and 0% in Guadalajara).

3.3. ECONOMIC IMPACT

Table 7. summarizes the economic impact of both Elite and Senior European Badminton Championship had on each city Huelva and Guadalajara.

Table 7. Economic impact by sectors

	EC Huelva	ESC Guadalajara
Accommodation	€397,962.96	€685,967.50
Food & Drink	€80,130.85	€340,536.25
Entertainment	€26,446.71	€0.00
Merchandise	€2,761.26	€0.00
Shopping /souvenirs	€9,886.02	€0.00
Local travel	€36,961.88	€111,250.00
Other	€1,472.67	€680,293.75
Total Visitor spend	€555,622.35	€1,818,047.50
Organizer Net spend	€471,786.56	€64,206.98
Economic impact	€1,027,408.91	€1,882,254.48

The impact generated by the EC Huelva was €1,027,408.91 whereas in the ESC Guadalajara it was €1,882,254.48.

Public investment was €435,248.90 for the EC Huelva and €110,010.00 for the ESC Guadalajara. This represents the money that the organizers received as grants to subsidize some of their expenses. This meant that, on average, for each Euro expanded in each Badminton Championship, each host city had a return of €2.5 in Huelva and €17.12 in Guadalajara.

Each individual (spectator in Huelva and competitor in Guadalajara) spent an average of €89 per person/day, with a 4-day stay average for the EC Huelva and an average of €163.42 per person/day and an 8-day stay average for the ESC Guadalajara.

We highlighted the relation between the total visitor spend and the organizer net spend. For the EC Huelva, the total visitor spending represented 54.07% of the income and the organizer net spend, 45.93%; for the ESC Guadalajara, it was 96.58% and 3.42%, respectively. Also, it was interesting to note how the economic was generated, considering the main expenditures: accommodation being, in both cases, the main factor with a relatively similar impact (38.73% for the EC Huelva and 36.44% for the ESC Guadalajara). We also noted the unequal impact of the different expenditures in both cases: for the EC Huelva all, to some extent, had a similar relevance whereas for the ESC Guadalajara, entertainment, merchandising and shopping/souvenirs had to presence.

3.4. TOURISM IMPACT

Table 8. summarizes the tourism impact of both Elite and Senior European Badminton Championship had on each city Huelva and Guadalajara.

Table 8. Tourism impact

	EC Huelva (n= 437)	ESC Guadalajara (n=284)
First time you been in the host city	96% 1 st time	74% 1 st time
Reason why you come to the city	98% sporting event	95% sporting event
Will you visit the city again	93% No	77% No

The result showed that in both events, answers were very similar, but with more forcefulness in answers to the first and third questions at the EC Huelva compared with the ECS Guadalajara. We therefore concluded that most individuals visited the host city for the first time; the main reason for the visit being the sporting event and that they were not planning to visit it again.

4. DISCUSSION AND CONCLUSIONS

Despite widespread use, economic impact studies still are frequently misused due to misinterpretations of the results or because the limitations of the analysis are not understood. These errors can lead policy makers to take poor decisions (Barajas *et al.* 2016). The two sporting events which were presented in this paper allow us to draw some practical conclusions.

Estimation of the eligible people numbers,

Results obtained from the data showed that the typology of the participating agents was very diverse even though the two sporting events were of the same typology (C1), of the same sport discipline (Badminton), with the same sport events (Men and Women singles, Men and Women doubles and Mixed), organized by the Spanish Badminton Federation within the official European Championships framework and, of the same duration (6 days).

The variable “event category” (Elite or Senior) was determining on the typology and number of participants. For the EC Huelva (elite event), there was ticketing (1,908 tickets) of which 68.9% spent commercial bed-nights, with fewer

competitors (300) and the presence of mass media commercial bed-nights (25 out of 100). On the contrary, for the ECS Guadalajara (senior event), there was no ticketing, a higher number of competitors (1,330), fewer media (10) and none from abroad. Organizers were almost the same number (165 for the EC Huelva and 156 for the ESC Guadalajara).

The “event category” therefore determined the typology and number of participants which, as shown on the results, were the main determining factors of expenditure and, within the host city, of the resulting economic impact. It somehow showed that choosing an elite or a senior event would determine from the start, the typology of individuals in attendance with a direct repercussion of the economic impact and considering similarly sized organizations.

Inflows from the different agents,

For this section and survey, results showed that the expenditure distribution among the agents varied according to the event category. For the elite event, all agents generated spending, whereas in the senior event, only competitors and organizers did so.

The analysis of the expenditure of the different agents also displayed disparity. During the EC Huelva (elite event) spectators generated 37.68% of the expenditure, competitors, 9.6%, mass media, 3% and the organizers, 49.72%. Whereas during the ESC Guadalajara (senior event), spectators and mass media generated no impact, while competitors did, 96.58% and the organizers, 3.42%. This can be explained by the fact that in elite events, the organizers are in charge of accommodation, transport and catering for the competitors, as these only attend to compete (arrival, competition and departure); whereas during senior events, competitors take care of their own logistics and the competition is the opportunity to do tourism: a combination of competition and expenditure in leisure, hotels and culture

The analysis of the impact according to the distribution of the expenditure category, whatever the generating agent, showed that both events followed the same trend: accommodation was the main expenditure (37.68% for the EC Huelva and 36.44% for the ESC Guadalajara), followed by catering (7.8% and 18.09% respectively) and transport (3.6% and 5.9%).

Another relevant result was that for the EC Huelva, the organizers' expenditure was split among very few service providers (scale economy), whereas for the ESC Guadalajara, the expenditure was more widely split among the local economy: the competitors' demands were individual and each one of them looked into the best offer (quality, price, distance from the competition venue, etc.).

We were therefore in a position to conclude in our analysis of both events that spectators generated the main impact in elite event, whereas competitors did so, for the senior event. Also, and at least for these two cases, the impact generated by the competitors (163.42€ person/day, with an average 8-day stay)

is higher than the impact from the spectators (89€ person/day, with an average 4-day stay). This coincides with the trend worldwide that shows increasing difficulty to generate ticketing inflows during sporting events. We also wished to highlight that the spending distribution within the city is greater, during senior events, while elite events concentrate the expenditure among fewer providers. Finally, the organizing costs for the elite or the senior event, of the same typology, sport discipline and sport events, were similar.

Economic impact,

The resulting data from this study showed that the senior sporting event generated a higher economic impact than the elite event, with similar resources (comparable organizations). Additionally, the senior event produced a higher return for each spent Euro in each Championship: return for the ESC Guadalajara was 17.12€ and 2.5€ for the EC Huelva.

The following conclusions were reached: on one hand, the organization of sporting events, even with unequal impact, is a source of wealth for the local economies as they truly provide a return on public investment; on the other hand, the category of the sporting event has a direct effect on the level of return.

Tourism impact

As for the tourism impact of both events, we were able to conclude that the sporting event is a powerful tool to attract spectators in elite events and competitors in senior events: they get into town, and host cities should do their best to strategically attract spending during the event as, in both cases, 86.69% of the surveyed individuals answered they would not visit the city again. This is why we do not recommend a loyalty touristic strategy, quite the contrary: the strategy should aim at informing on the available offer during the days of the event or, at most, until two days after. A longer-term strategy may be erroneous and lead to a waste of resources.

General recommendations for the Management

Both the results and the features of each sporting event led us to the following conclusion: the category of the sporting event (elite or senior) is a key feature and it determines the resulting economic impact.

With the same number of competitors, senior sporting events generate a higher economic impact. Better still, the same economic impact can be achieved with fewer competitors, thus ensuring sustainability for the host city.

As for the impact spreading, senior sporting events allow for a larger diversification and repartition, whereas elite sporting events imply a higher concentration, with fewer providers. The senior competitor generates a higher economic impact than the elite competitor: this largely compensates for the spectator's spending in elite events that is inexistent in senior events.

Accommodation is the main expenditure borne by the participating agents in sport events. A city wishing to host sporting events should therefore have sufficient hotel infrastructures to welcome the visitors; should that not be the case, the surrounding cities would make the most of the economic impact.

In events similar to the two analyzed in this study – medium-sized sporting event of a non-mediatic sport discipline – ticketing is not a key factor because it does not provide sufficient inflow. This conclusion follows the existing trend in many other sporting events, including the analysis of ticketing at the Olympic Games. From an economic impact viewpoint, it therefore seems more profitable to organize sporting events aiming at active sport consumption (competitors) rather than at a passive one (spectators)

In conclusion, and for cities with hotel infrastructures and sufficient leisure offers, the municipal management can reasonably consider embracing the organization of sporting events as a means to generate economic impact. It is also recommended that, among the various existing sporting events, senior events should be favored rather than elite ones, as the former generate a higher impact, a wider spending distribution and a smaller organizing infrastructure.

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