

Mega-events' medium-term effects on host communities: the role of community pride

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Abstract

Purpose. The purpose of this study is to evaluate the medium-term effects of mega-events on the quality of life (QOL) of the host community. In detail, we address citizens' perceptions one year after the end of the mega-event, when citizens returned to their ordinary life and are able to provide a more comprehensive evaluation of the effects of the event. The research considers the perceived impacts along four dimensions (economic, infrastructural, image, cultural) and suggests that these effects are mediate by community pride.

Methodology. This study investigates the effects of Expo Milan 2015. Data were collected through a questionnaire-based survey among the residents in Milan in October and November 2016, one year after the end of the event. A convenience sampling technique was used. Structural equation modelling was used to analyze data.

Findings. The results provide support for the hypothesized effects and highlight the pivotal mediating role of community pride.

Practical implications. The findings may be of interest for authorities interested in hosting mega-events in the territories. Our research shows that in the medium-term mega-events can improve residents' QOL but that specific initiatives are required to strengthen community pride.

Originality/value. Available literature has examined the direct effects of mega-events on residents' QOL. This is the first study to suggest and demonstrate that community pride mediates such effects which means that stronger benefits may arise if residents develop community pride.

Keywords

post mega-event, host community perceptions, quality of life, community pride, public authorities

1. Introduction

Mega-events are cultural, commercial and sport events (e.g. Olympics Game, World Expos) of limited duration that generally draw national and international participants (Müller, 2015; Roche, 2002). In general, these events attract the attention of media all around the world and therefore enhance the image and the awareness of the territory that hosts the event. Moreover, mega-events can encourage tourism, new investments, job opportunities (Homafar, Honari, Heidary, Heidary, & Emami, 2011; Horne & Manzenreiter, 2006; Lee, Mjelde, & Kwon, 2017). In sum, they represent opportunities for economic, social and cultural development (S. S. Kim & Petrick, 2005; Wonyoung Kim, Jun, Walker, & Drane, 2015).

However, these events are not immune to negative consequences. In particular, there could be both economic (e.g., huge expenses for the creation and maintenance of the real estate often called "white elephant" such as stadiums and increases of taxes) and social negative effects (e.g., corruption and traffic) (Wonyoung Kim et al., 2015).

Despite the massive amount of resources needed to organize mega-events, competition among nations to host them continues to growth. In particular, in the 21st century and contrary to the previsions (see for example Essex & Chalkley, 2004) the request by emerging countries to host these events has increased (and actually several emerging countries have been assigned important events such as, Russia 2018 World Cup, Olympic Games Brazil 2016, Shanghai Expo 2010, and many others) (Deng, Poon, & Chan, 2016).

According to Malfas, Houlihan, and Theodoraki (2004), the performance of mega-events can be evaluated from two different perspectives, labelled as internal and external. The first is related to the event itself and includes aspects such as the number of visitors and the expenditures for infrastructures; the second is related to aspects such as tourism and economic consequences on the host territory. Available literature has mostly focused on the external impacts of the mega-event (Malfas et al., 2004). However, these studies have widely focused on the economic consequences but have to a large extent overlooked the total and multidimensional perceptions of residents (S. S. Kim & Petrick, 2005; Wonyoung Kim et al., 2015).

In order to fill this gap and through the support of an empirical analysis, this paper intends to investigate whether the Expo 2015 has contributed to increase residents' perceptions of their quality of life. In detail, we explore citizens' perceptions one year after the end of the mega-event, when citizens have returned to their ordinary life and are able to provide a more comprehensive evaluation of the effects of the event. In particular, we consider the perceived impacts along four dimensions (economic benefits, infrastructure enhancement, image enhancement, cultural benefits) (H. J. Kim, Gursoy, & Lee, 2006; Wonyoung Kim et al., 2015) and we relate them to the changes in community pride and to perceived improvement of residents' quality of life. Data were collected through a questionnaire-based survey among the residents in Milan in October and November 2016.

The remaining of the article is articulated as follows: in the next paragraph, the relevant literature is reviewed and the hypotheses are set; after that the context of the analysis and the method are explained and the results are presented and discussed; conclusions and limitations complete the paper.

2. Literature Review and hypotheses

Literature has highlighted that mega-events generate a legacy on the host territory (Kaplanidou et al., 2013; Preuss, 2007). Focusing in particular on sport mega-events, Preuss (2007, p. 211) defines legacy as: *"all planned and unplanned, positive and negative, tangible*

and intangible structures created for and by a sport event that remain longer than the event *itself*." Tangible (or direct or hard) effects are related to concrete elements such as facilities built for the mega-event while intangible (or indirect or soft) effects refer to non-concrete aspects related for example to the image of the host territory (Cornelissen, Bob, & Swart, 2011; Kaplanidou et al., 2013; Preuss, 2007).

Despite the wide research efforts about the legacy of mega-events, academic literature has begun only recently to analyze the impact of mega-events on local residents' perceptions (Kaplanidou et al., 2013; Preuss, 2007). This point is particularly important because the host community has a key role in lengthen the positive effects of the event (Chien, Ritchie, Shipway, & Henderson, 2012).

Moreover, the majority of available studies on this issue have focused on the effects of sport mega-events while events such as Expo haven't received the same attention (Getz, 2008; Li, Hsu, & Lawton, 2015). Expo has a longer duration (six months) than sport mega-events and, as a consequence, residents are necessarily more involved and the post-event legacy on the host community can be deeper. Drawing on these premises, this research aims to understand if the tangible and intangible effects of an Expo have an influence on resident quality of life (QOL) and through which underlying mechanisms. QOL is a multi-dimensional construct that summarizes different aspects of life (from emotional and psychological wellbeing to material well-being and personal development) (Andereck & Nyaupane, 2011; Schalock, 1996). Differently from available studies which examined the direct effects of the mega-events on the QOL, in this paper we suggest that these effects are fully mediated by the community pride. In other terms, benefits have impacts on QOL if they are internalized by residents through the development of a sense of community pride. Many studies have indicated community pride as the most important benefit for the host territory, which is able to reduce the negative perceptions related to the event (such as traffic, pollution, etc.) (Kaplanidou, 2012; H. J. Kim et al., 2006; Wonyoung Kim et al., 2015). Hosting a megaevent can be a means to reinforce the sense and the pride of being part of a community and enhance a country's national spirit, by showing the world what the community is able to do (Gursoy, Chi, Ai, & Chen, 2011; Wonyoung Kim et al., 2015).

Among the hard effects that contribute to determine "worth it" in hosting mega-events (Hiller & Wanner, 2011), those related to economic benefits and to infrastructure are undoubtedly the most important ones (Preuss, 2007). It is generally recognized that hosting a mega-event generates important economic effects because it acts as a stimulus for the host economy and for inbound tourism (Cornelissen et al., 2011; Hritz & Ross, 2010; Wonyoung Kim et al., 2015; Preuss, 2007). In general, these events generate job opportunities, new businesses for the firms, an increased amount of investments, tourism growth (Homafar et al., 2011). Hence economic effects are able to enhance the QOL of residents (Andereck & Nyaupane, 2011; Kaplanidou et al., 2013). In fact if residents are satisfied with the economic situation they tend to perceive higher QOL as well (Kaplanidou et al., 2013). Available studies have only examined the direct effect of the economic benefits on QOL. None of them has considered a mediated effect. However, as we explained above, we suggest that community pride acts as mediator. Therefore, we state that:

H1: Economic benefits have a positive effect on the QOL and this effect is fully mediated by community pride.

Mega-events give the opportunity to renovate or build infrastructures in the host territory thanks to the availability of financing otherwise difficult to obtain (Hiller, 2000). In particular, infrastructures concern new buildings specifically related to the event (i.e., stadiums, entertainment facilities, etc.) but also general infrastructures such as roads, airports, health-

related and mobility/access-related infrastructures (Cornelissen et al., 2011; Gratton & Preuss, 2008). The role of infrastructure legacies is not univocal. Despite some criticisms (Kaplanidou et al., 2013), several studies highlight the importance of this aspect and its positive impact on QOL (Wonyoung Kim et al., 2015; Woosoon Kim & Walker, 2012). Following this reasoning we hypothesize that:

H2: Infrastructures enhancement has a positive effect on QOL and this effect is fully mediated by community pride.

Image and culture benefits are "soft" effects generated by hosting a mega-event (Preuss, 2007). A mega-event can improve or/and transform the international image of the host country (Frisby & Getz, 1989; Hall, 1997). At the beginning of the last century, for example, the reputation of Chigago was very bad. At that time, the city was considered dominated by the mafia. Therefore, local authorities decided to host the 1933 Expo which was entitled "A Century of Progress, International Exposition". It was a huge success and the event was able to improve the national and international image of Chicago. In this sense, mega-events are considered "image-makers" (Getz, 2008). Available literature underlines the positive role of mega-events in enhancing territory image (Gursoy et al., 2011; S. S. Kim & Petrick, 2005).

Through the support of a longitudinal analysis, Ritchie and Smith (1991) discovered that the image of Calgary, which hosted the Winter Olympic Game in 1988, was substantially enhanced. The same positive results were found for Expo mega-events by H. J. Kim et al. (2006) and Yang, Zeng, and Gu (2010). Therefore, we state that:

H3: Image enhancement has a positive effect on QOL and this effect is fully mediated by community pride.

Mega-events can also be viewed as an occasion of cultural growth for residents. In particular, they allow exchanges among different cultures (Gursoy et al., 2011). In detail, Kaplanidou et al. (2013) found a direct effect of cultural benefits on QOL in the case of the FIFA World Cup. Following this reasoning we hypothesize:

H4: Cultural benefits have a positive effect on QOL and this effect is fully mediated by community pride.

In addition, we inserted a respondent's length of residence as a control variable. In fact, some studies have underlined the positive effects of length of residence on community attachment and its role in the creation of social ties (Cope, Flaherty, Young, & Brown, 2015; Flaherty & Brown, 2010; Kasarda & Janowitz, 1974; Theodori & Luloff, 2000). The research model is shown in figure 1.

Fig. 1. The suggested Model



3. Research context

An Expo is a "global event that aims at educating the public, sharing innovation, promoting progress and fostering cooperation. It is organized by a host country that invites other countries, companies, international organizations, the private sector, the civil society and the general public to participate. Due to the diversity of its participants, from top decision makers to children, Expos offer a multifaceted event where extraordinary exhibitions, diplomatic encounters, business meetings, public debates and live shows take place at the same time". This is the official definition of Expo provided by The Bureau International des Expositions (BIE), the official Intergovernmental Organization in charge of overseeing and regulating all international exhibitions that last more than three weeks and are of non-commercial nature ("Expos"). In particular, it organizes 4 main types of Expos: World Expos, Specialized Expos, Horticultural Expos and the Triennale di Milano. In particular, in our research we focused on the first type of Expo. The history of the World Expos began in the 1851 in London, the theme was the Industry of all Nations, the number of participants was 6,039,195 while the countries involved were 25. Table 1 provides an overview of past World Expos.

While the firsts Expos were dedicated to industry and national prestige, moderns Expos have focused on new challenges (e.g., "Better City, Better Life" in Shangai). They occur every five years and last six months. Hosting a World Expo can modify the aspect of a city, not only through the building of extraordinary pavilions but also thanks to the realization of new infrastructure (http://www.bie-paris.org/site/en/expos/past-expos/past-expos-a-short-history-of-expos). In our research, we focused on the last World-Expo which took place in 2015 in Milan. The theme was Feeding the Planet, Energy for Life, with 145 countries involved and 21,500,000 visitors.

Edition	City	Dates	Theme	Visitors	Participating Countries
1851	London	01/05/1851 - 11/10/1851	Industry of all Nations	6,039,195	25
1855	Paris	15/05/1855 - 15/11/1855	Agriculture, Industry and fine arts	5,162,330	27
1862	London	01/05/1862 - 01/11/1862	Industry and Art	6,096,617	39
1867	Paris	01/04/1867 - 03/11/1867	Agriculture, Industry and fine arts	15,000,000	42
1873	Vienna	01/05/1873 - 31/10/1873	Culture and Education	7, 255,000	35
1876	Philadelphia	10/05/1876 - 10/11/1876	Arts, Manufactures and Products of the Soil and Mine	10,000,000	35
1878	Paris	20/05/1878 - 10/11/1878	New Technologies	16,156,626	35
1880	Melbourne	01/10/1880 - 30/04/1881	Arts, Manufactures and Agricultural and Industrial Products of all Nations	1,330,000	33
1888	Barcelona	08/04/1888 - 10/12/188	Fine and Industrial Art	2,300,000	30
1889	Paris	05/05/1889 - 31/10/1889	Celebration of the centenary of the French revolution	32,250,297	35
1893	Chicago	01/05/1893 - 03/10/1893	Fourth centenary of the discovery of America	27,500,000	19
1897	Brussels	10/05/1897 - 08/11/1897	Modern Life	6,000,000	27
1900	Paris	15/04/1900 - 12/11/1900	19th century: an overview	50,860,801	40
1904	Saint Louis	30/04/1904 - 01/12/1904	Celebration of the acquisition of territory Louisiana, April 30 1803	19,694,855	60
1905	Liege	27/04/1905 - 06/11/1905	Commemoration of the 75 th anniversary of National independence	7,000,000	35
1906	Milan	28/04/1906 - 11/11/1906	Transportation	N.A.	40
1910	Brussels	23/04/1910 - 07/11/1910	Works of Art and Science, Agricultural and Industrial Products of All Nations	13,000,000	26
1913	Ghent	26/04/1913 - 03/11/1913	Peace, Industry and Art	9,503,419	24
1915	San Francisco	20/02/1915 - 04/12/1915	Celebrating the opening of the Panama Canal	18,876,438	24
1929	Barcelona	20/05/1929 - 15/01/1930	Industry, Art and Sport	5,800,000	29
1933	Chicago	27/05/1933 - 12/11/1933 01/06/1934 - 31/10/1934	The independence among Industry and scientific research	38,872,000	21
1935	Brussels	27/04/1935 - 06/11/1935	Transport	20,000,000	35
1937	Paris	25/05/1937 - 25/11/1937	Arts and technics in modern life	31,040,955	45
1939	New York	30/04/1939 - 31/10/1939 11/05/1940 - 27/10/1940	Building the World of Tomorrow	N.A.	54
1949	Port-au- Prince	08/12/1949 - 08/06/1950	The festival of Peace	250,000	15
1958	Brussels	17/04/1958 - 19/10/1958	A World View: A New Humanism	41,454,412	39
1962	Seattle	21/04/1962 - 21/10/1962	Man in the Space Age	9,000,000	49
1967	Montreal	28/04/1967 - 29/10/1967	Man and his World	50,306,648	62
1970	Osaka	15/03/1970 - 13/09/1970	Progress and Harmony for Mankind	64,218,770	78
1992	Seville	20/04/1992 - 12/10/1992	The Age of Discovery	41,814,571	108
2000	Hannover	01/06/2000 - 31/10/2000	Man - Nature – Technology	18,100,000	155
2010	Shanghai	01/05/2010 - 31/10/2010	Better City, Better Life	73,085,000	246
2015	Milan	01/05/2015 - 31/10/2015	Feeding the Planet, Energy for Life	21,500,000	145

Table 1. The history of World Expos

Source BIE

4. Method

In order to achieve our research goals, an on-site survey was conducted among the residents of Milan in October and November 2016, one year after the end of the event. Data were collected in three different areas of Milan: a commercial street ("Corso Buenos Aires"), a subway station ("Porta Genova") and a business street ("Tortona"). As a result, 232 questionnaires were collected through a convenience sampling technique.

The questionnaire, composed by 45 questions, was divided into three parts. The first one was related to the post-Expo perceptions, the second concerned the direct experience of residents with Expo 2015 and the last included questions about the profile of the respondent. Each construct was measured through multiple items developed from previous studies (Deccio & Baloglu, 2002; Kaplanidou et al., 2013; Wonyoung Kim et al., 2015; Yang et al., 2010). All items were measured on five-point Likert scales, with extremes being 1=totally disagree and 5=totally agree.

Data collected were then analysed through the Amos software to highlight the structural effects. Before estimating the structural model, a confirmatory factor analysis (CFA) was conducted to assess constructs' convergent and discriminant validity. The CFA's overall goodness of fit was satisfactory (Kaplan, 2009) with Chi-square (df=214)=461.637, p<0.01; CFI=0.94 and RMSEA=0.07. Table 2 shows the details of the measurement model. Since the CFA confirmed the validity and reliability of the measurement model, we were able to use the corresponding latent variables to estimate the structural equation model.

Construct	Item	Mean	S.D.	Factor Loading
	ECON_1 - After Expo2015, the number of jobs opportunities has increased	2.56	1.14	0.77
Economic Benefits	ECON_2 - After Expo2015, the business opportunities for the enterprises have increased	2.86	1.04	0.82
(<i>α</i> =0.81)	ECON_3 - After Expo 2015, the total amount of investments has enhanced	3.06	0.95	0.67
	ECON_4 - Thanks to Expo 2015, the tourism is increased	3.34	1.15	0.64
	INFR_1 – Thanks to Expo 2015, better residential solutions have been created	3.47	1.19	0.75
Infrastructures Enhancement	INFR_2 - Thanks to Expo 2015, urban infrastructures (e.g. streets, railways) have been improved	3.23	1.22	0.81
$(\alpha = 0.87)$	INFR_3 - Thanks to Expo 2015, After Expo 2015, tourist infrastructures (e.g. hotels, attractions) have been improved	3.30	1.02	0.77
	INFR_4 - Thanks to Expo 2015, public infrastructures, usable by all the inhabitants, have been built and/or improved	3.22	1.13	0.84
	IMAGE_1 - Expo 2015 has contributed to enhance the international image of Milan	3.76	1.05	0.76
Image	IMAGE_2 - Expo 2015 has generated a prestigious image of Milan	3.53	1.10	0.73
Enhancement (α =0.89)	IMAGE_3 - Expo 2015 will help to promote the image of Milan for many years	3.35	1.14	0.88
	IMAGE_4 - Expo 2015 increased the opportunity to introduce Milan to the world	3.62	1.05	0.83
	CULT_1 - Expo 2015 has allowed cultural exchanges between attendees and inhabitants	3.37	1.15	0.72
Cultural Benefits	CULT_2 - Expo 2015 provided me with the opportunity to experience other cultures	3.48	1.17	0.82
(<i>α</i> =0.89)	CULT_3 - Thanks to Expo 2015 I now better understand other/different cultures	3.01	1.20	0.92
	CULT_4 - Expo allowed me to expand my knowledge	3.18	1.23	0.80

Table 2. The measurement model

Community	COMPR_1 - After Expo 2015, the community pride of Milan citizens is higher	3.01	1.12	0.89
Pride	COMPR_2 - Expo 2015 reinforced community spirit	2.72	1.13	0.91
(<i>α</i> =0.90)	COMPR_3 - After Expo 2015, the community of Milan inhabitants is more solid	2.28	1.02	0.81

Source: our analysis

5. Results

Respondents were mainly female (61.2%) and 72.8% of them had an age equal to or lower than 50. A share of 39.2% had either a bachelor's degree or a higher level of education. Moreover, the vast majority of respondents (85.5%) had visited the Expo (Table 3).

Table 3. Descriptive statistics of the sample

Variables	Frequency (%)
Gender	
Female	142 (61.2%)
Male	90 (38.8%)
Age	
18 - 25	30 (12.9%)
26-35	63 (27.1%)
36 - 50	76 (32.8%)
51 - 64	50 (21.6%)
>64	13 (5.6%)
Education	
Middle school degree	141 (60.8%)
High school degree	35 (15.1%)
Bachelor's and/or Master's degree	45 (19.4%)
Doctoral and other post-graduate degrees	11 (4.7%)
Occupation	
Student	21 (9.1%)
Employee	152 (65.5%)
Homemaker	6 (2.6%)
Self-employed	37 (15.9%)
Unemployed	4 (1.7%)
Retired	12 (5.2%)
Did you visit Expo 2015?	
Yes	129 (85.8%)
No	33 (14.2%)

Source: our elaboration

The estimated structural model showed a good fit, with chi-square (df = 173) = 377.147, p<0.01, with $\chi_2/df=2.180$, below the cutoff of 3 (Kline, 2011). CFI was 0.94 above the threshold of 0.93 (Bagozzi & Yi, 2012). The estimated structural effects are shown in table 4. In detail, economic benefits have a positive effect on the QOL but this effect is not mediated by community pride (H1 is only partially supported). Infrastructures enhancement has a direct positive effect on the QOL and its effect is fully mediated by community pride (H2 is

supported). The significance of this mediation effect was tested via Sobel test, which showed a value of 2.10 greater than the cutoff of 1.96 (Kline, 2011; Sobel, 1987). Image enhancement has a positive effect on QOL and its effect is fully mediated by community pride, the value of Sobel test was 3.55 (H3 is supported). Cultural benefits have a positive effect on QOL but this effect is only partially mediated by community pride (the value of Sobel test was 2.36) (H4 is supported). In addition, the model was re-estimated by controlling for the effects of length of residence. The estimation shows that the control variable has no effect.

Effects	Unst. Coeff.	SE	Std. Coeff.
Economic Benefits -> QOL	0.464***	0.112	0.414
Economic Benefits -> Community Pride	-0.087	0.114	-0.065
Infrastructures enhancement -> QOL	0.095	0.077	0.108
Infrastructures enhancement -> Community Pride	0.200*	0.085	0.190
Image -> QOL	-0.194	0.117	-0.201
Image -> Community Pride	0.627***	0.114	0.542
Culture Benefits -> QOL	0.265***	0.073	0.312
Culture Benefits -> Community Pride	0.198**	0.077	0.194
Community Pride -> QOL	0.389***	0.084	0.466
Controls			
Length of Residence -> Community Pride	-0.083	0.050	-0.079
Length of Residence -> QOL	-0.029	0.045	-0.033

Table 4. The structural Model

p*<0.05, p< 0.01**, p***<0.001

Source: our analysis

6. Discussion

Even if several studies have investigated the effects that a mega-event has on the host territory (Malfas et al., 2004), residents' perceptions have received only limited attention. This study contributed to fill this gap by addressing residents' perceptions of the effects of a mega-event on their QOL. As Osborne (1992) underlined, QOL consists of objective, tangible elements (such as the economic conditions of life) and of subjective, intangible elements (such experiences). Differently from other studies (Kaplanidou et al., 2013), our paper suggested and demonstrated that these elements affect QOL via community pride. Many studies have stressed the importance of community pride (Kaplanidou, 2012; Kaplanidou et al., 2013; Wonyoung Kim et al., 2015), but none of these has considered it as mediator.

The literature distinguishes among tangible and intangible effects of mega-events. In our study, we analyzed economic benefits and infrastructures enhancement as tangible aspects and image and cultural benefits as intangible aspects. Except for the economic benefits the results of our study highlighted the mediating role of community pride.

As regards economic benefits our findings revealed that they have no impact on community pride but they directly affect QOL. Therefore, consistent with previous research (Andereck & Nyaupane, 2011; Wonyoung Kim et al., 2015), we found only a direct effect of economic benefits. This result may suggest that community pride is an in-depth attitude which is not related to the economic condition of a community (Misener & Mason, 2006). This is consistent with the study by Lepofsky and Fraser (2003), who demonstrated that for territories with economic problems, initiatives directed to create a sense of community have for citizens more potential benefits than economic initiatives.

Available literature underlined controversial effects of infrastructures enhancement (Gratton & Preuss, 2008; Kaplanidou et al., 2013). On the one side, these improvements enable higher QOL; on the other side, they often require huge expenditures for both building and maintenance. Our study suggested that benefits outweigh costs and that they positively affect QOL through the improvement of residents' community pride.

As regards the intangible effects, our study corroborated the role mega-events as image makers (Getz, 2008; Gursoy et al., 2011). These improvements are able to enhance QOL only if they are internalized by residents allowing them to strengthen their community pride.

Similarly, our research shed new light on the effects of cultural benefits (Gursoy et al., 2011; H. J. Kim et al., 2006). Mega-events are occasions for exchanges among different cultures and they allow people to enrich their knowledge and awareness of their traditions. Therefore, cultural benefits have both a direct effect on QOL and a further mediated effect on QOL through community pride. This effect was not addressed by previous analyses. However, we state that it has strong theoretical value because it indicates that cultural exchanges are able to make residents more conscious about the value of their culture and traditions.

The results of this study have significant practical implications for the national and local authorities interested in hosting mega-events in their territories. On this point our study urge authorities to consider the wide range of impacts of mega-events on the territory highlighting the relevance of intangible impacts and legacies. Furthermore, our results suggest that authorities should take care of their residents by organizing specific initiatives aimed to strengthen the relationship between the mega-events benefits and community pride. These activities should take place before, during and after the event.

7. Conclusions and limitations

This study advanced knowledge on the medium-term effects of mega-events on the host territory by investigating residents' perceptions. In detail, it showed that mega-events improve residents' QOL and that economic, infrastructural, image and cultural impacts on QOL are mediated by community pride.

Despite this contribution, this study presents several limitations. First, the suggested effects were tested only in one context (Expo 2015), thus requiring further evidence related to other mega events before our results can be generalized. For example, the intensity of the tested relationships may vary depending on the level of community pride before the event. Further studies may also investigate the influence of negative episodes (such as cases of corruption) related to the organization of the mega-event on residents' perceived changes in their QOL. Second, this research measured the effects of mega-events on the host territories only one year after the end of the event. New studies with different timeframes are required to appreciate the medium- and long-term impacts. Finally, while this paper addressed only citizens' perceptions, future research may also investigate business actors' perceptions to have a more comprehensive view of the effects and legacies of mega-events on the host territory.

References

- Andereck, K. L., & Nyaupane, G. P. (2011). Exploring the nature of tourism and quality of life perceptions among residents. *Journal of Travel Research*, *50*(3), 248-260.
- Bagozzi, R. P., & Yi, Y. (2012). Specification, evaluation, and interpretation of structural equation models. *Journal of the Academy of Marketing Science*, 40(1), 8-34.

- Chien, P. M., Ritchie, B. W., Shipway, R., & Henderson, H. (2012). I am having a dilemma: Factors affecting resident support of event development in the community. *Journal of Travel Research*, 51(4), 451-463.
- Cope, M. R., Flaherty, J., Young, K. D., & Brown, R. B. (2015). Olympic boomtown: The social impacts of a one-time mega-event in Utah's Heber Valley. *Sociological Spectrum*, 35(2), 136-160.
- Cornelissen, S., Bob, U., & Swart, K. (2011). Towards redefining the concept of legacy in relation to sport mega-events: Insights from the 2010 FIFA World Cup. *Development Southern Africa*, 28(3), 307-318.
- Deccio, C., & Baloglu, S. (2002). Nonhost community resident reactions to the 2002 Winter Olympics: The spillover impacts. *Journal of Travel Research*, *41*(1), 46-56.
- Deng, Y., Poon, S., & Chan, E. (2016). Planning mega-event built legacies–A case of Expo 2010. *Habitat International*, *53*, 163-177.
- Essex, S., & Chalkley, B. (2004). Mega-sporting events in urban and regional policy: a history of the Winter Olympics. *Planning perspectives*, 19(2), 201-204.
- Flaherty, J., & Brown, R. B. (2010). A multilevel systemic model of community attachment: Assessing the relative importance of the community and individual levels. *American Journal of Sociology*, *116*(2), 503-542.
- Frisby, W., & Getz, D. (1989). Festival management: A case study perspective. *Journal of Travel Research*, 28(1), 7-11.
- Getz, D. (2008). Event tourism: Definition, evolution, and research. *Tourism Management*, 29(3), 403-428.
- Gratton, C., & Preuss, H. (2008). Maximizing Olympic impacts by building up legacies. *The International Journal of the History of Sport, 25*(14), 1922-1938.
- Gursoy, D., Chi, C. G., Ai, J., & Chen, B. T. (2011). Temporal change in resident perceptions of a mega-event: The Beijing 2008 Olympic Games. *Tourism Geographies*, 13(2), 299-324.
- Hall, C. M. (1997). Mega-events and their legacies. *Quality management in urban tourism*, 75-87.
- Hiller, H. H. (2000). Mega-events, urban boosterism and growth strategies: an analysis of the objectives and legitimations of the Cape Town 2004 Olympic Bid. *International Journal of Urban and Regional Research*, 24(2), 449-458.
- Hiller, H. H., & Wanner, R. A. (2011). Public opinion in host Olympic cities: The case of the 2010 Vancouver Winter Games. *Sociology*, 45(5), 883-899.
- Homafar, F., Honari, H., Heidary, A., Heidary, T., & Emami, A. (2011). The role of sport tourism in employment, income and economic development. *Journal of Hospitality Management and Tourism, 2*(3), 34-37.
- Horne, J., & Manzenreiter, W. (2006). An introduction to the sociology of sports mega-events. *The sociological review*, 54(s2), 1-24.
- Hritz, N., & Ross, C. (2010). The perceived impacts of sport tourism: an urban host community perspective. *Journal of Sport Management*, 24(2), 119-138.
- Kaplan, D. (2009). *Structural equation modeling: Foundations and extensions* (Vol. 10). Thousand Oaks, CA: Sage.
- Kaplanidou, K. (2012). The importance of legacy outcomes for Olympic Games four summer host cities residents' quality of life: 1996–2008. European Sport Management Quarterly, 12(4), 397-433.
- Kaplanidou, K., Karadakis, K., Gibson, H., Thapa, B., Walker, M., Geldenhuys, S., & Coetzee, W. (2013). Quality of life, event impacts, and mega-event support among South African residents before and after the 2010 FIFA world cup. *Journal of Travel Research*, 52(5), 631-645.

- Kasarda, J. D., & Janowitz, M. (1974). Community attachment in mass society. American sociological review, 328-339.
- Kim, H. J., Gursoy, D., & Lee, S.-B. (2006). The impact of the 2002 World Cup on South Korea: Comparisons of pre-and post-games. *Tourism Management*, 27(1), 86-96.
- Kim, S. S., & Petrick, J. F. (2005). Residents' perceptions on impacts of the FIFA 2002 World Cup: the case of Seoul as a host city. *Tourism Management*, 26(1), 25-38.
- 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.
- Kim, W., & Walker, M. (2012). Measuring the social impacts associated with Super Bowl XLIII: Preliminary development of a psychic income scale. *Sport Management Review*, 15(1), 91-108.
- Kline, R. B. (2011). *Principles and Practice of Structural Equation Modeling. Third Edition*. New York, NY: Guilford.
- Lee, C.-K., Mjelde, J. W., & Kwon, Y. J. (2017). Estimating the economic impact of a megaevent on host and neighbouring regions. *Leisure Studies*, *36*(1), 138-152.
- Lepofsky, J., & Fraser, J. C. (2003). Building community citizens: Claiming the right to place-making in the city. *Urban studies*, 40(1), 127-142.
- Li, X., Hsu, C. H., & Lawton, L. J. (2015). Understanding residents' perception changes toward a mega-event through a dual-theory lens. *Journal of Travel Research*, 54(3), 396-410.
- Malfas, M., Houlihan, B., & Theodoraki, E. (2004). Impacts of the Olympic Games as megaevents.
- Misener, L., & Mason, D. S. (2006). Creating community networks: Can sporting events offer meaningful sources of social capital? *Managing Leisure*, 11(1), 39-56.
- Müller, M. (2015). What makes an event a mega-event? Definitions and sizes. *Leisure Studies*, 34(6), 627-642.
- Osborne, S. P. (1992). The quality dimension. Evaluating quality of service and quality of life in human services. *The British Journal of Social Work*, 22(4), 437-453.
- Preuss, H. (2007). FIFA World Cup 2006 and its legacy on tourism. *Trends and issues in global tourism 2007*, 83-102.
- Ritchie, J. B., & Smith, B. H. (1991). The impact of a mega-event on host region awareness: A longitudinal study. *Journal of Travel Research*, *30*(1), 3-10.
- Roche, M. (2002). The Olympics and Global Citizenship'. Citizenship Studies, 6(2), 165-181.
- Schalock, R. L. (1996). Reconsidering the conceptualization and measurement of quality of life. *Quality of life*, 1(9), 123-139.
- Sobel, M. E. (1987). Direct and indirect effects in linear structural equation models. Sociological Methods & Research, 16(1), 155-176.
- Theodori, G. L., & Luloff, A. E. (2000). Urbanization and community attachment in rural areas. *Society & Natural Resources*, 13(5), 399-420.
- Yang, J., Zeng, X., & Gu, Y. (2010). *Local residents' perceptions of the impact of 2010 EXPO*. Paper presented at the Journal of Convention & Event Tourism.