

Social impact of a participative small-scale sporting event

Participative
small-scale
sporting event

David Parra-Camacho

*Department of Physical Education and Sports, Universidad de Valencia,
Valencia, Spain*

Rómulo Jacobo González-García

*Facultad de Ciencias Económicas y Empresariales, Universidad de Granada,
Granada, Spain, and*

Manuel Alonso-Dos-Santos

*Departamento de Administración, Facultad de Ciencias Económicas y Empresariales,
Universidad Católica de la Santísima Concepción, Concepción, Chile and
Department of Marketing and Market Research,*

*Facultad de Ciencias Economicas y Empresariales, Universidad de Granada
Granada, Spain*

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Abstract

Purpose – To examine the social impact of a small-scale sporting event and its influence on the willingness to support future events.

Design/methodology/approach – A self-supplied questionnaire was used with 248 residents-sportspeople that participated in the Valencia Triathlon. Descriptive analysis, exploratory and confirmatory factorials were done through SPSS, FACTOR and EQS.

Findings – Three dimensions of positive impacts were identified; sporting participation and city image, social development and human capital and economic development. The impacts in sporting participation and in the improvement to the image of the city contribute to positively explaining the willingness to support the holding of sporting events. Local sportspeople highlight their participative component and the projection of the city image as key factors to endorse holding future sporting events as a strategy for tourism.

Research limitations/implications – The convenience sampling limits the extrapolation of the results.

Practical implications – Making the most of the intangible aspects is recommended due to the great potential these events have to generate social capital and increase the networks of social collaboration. Give a more active role to volunteers and local organizers in an organization. Transmit the pride of the community and the sense of belonging to this community to the media and advertising communication.

Social implications – Small scale sporting events can contribute to improving the quality of life, increasing pride, the sense of belonging of the residents, opportunities for entertainment and encouraging local participation.

Originality/value – A contribution to the empirical analysis of the social impact of small-scale sporting events from the perspective of local participants.

Keywords Social impact, Small event, Non-mega sporting event, Residents' perceptions, Support

Paper type Research paper

1. Introduction

Small-scale sporting events have not been particularly highlighted from the point of view of research into their social impact (Chen *et al.*, 2018; Djaballah *et al.*, 2015; Taks, 2013). However, in the last few years different studies have pointed to the socioeconomic importance that this type of event can have for the local areas that host them (Agha and Taks, 2015; Matheson, 2012; Taks, 2013; Sánchez-Sáez *et al.*, 2018; Veltri *et al.*, 2009). This type of event can contribute to improving the quality of life of the residents and tend to generate fewer negative impacts than the mega sporting events (Parra *et al.*, 2016a; Taks, 2013).

For this reason, this study intends to contribute knowledge relating to the social impact of this type of events from the point of view of the perception of the sportspeople-residents who



participated in the Valencia Triathlon. The aim is to identify the factors that contribute to explaining the social impact of a small-scale sporting event and analyze its relationship with respect to the willingness to support the holding of future sporting events.

2. Literature review

2.1 *Social impact of small sporting events*

The majority of studies on the repercussions of events in host communities have centered on mega events or great sporting celebrations (Añó *et al.*, 2012). “Mega events” refer to the biggest and most significant events with the capacity to generate a substantial level of tourism, press coverage, prestige and financial benefits for the host city (Chen *et al.*, 2018). Therefore, the rest of the events that do not come within these characteristics can be considered as non-mega sporting events.

Firstly, we must keep in mind that by social impact of a sporting event we can understand the changes in residents’ quality of life as a consequence of hosting a sporting event. On the other hand, it is important to explain what is understood by a small-scale event and what its characteristics are. According to Higham (1999, p. 87), it includes “regular season sporting competitions (ice hockey, basketball, soccer, rugby leagues), international sporting fixtures, domestic competitions, Masters or disabled sports and the like.” In this way, some smaller-scale events attract more spectators, while others, due to their characteristics, like in the case of marathons, emblematic popular races or triathlons, attract participants (Higham, 1999). The Valencia Triathlon is characterized by being a recurring and participative event, whose media coverage is local and whose economic benefits are limited.

However, Gibson *et al.* (2003) argue that it is necessary to conceptualize small-scale events in relative terms, as the aforementioned definitions are applied to sporting competitions with local support and, at the same time, to sporting events that attract spectators and participants at a national, and even international level. The smaller-sized events also tend to need fewer public resources.

According to Veltri *et al.* (2009), this type of event can generate, proportionally, more economic benefits if they are held in small or medium-sized localities than if they take place in big cities. Higham (2005) points out that a small-scale sporting event also brings benefits to the host community both because they tend to be organized using existing infrastructure, which implies a lower public cost, and because they tend to be easier to manage from the point of view of the presence of spectators.

Another advantage associated with this type of event is that they are related to the possibility of participation from the local resident population (Taks, 2013). This has repercussions in the improvement of residents’ quality of life as well as in the degree of identification with the local area and the event. The “non-mega event” seems to allow for more exchange in the local community and, thus, is likely to generate results that benefit this community more (Taks *et al.*, 2015).

Sporting events provide opportunities for the development of knowledge and skills in local residents through programs that are organized specifically around the event (Taks, 2013). Human capital refers to the attributes of individuals in terms of knowledge, skills, competencies and attitudes that are leading to personal development and societal well-being and that can influence sport (Lee *et al.*, 2013). In this sense, sporting events can provide opportunities for personal growth and skills development of local residents through volunteering and organization as there are opportunities for them to participate in the planning and management of small and medium scale events (Taks, 2013).

On the other hand, the impact of participation in sport is a derivative of the social impact, because sport is the central aspect of sporting events, a sporting participation outcome of sporting events would seem to be a reasonable expectation (Taks *et al.*, 2015). A review by Weed *et al.* (2009) on the impacts of sporting events on sporting participation noted that the

demonstration effect of sporting events can lead to people already involved in sport being motivated to continue participating. Furthermore, in the rare cases where facilities are improved or built for small-scale events, it is likely that these facilities will be improved or built with community needs in mind, thus ensuring long-term community use, which is critical to the sustainable development of sporting participation and could serve to improve perceptions of sport development (Taks *et al.*, 2015).

The influence of sporting events on the image of the city has been analyzed in numerous works on large-scale sporting events (e.g. Hallmann and Breuer, 2010; Ryan, 2008), although there are few works that study the image of the city among local participants in small-scale events. The work by Hautbois *et al.* (2020) found that small-scale sporting events can have a positive influence on the local community in terms of image, beyond even the benefits related to sporting development. In this sense, some factors such as self-esteem and participation in sport seem to be positively related to participatory events, being able to attract more people and benefiting from greater media exposure that could be useful when the objective is to improve the image or strengthen the awareness of the city (Hautbois *et al.*, 2020).

Furthermore, these events tend to generate less problems or annoyances for residents, related with traffic, congestion, or restriction in access to public spaces, noise, vandalism, etc. Along these lines, a sporting event of a smaller magnitude, and oriented towards participation, can generate lower economic income than major sporting events, but also lower costs at a social and environmental level (Fredline, 2005).

2.2 Explanatory theories for residents' perceptions

There are different theories that try to explain the social impact of sporting events. In this study we use Social Exchange Theory (SET) as a frame of reference when analyzing residents' perception of the Valencia Triathlon.

This theory comes from research in the area of tourism and is applied to sporting events understood as a touristic phenomenon. SET argues that the perception of local residents of tourism development is positive when these people receive more benefits from the tourism industry, and some residents perceive tourism development as negative when they perceive that more costs are incurred because of it (Gursoy *et al.*, 2019). Therefore, applied to the case of sporting events, we can say that if the residents consider that the event generates more benefits than costs for the community, they will tend to support the holding of the event (Gursoy *et al.*, 2017; Waitt, 2003). This evaluation sets out a social dilemma as the residents must consider if the event is positive or negative for the community they reside in in terms of personal or collective interests (Chien *et al.*, 2012).

According to this theory, an individual or a group is happy to participate in an exchange with another party if the individual or the group feels that there will be some benefit from the exchange (Gursoy and Kendall, 2006). This definition fits well with participants in sporting events, as their choice to participate depends on a comparison between the perceived costs and benefits of the event, which is a key element of the theory of social exchange (Hautbois *et al.*, 2020). Therefore, residents who participate as athletes in sporting events have a range of perceptions about the benefits the event can bring them, knowing that if the perceived costs seemed more important, they would choose not to participate.

2.3 Support for holding sporting events

Studies on the social impact of sporting events tend to consult the perception of residents on the impacts associated with the holding of the event and about the support for holding future versions of the event. In this way, it has been shown that the lack of support and cohesion around holding these events can increase social and political tensions (Gursoy *et al.*, 2017). For this reason, support is a variable that allows researchers to understand the degree of acceptance of the local community.

Different studies have centered their interest in knowing the support of resident for holding sporting events, as well as the factors of perceived impact that influence the explanation of this variable (e.g. [Gursoy and Kendall, 2006](#); [Gursoy et al., 2017](#); [Pappas, 2014](#); [Prayag et al., 2013](#); [Zhang et al., 2020](#)). However, that majority of these studies have analyzed these relationships in the context of major sporting events (Olympic Games or Soccer World Cups).

The first contributions to this area are those of [Deccio and Baloglou \(2002\)](#) and [Gursoy and Kendall \(2006\)](#). In the first study, the authors tested whether the perceived opportunities or possible impacts associated with holding the Winter Olympic Games in Salt Lake City (Utah, United States of America) significantly predicted the willingness to support the holding of the games among residents of a county that was not host of the event (Garfield County). On the other hand, the perceived costs exercised scarce influence on willingness to support the event. The work of [Gursoy and Kendall \(2006\)](#) observed the same tendency to that of [Deccio and Baloglou \(2002\)](#) in a sample of residents of the city hosting the same sporting event, with the perceived benefits being a more determining factor than the costs or negative impacts in support for holding the event. In addition, the work of [Lee and Krohn \(2013\)](#), showed that the positive impacts exercised a stronger influence than the negative ones in the sentiments of the citizens towards welcoming future sporting events. Along the same lines, in the study of [Balduck et al. \(2011\)](#), it was observed that the perception of the citizens of Ghent (Belgium) on the sociocultural aspects and some costs (problems of mobility and excessive public expenditure) were significant predictors in the willingness to support the holding of the Tour de France. Studies like that of [González-García et al. \(2016\)](#) carried out on residents of Gran Canaria about the Basketball World Cup detected that the perceived benefits in terms of image and international recognition in socioeconomic, sociocultural and sporting aspects predicted willingness to support the holding of sporting events.

Some studies have focused their interest in demonstrating the direct or mediating effect of determined variables in the support for holding sporting events. This is the case of the work of [Prayag et al. \(2013\)](#) that tested the mediating effect of the variable general attitude of London residents to the Olympic Games between the perceived impacts and the support for holding sporting events. In addition, [Kaplanidou et al. \(2013\)](#) analyzed the mediating effect of satisfaction with quality of life between the perceived impacts and support for holding the Soccer World Cup in 2010. The study of [Gursoy et al. \(2017\)](#) analyzed the relationship between trust in the government and in the organizers, the perceived impacts and support for holding the event. Other studies have also demonstrated the mediating effect of variables such as community participation ([Pappas, 2014](#)) or positive and negative emotions ([Ouyang et al., 2017](#)).

Within the social impact of sporting events, some contributions have been made in the context of small and medium-scale events (e.g. [Chen et al., 2018](#); [Ntloko and Swart, 2008](#); [Parra et al., 2016b](#); [Taks et al., 2016](#)). However, there are very few contributions that analyze the relationships between perceived impacts and willingness to support the holding of this type of events.

Some studies have analyzed variables with similar characteristics to support for holding the event, as is the case of the work of [Parra et al. \(2016a\)](#) that showed the mediating effect of the perceived value between the perceived impacts of the Barcelona World Race (BWR) and the general satisfaction of the residents with the holding of the event. In this work the authors tested if there exists a positive relationship between the socioeconomic and sociocultural benefits and the perceived value of the BWR and a negative one between the perceived costs and the perceived value, while the latter was positively related with general satisfaction. The mediating effect of the perceived value between the perceived sociocultural benefits and general satisfaction with the holding of the event was shown, while it was partial between perceived costs and satisfaction. Additionally, the study of [Parra et al. \(2016b\)](#) about the

Valencia Boat Show, a small-scale event, proved the existence of a significant positive relationship between the intangible social impacts and the future intentions of the visitors and a negative one with the negative impacts and intentions.

On the other hand, [Inoue and Havard \(2014\)](#) have analyzed the determinants and consequences of the perception of the attendees of the 2012 FedEx St. Jude Classic on the social impact of the event. These authors found that a sporting event generates a greater social impact among the attendees if they perceive a greater feeling of comradery during the event and a high level of social responsibility on the part of sponsors and organizers of the event. At the same time, the creation of social impact leads to greater business returns and in this way local attendees that perceive a high level of social impact are likely to support the event and its sponsors.

Another study in this area was carried out by [Taks et al. \(2016\)](#) about two small-scale sporting events held in 2014 in Canada (Ontario Summer Games and the +55 Summer Games) that analyzed the happiness among residents that did not attend the event. They observed that the residents did not need to have the intention of attending the events to experience higher levels of happiness. From a practical point of view, the authors underline the fact that an effective communication with the citizens must include feelings of pride and belonging, as they are expected to stimulate feelings of happiness in residents that do not attend.

Finally, more recently, [Chen et al. \(2018\)](#) analyzed residents' perceptions of the Standard Charter Hong Kong Marathon. The results of the study allowed them to show that the level of participation of the residents in the event was a significant determinant in the perceptions of the positive and negative effects, changing those perceptions over time. The residents that participated in the marathon reported a significantly higher positive impact in their perceptions, while perceptions of negative impacts were lower in comparison with spectators and other residents. On the other hand, the perceptions of the negative impacts were higher during the event compared with the impact reported before or after the event.

With the exception of these contributions, few studies have been done to analyze the multi-dimensional nature of the social impacts of small-scale sport events from the perspective of local participants in the event. Even fewer are the contributions on the relationship between these impacts and the willingness to support holding events of this nature as a strategy for tourism.

3. Method

3.1 Procedure

A procedure of convenience sampling was used, in accordance with that done in other studies in this area ([Oshimi and Harada, 2018](#); [Prayag et al., 2013](#)). The selection of this type of sampling is justified for several reasons. First, the absence of a suitable sampling frame, different from that of registered residents, which would make it possible to ascertain the actual number of residents living in Valencia. Second, the benefits provided by this type of sampling in terms of economic and temporal costs. One of the main weaknesses associated with sampling of convenience, as indicated by [Kim et al. \(2006\)](#), is bias in the selection. Even though there were a higher percentage of men who participated in the Valencia Triathlon, a proportional sample was collected according to the variable sex.

3.2 Participants

To carry out this study, 248 valid questionnaires were collected from among the sportspeople residing in Valencia that participated in the Valencia Triathlon. The surveys were collected during the week following the holding of the event, the second week of September 2015. The

perception of impacts was consulted after the event as has been done in other work in this area (e.g. [Inoue and Havard, 2014](#); [Inoue et al., 2018](#); [Hautbois et al., 2020](#)). This research used an online questionnaire because of the difficulty of obtaining valid responses among active or tired athletes immediately after the race. The mean age of those surveyed is 37.88 (SD = 9.03) with ages between 18 and 61 years. By sex, 71.8% were men, while 28.2% were women.

3.3 Instrument

To enquire about the social impact of the event, an instrument composed of 23 items adapted from prior studies about possible benefits associated with holding an event in the city was used ([Djaballah et al., 2015](#); [Parra et al., 2016b](#); [Ntloko and Swart, 2008](#); [Taks, 2013](#)). A scale of support for tourism through sporting events composed of seven items adapted from [Karadakis \(2012\)](#) was included. All the indicators were evaluated through a Likert-type scale of five points (1 = totally disagree; 5 = totally agree). The questionnaire included questions of a sociodemographic nature, such as the age and sex of the participants.

3.4 Statistical analysis

First, the psychometric properties of social impact scale were tested on the sample under study by performing an exploratory factor analysis (EFA) and a confirmatory factor analysis (CFA). The EFA was performed with the FACTOR program following the recommendations of [Lloret-Segura et al. \(2014\)](#). This analysis was carried out through the method of extraction of Maximum Likelihood (MV) and the Oblimin Direct rotation method was utilized. Following the recommendations of [Lloret-Segura et al. \(2014\)](#), this type of oblique rotation was used because the correlations between pairs of factors were expected to be statistically significant and above values of 0.30, as observed in previous studies on the dimensions of the social impact of events. To determine the number of factors, the procedure of Optimal Implementation of Parallel Analysis ([Timmerman and Lorenzo-Seva, 2011](#)) was used, while to check the fit of the model the coefficients of root mean square root of the residuals (RMSR) were analyzed as well as the gamma index or the goodness-of-fit (GFI) proposed by [Tanaka and Huba \(1989\)](#). Other indicators that were taken into account were the Generalized G-H Index to analyze the replicability of the factors derived from the EFA. The measures for sample adequation of Kaiser Meyer Olkin (KMO) were also observed, as was Bartlett's sphericity test. On the other hand, the items with factorial loads below 0.40 or above this value in two or more factors were eliminated before carrying out the next EFA. Finally, the theoretical interpretability of the factorial solution extracted from the EFA was tested.

A confirmatory factorial analysis (CFA) was carried out, applying the method of Robust Maximum Likelihood Estimation (MVR) with the aim of correcting the possible absence of multivariate normality, using statistics such as the χ^2 of Satorra Bentler ([Chou et al., 1991](#)). Thus, for the evaluation of global fit, different goodness-of-fit indexes recommended in the literature ([Kline, 2005](#)) were used, such as the signification of the Chi-squared and its robust correction offered by Satorra-Bentler (S-B χ^2) ([Satorra and Bentler, 1994](#)). In addition, other coefficients were calculated which allowed for testing the adequation of the proposed models, such as the ratio of χ^2 and its degrees of freedom (χ^2/df ; [Wheaton et al., 1977](#)), with acceptable values being less than five ([Byrne, 2009](#)). In the same way the coefficients of the indexes of robust goodness-of-fit of the proposed model, the Compared Fit Index (CFI) and the Incremental Fit Index (IFI) were tested. For these indicators, a good fit is considered with values above 0.90 ([MacCallum and Austin, 2000](#)). To finalize, the Root Mean Square Error of Approximation (RMSEA) is shown, with score below 0.08 being considered a good fit ([Browne and Cudeck, 1993](#)).

Second, in the evaluation of the reliability of the scales three measurements were taken into account: Cronbach's Alpha, Composite Reliability (CR) and the Average Variance

Extracted (AVE) for each factor (Hair *et al.*, 2006). On the other hand, the convergent validity was tested through the significance of the factorial loads in their respective dimensions and the values of the associated *t* tests. Additionally, the discriminant validity, that has to do with seeing the clear distinction between any pair of constructs, was evaluated using the method suggested by Fornell and Larcker (1981). This method admits the discriminant validity if the square root of the AVE value of a determined factor is greater than the correlation coefficients between the factor and any other in the proposed scale. The other criteria to assure the discriminant validity indicates that the correlations between the different pairs of factors must be less than 0.85 (Kline, 2005).

Finally, a model of the causal relations was made to test the relationship between the impacts perceived by the local sportspeople and the support for the development of tourism through holding sporting events. The model of causal relations was evaluated through the estimations given by the R^2 coefficient, the standardized coefficients (β) and the level of significance (statistic *t*). The fit of the model was tested using the indicators of goodness-of-fit mentioned for the confirmatory factorial analysis.

4. Results

4.1 Descriptive statistics

Table 1 shows the mean, standard deviation, asymmetry and kurtosis of each indicator. As can be observed, the majority of the indicators present values close to value 4 in the Likert scale, which would indicate a tendency of residents towards agreement. The indicators with the most reduced scores are those related with “the benefits of holding the event are distributed in a balanced way in Valencian society” ($M = 2.71$; $SD = 1.05$), “encourages the inclusion of disadvantaged groups or groups at risk of social exclusion” ($M = 3.22$; $SD = -0.08$) and “helps generate opportunities for work” ($M = 3.22$; $SD = 1.09$). On the other hand, the values of asymmetry and kurtosis are acceptable as they are less than 3.0 in all the items (Chou and Bentler, 1995).

4.2 Exploratory factorial analysis

The internal validity of the scale of social impact was contrasted through an EFA, based on Lloret-Segura *et al.* (2014) and, then, a CFA. An EFA was carried out for the 23 items associated with possible benefits of the event. The results of the EFA allowed for the identification of three factors in which indicators are grouped: social development and human capital (10 items), sporting participation and city image (6 items) and economic development (4 items). Three indicators (9, 10 and 17) were eliminated due to the fact that their factorial loads were less than 0.40.

To check the fit of the model, the coefficients of the residual mean square root (RMSR) and the gamma index or GFI showed values inside the cut off points recommended: $RMSR = 0.04$ (<0.50) $GFI = 0.99$ (>0.95). On the other hand, the Generalized G-H Index showed values above 0.80 in all the factors detected by the EFA (oscillating between 0.90 and 0.92), indicating a good replicability of the dimensions in other studies (Ferrando and Lorenzo-Seva, 2017). The explained variance for the 20 items grouped in the three factors was of 65.56% (see Table 2).

4.3 Confirmatory factorial analysis

Starting from the factorial solution proposed by the EFA, a CFA was carried out and showed a good fit as can be observed in the indexes of goodness-of-fit of the model: significant chi-squared ($\chi^2 = 355.01$, $df = 167$, $p < 0.01$) and a value for the normed chi-squared ($\chi^2/df = 2.12$) less than 5 and the RMSEA index showed a value of 0.068 (Confidence Interval $CI = 0.058-0.077$), less than

Item	Means (SD)	Asymmetry	Kurtosis
1. Generates economic benefits for the city	3.92 (0.88)	-0.58	-0.07
2. Helps generate opportunities for work	3.23 (1.09)	-0.14	-0.50
3. Brings tourists to the city	3.67 (0.99)	-0.52	-0.05
4. It is an opportunity for commerce and local businesses	3.62 (0.96)	-0.43	-0.09
5. Improves maintenance and the appearance of facilities and infrastructure in the area (port, dock, . . .)	3.57 (1.08)	-0.54	-0.19
6. Improves the reputation of the city as a destination for sporting events	4.25 (0.82)	-1.30	1.94
7. Increases the pride of the residents for their city	3.63 (0.98)	-0.63	0.31
8. Contributes to residents feeling good about themselves and the society in general	3.34 (1.00)	-0.28	-0.15
9. It is an opportunity for entertainment for residents	3.93 (0.86)	-0.74	0.76
10. Offers an opportunity to have fun with family and friends	4.01 (0.84)	-0.95	1.33
11. Offers an opportunity to meet new people	3.66 (0.99)	-0.52	-0.08
12. The event contributes to the inclusion of people with disabilities	4.11 (0.92)	-0.98	0.64
13. Encourages the inclusion of disadvantaged groups or those at risk of social exclusion	3.22 (1.15)	-0.08	-0.67
14. The residents have the opportunity to participate in the planning and organization of the event (as volunteers, workers, . . .)	3.68 (1.00)	-0.53	-0.15
15. Increases the abilities and knowledge of citizens about the organization of sporting events	3.42 (1.00)	-0.39	-0.14
16. Shows the capacity of the city for welcoming sporting events	4.12 (0.80)	-0.91	0.94
17. Contributes to the development of volunteer networks that can be useful for other events held in the city	3.81 (0.86)	-0.68	0.44
18. Promotes sport amongst young people	4.10 (0.86)	-1.09	1.42
19. Increases interest in triathlon amongst citizens	4.20 (0.82)	-1.25	1.69
20. Encourages the participation of women in sport	4.31 (0.77)	-1.28	1.85
21. Allows for promotion and increased knowledge about local sporting clubs	3.71 (0.96)	-0.43	-0.28
22. Holding the event contributes to increasing public spending on sport	3.39 (0.99)	-0.24	-0.19
23. The benefits of holding the event are distributed equally in the Valencian society	2.71 (1.05)	0.13	-0.32

Note(s): SD = Standard deviation

Table 1.
Mean, standard deviation, asymmetry and kurtosis of the indicators of benefits perceived by the participants' residents of the Valencia Triathlon

0.08. Along the same lines, the rest of the indexes show a good fit for the model, as they presented values above 0.90: CFI = 0.92 e IFI = 0.92.

To analyze the reliability, the measures of Cronbach's alpha, composed reliability (CR) and the Average Variance Extracted (AVE) were observed and the values fitted the parameters recommended in the literature: social development and human capital ($\alpha = 0.92$; CR = 0.92; AVE = 0.53); economic development ($\alpha = 0.89$; CR = 0.89; AVE = 0.67); sporting participation and city image ($\alpha = 0.90$; CR = 0.91; AVE = 0.62); and support for tourism development through sporting events ($\alpha = 0.90$; CR = 0.91; AVE = 0.59) (see Table 3).

It was shown that the values of the *t* tests associated with the factorial loads of the items were more than 1.96 ($p < 0.05$), oscillating from 8.42 to 14.08, allowing us to prove the convergent validity. In terms of the discriminant validity, on one hand we showed that all the correlations between the different factors were inferior to 0.85, meeting this criterion as can be seen in Table 4. On the other hand, it was shown that the square root of the AVE was superior to the correlation between pairs of factors. This criterion was not met only in the case of the correlation between factors 1 and 2.

	F1	F2	F3	Com.	Participative small-scale sporting event
<i>Factor 1 – Social development and human capital</i>					
5. Improves maintenance and appearance of facilities and infrastructure of the area (port, dock, . . .)	0.52			0.50	
7. Increases residents' pride in their city	0.44			0.62	
8. Contributes to residents feeling good about themselves and society in general	0.58			0.63	
11. Offers an opportunity to meet new people	0.51			0.46	
13. Encourages the inclusion of disadvantaged groups or those at risk of social exclusion	0.68			0.49	
14. The residents have the opportunity to participate in the planning and organization of the event (as volunteers, workers, . . .)	0.41			0.48	
15. Increases the abilities and knowledge of the citizens about the organization of sporting events	0.67			0.60	
21. Permits promotion and increases knowledge about local sporting clubs	0.53			0.60	
22. Holding the event contributes to increasing public spending on sport	0.65			0.45	
23. The benefits of holding the event are distributed equally in Valencian society	0.79			0.58	
<i>Factor 2 – Sporting participation and city image</i>					
6. Improves the reputation of the city as a destination for sporting events		0.53		0.57	
12. The event contributed to the inclusion of people with handicaps		0.44		0.46	
16. Shows the capacity of the city to welcome sporting events		0.49		0.63	
18. Promotes sport among young people		0.80		0.69	
19. Increases interest in triathlon amongst the citizens		0.88		0.81	
20. Encourages participation of women in sport		0.72		0.68	
<i>Factor 3 – Economic development</i>					
1. Generates economic benefits for the city			0.81	0.60	
2. Helps generate opportunities for work			0.73	0.67	
3. Brings tourists to the city			0.85	0.74	
4. It is an opportunity for commerce and local businesses			0.69	0.68	
G H Index	0.90	0.92	0.90		
Eigenvalue	10.55	1.39	1.17		
Variance explained (%)	52.75	6.95	5.84		
Items	10	6	4		
Note(s): Com. = Commonality					

Table 2.
Rotated factorial structure of the scale of the perception of the resident participants in terms of the benefits of the Valencia Triathlon, commonalities, eigenvalues and explained variance

4.4 Relationship between the perceived benefits and support for holding sporting events

On the other hand, the fit of the model of causal relations, in which the predictive variables were the factors of perceived benefits and the predicted variable was support for the development of tourism through sporting events, was tested. The proposed model shows some adequate indexes of goodness-of-fit: S-B $\chi^2 = 590.61$, $df = 318$, $p < 0.01$; $\chi^2 = 861.33$, $df = 318$; $\chi^2/df = 2.70$; RMSEA = 0.059; CI = 0.051–0.066; CFI = 0.90; IFI = 0.90. Figure 1 shows the model with the relationships between the variables that explain 42.1% of the support for holding sporting events. The standardized coefficients showed that only the factor related with the perception of sporting participation and city image significantly predicted ($\beta = 0.29$; $p < 0.01$) support for holding sporting events.

5. Discussion and conclusions

This work analyses the perceptions of sportspeople-residents that participated in a small-scale annual event. The studies in this area of research that analyze the social repercussions of small-scale events are limited, as are the contributions about scales that allow for the identification of factors that make up the construct of social impact of this type of event.

	λ	α	FC	AVE
<i>Factor 1 – Social development and human capital</i>				
5. Improves maintenance and appearance of facilities and infrastructure of the area (port, dock, . . .)	0.71	0.92	0.92	0.53
7. Increases residents' pride in their city	0.81			
8. Contributes to residents feeling good about themselves and society in general	0.82			
11. Offers an opportunity to meet new people	0.69			
13. Encourages the inclusion of disadvantaged groups or those at risk of social exclusion	0.67			
14. The residents have the opportunity to participate in the planning and organization of the event (as volunteers, workers, . . .)	0.69			
15. Increases the abilities and knowledge of the citizens about the organization of sporting events	0.77			
21. Permits promotion and increases knowledge about local sporting clubs	0.77			
22. Holding the event contributes to increasing public spending on sport	0.66			
23. The benefits of holding the event are distributed equally in Valencian society	0.67			
<i>Factor 2 – Sporting participation and city image</i>				
6. Improves the reputation of the city as a destination for sporting events	0.76	0.90	0.91	0.62
12. The event contributed to the inclusion of people with handicaps	0.67			
16. Shows the capacity of the city to welcome sporting events	0.81			
18. Promotes sport among young people	0.80			
19. Increases interest in triathlon amongst the citizens	0.86			
20. Encourages participation of women in sport	0.83			
<i>Factor 3 – Economic development</i>				
1. Generates economic benefits for the city	0.75	0.89	0.89	0.67
2. Helps generate opportunities for work	0.84			
3. Brings tourists to the city	0.85			
4. It is an opportunity for commerce and local businesses	0.84			
<i>Support for the development of tourism through sporting events</i>				
1. Holding sporting events can be one of the most important sectors for the city	0.81	0.90	0.91	0.59
2. The fact of hosting additional sporting events would contribute to the social development of my local area	0.84			
3. The organization of sporting events plays an important economic role in my city	0.78			
4. I feel proud to see tourists enjoying what my city has to offer when a sporting event is held	0.79			
5. I am in favour of the construction of new tourist infrastructure to attract more tourists	0.60			
6. In general, I support the idea of organizing more sporting events in my city	0.73			
7. In general, I support the development of tourism through holding sporting events	0.82			

Table 3. Factorial loads, composed reliability, measure of the extracted variance and Cronbach's alpha of the indicators of the scale of the perception of the resident participants in terms of the benefits of the Valencia Triathlon and the scale of support for the development of tourism through sporting events

Table 4. Correlations between factors of the scale on the perception of resident participants and the scale of support for the development of tourism through sporting events

	F1	F2	F3	Support
Factor 1 – Social development and human capital	0.72			
Factor 2 – Sporting participation and city image	0.78**	0.79		
Factor 3 – Economic development	0.71**	0.65**	0.82	
Support	0.55**	0.55**	0.51**	0.77

Note(s): ** $p < 0.01$. The diagonal offers the values of the $\sqrt{\text{AVE}}$

In accordance with the theory of social exchange, if the residents consider that an event generates benefits for the community it is more likely that they will show a tendency to support the event. In this case the local sportspeople showed a positive tendency in the

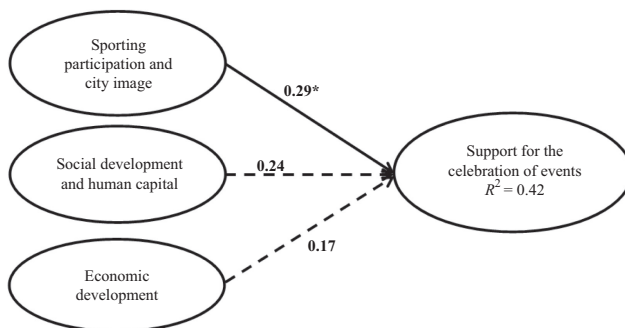
valuation of the majority of the indicators of perceived benefits, highlighting those related with aspects of intangible nature such as participation or promotion of the sport, the improvement of the city as a tourist destination or the opportunities for entertainment and fun. These are positive impacts highlighted by different authors that have pointed out the benefits of small-scale events (Taks, 2013).

On the other hand, this study analyzed the validity of the scale used to analyze the perceptions of the residents of the impacts of a small-scale event from the perspective of the local sportspeople that participated in the event. In this way, following a procedure similar to that of other studies carried out in this area of research for the development and validation of scales (e.g. García-Pascual *et al.*, 2019; Kim and Walker, 2012; Kim *et al.*, 2015; Parra *et al.*, 2018, Parra-Camacho *et al.*, 2019), this study combined exploratory and confirmatory factorial analyses of the proposed items. The results allow us to identify three factors: sporting participation and city image (6 items), social development and human capital (10 items) and economic development (4 items). The psychometric properties of the scale showed an adequate validity and reliability for the sample object of this study, as shown by the different indexes and coefficients used.

The factors identified are related with the prior theoretical frameworks that have identified possible social impacts of this type of event (Djaballah *et al.*, 2015; Taks, 2013). The dimension of social development and human capital is the one that contains most indicators, becoming encompassed in the same items related to acquisition of knowledge, competencies and fundamental abilities for community and personal development (Lee *et al.*, 2013). It also contains indicators related with social wellbeing and social capital, defined by Lee *et al.* (2013, p. 27) as “social relationships and conditions including trustworthy and diverse networks, social proactivity and participation in community conducive to cooperation for mutual success in society.” In this sense indicators related with the pride of residing in the city, the feeling of wellbeing with oneself and the society, the opportunity for relating with new people and the inclusion of disadvantaged groups or those at risk of social exclusion are encompassed in this dimension.

The dimension of economic development collects the variables related to the benefits of a socioeconomic nature that can contribute to the event a participative and recurrent character for the local population (economic benefits, employment, business and local commercial opportunities). In other studies on events with similar characteristics, these indicators have been framed in the factor of intangible impacts (Parra *et al.*, 2016b).

In relation to the dimension of sporting participation and city image, this contains indicators related to the possibilities that an event of these characteristics can generate in the



Note(s): * $p < 0.05$

Figure 1.
Relationships between
factors of perceived
benefits and support
for holding sporting
events

promotion and encouragement of sport in the local population (Djaballah *et al.*, 2015; Taks, 2013). Even though there is no evidence of a possible increase in sporting participation due to the scarcity of work in this line about small-scale events (Djaballah *et al.*, 2015), Girginov and Hills (2008) suggest that their recurring and generalized character can be taken into account to encourage sporting participation in an accumulative way.

Although the international repercussions of these sporting events are limited, on occasion they do attract amateur sportspeople from different countries, thus improving the reputation of the city as a destination for sporting events. This is the case of the Valencia Triathlon which, in the version being analyzed, had a participation of non-resident athletes (national and international) of more than 30% of those who applied.

On the other hand, the analysis of the results of the model of causal relationships has allowed us to show that the dimension that significantly contributes to explaining the support of local sportspeople for the development of tourism through holding sporting events is sporting participation and city image. Even though it was not a significant predictor dimension at the statistical level of the support, social development and human capital also showed an elevated coefficient ($\beta = 0.24$). Therefore, it would seem that the aspects of an intangible nature are those that better explain the support of local sportspeople for holding this type of event. This coincides with what was found in a prior study by Parra *et al.* (2016b) about a small-scale sporting event in which the intangible impacts were those that best explained the future intentions of local and non-local participants.

5.1 Theoretical and practical implications

This study offers a multidimensional scale to analyze the social impact of small-scale sporting events that are both recurring and participative, as is the case of a triathlon. From the point of view of the management and organization of this type of events, it seems necessary to place special attention on the aspects related to social development, due to the great potential that these events have for generating social capital and increasing the networks of social collaboration.

In this type of event there is a clear need to give a leading role to volunteers and local organizers to increase the knowledge and abilities of the local community. Along these lines, it is necessary to involve collectives such as associations and local sporting clubs in the organization of this kind of event to achieve an increase in participation in local sport. The support for this type of sporting event seems to be explained by the intangible aspects already mentioned (social development, human capital and social capital) more than by the possible benefits of a more tangible nature. As highlighted by Taks *et al.* (2016), it is important to raise awareness in local residents to the fact that these events are being organized and to transfer the pride of the community and the sense of belonging to the media and the publicity communication.

However, given that holding this type of events is recurring and added to the other similar characteristics, they can generate benefits in local economies and thus it is necessary to develop strategic plans that encourage their holding and publicize the social and economic benefits through published studies of their social and economic impact.

5.2 Limitations and future lines of research

One of the limitations of this study is the target population of the study as it is centered only attendees that participated in the event itself. In future studies it would be convenient to enquire into the perception of other interest groups related to the event, for example, residents of the closest suburbs to the place where the event is held. It could also be possible to enquire into the perception of local businesspeople. On the other hand, a convenience sample was used, for which reason one must be cautious when it comes to extrapolating the results to the combination of local participants.

It is important to note that perceptions can change over time (Chen *et al.*, 2018). Changes in local residents' perception of impacts after hosting a sporting event are likely to play an

important role in their decision to support or oppose hosting another sporting event in their community in the future (Gursoy *et al.*, 2011). For this reason, future work should take into account the effect associated with changes in the perception of events due to time and other factors such as the effect of forgetting or remembering past events.

Future studies could consider other dimensions on possible negative impacts. Additionally, it would be possible to continue exploring the multidimensional nature of the construct of social impact of small-scale events with the aim of improving the theoretical interpretation. In the same way it would be possible to test if the factors can be split up into more dimensions in order to identify first and second order factors.

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Corresponding author

David Parra-Camacho can be contacted at: david.parra-camacho@uv.es

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