# Support for the 2014 FIFA World Cup and the 2016 Olympic Games

## Claudio M Rocha[1] & Valdir J Barbanti[2]

## Abstract

The purposes of this research were (a) to explore and describe the relationships relative to the evaluation of the work of the organizers, expected legacy, and support for hosting the 2014 World Cup (WC) and the 2016 Olympic Games (OG); and (b) to compare Brazilians' support for these two events. Social exchange theory (Blau & Scott, 1962) supported three structural models. Results indicated that Brazilians college students ($n$ = 914) do not strongly support the country's hosting of either the 2014 WC or the 2016 OG. They also do not believe the organizers adequately prepared the country to host the events, and, subsequently, do not have high positive legacy expectations. Mediated models indicated that higher perceptions of the work of the organizersin preparation for the sport mega-events predicted more positive legacy expectations of these events, and subsequently, larger intentions to support the events. Significant indirect effects indicated that a fully mediated model might be useful to describe relationships among intentions of support, expected legacy, and evaluations of the work of the organizers in preparing to host sport mega-events. Implications for theory and practice are discussed.

**Keywords**: FIFA World Cup, legacy, Olympic Games, support

## 1. Introduction

Sport mega-events have been largely used as instruments to market nations around the world mainly because of the efficacy of such events in boosting tourism and consequently promoting sustainable development of the host countries (Ma, Egan, Rotherham, & Ma, 2010). Developing nations have recently started to bid and host sport mega-events to reposition themselves as tourist destinations.

---

[1] Assistant Professor at School of Physical Education and Sport of Ribeirao Preto, University of Sao Paulo, Brazil. E-mail: rocha.7@usp.br, phone: + 1 413-404-2250
[2] Professor at School of Physical Education and Sport, University of Sao Paulo, Brazil. E-mail: barbanti@usp.br

For example, China hosted the 2008 OG in Beijing, Russia hosted the 2014 Winter OG in Sochi, and Brazil will host the 2016 OG in Rio de Janeiro. In order to provide positive international exposure to the host, sport mega-events depend on popular support(Getz & Fairley, 2004). As the media reports local residents' support for an event, tourists create a feeling of safety to visit the host country (Toohey, Taylor, & Lee, 2003). Therefore, not by chance, sport governing bodies responsible for sport mega-events look for strong local residents' support before and after granting countries and cities the right to host them(Cashman, 2002).

Therefore, organizing committees and the government of the hosting city/country are strongly looking for local residents' support. For example, in 2003, the city of Vancouver held a plebiscite to gauge and, consequently, promote local residents' support for the 2010 Winter Olympic Games (Boykoff, 2011). Brady (2009) stated that between 2006 and 2008, the Chinese government employed propaganda strategies to promote mass distraction from actual social problems such as unemployment, inflation, environmental degradation, and corruption, and foster local residents' support for the 2008 Olympic Games. Gursoy and Kendall (2006)affirmed that ignoring local residents' support can have serious negative impacts on the organization of sport mega-events, because the media tends to explore clashes between people and organizers. Besides, organizers depend upon the goodwill of people, who are supposed to serve as volunteers and cope with natural disturbances to their normal lives resulting from hosting the event(Giannoulakis, Wang, & Gray, 2008; Hyejin, Konstantinos, & Stephen, 2009).

In order to promote sustainable development, sport mega-event organizers should know not only the level of local residents' support, but also the reasons behind such support(Ritchie, Shipway, & Cleeve, 2009).As such, this research draws on social exchange theory (Blau & Scott, 1962), to propose that perceptions of positive legacies and the work of the organizers in preparation for staging are two important antecedents of popular support for sport mega-events. Specifically, the purposes of this study were (a) to explore and describe the relationships relative to the evaluation of the work of the organizers, expected legacy, and support for hosting the 2014 World Cup (WC) and the 2016 Olympic Games (OG); and (b) to compare Brazilians' support for these two events.

## 2. Review of Literature

### 2.1. Social exchange theory

Social exchange theory(Blau & Scott, 1962) posits that human relationships are based on potential exchanges, i.e., people engage in relationships with other people or organizations (Levine & White, 1961) because they expect to receive something valuable in exchange for the time and effort they put into the relationship. Based on this theory, people reciprocate positively or negatively to what they receive in any relationship (Blau, 1964).Previous studies have shown that residents are able to evaluate the benefits of hosting sport mega-events and therefore use this to support (or not) the event in their communities(Deccio & Baloglu, 2002; Kim & Petrick, 2005; Waitt, 2003). These scholars have proposed that residents *exchange* support for positive legacies (in post-event studies) or for expectations of positive legacies (in pre-event studies).

Gursoy and Kendall (2006) and Deccio and Baloglu(2002) used social exchange theory as the theoretical foundation in their investigations of support for the 2002 Winter OG in a post- and pre-event stage, respectively. Both investigations tested a model with direct effects from perceptions of legacies (i.e., potential costs and benefits) to support for the 2002 Winter OG in Salt Lake City. Waitt(2003)also drew on social exchange theory to affirm that residents who perceive improvements totheir social and economic well-being (i.e., positive legacies) as a consequence of hosting an event tend to evaluate the event as positive. Gursoy and Kendall (2006) noted that many other sport event investigations (e.g., Delamere, Wankel, & Hinch, 2001; Fredline & Faulkner, 2001; Fredline, Jago, & Deery, 2003) had their theoretical basis in social exchange theory, as they assumed that individuals are likely to have positive attitudes toward an event if they believe they will gain some benefits in the relationship with organizers and local governments. Based on the literature, we argue that residents of Brazil will support the sport mega-events in the country, if they perceive positive legacies will be derived as a consequence of the hosting process.

## 2.2. Legacies of Sport Mega-Events

Considering the context of social exchanges, legacy is a key concept in understanding the intentions of residents to support a sport mega-event in their communities.

Sport event legacy is defined as "planned and unplanned, positive and negative, tangible and intangible structures created for and by a sport event that remain longer than the event itself" (Preuss, 2007, p. 211).This definition has been illustrated by "the legacy cube", which includes three frames: planning, tangibility, and positiveness. Dickson, Benson, and Blackman(Dickson, Benson, & Blackman, 2011) criticized the cube representation inasmuch as it does not consider frames of time and space. These authors have argued that by disregarding time and space frames, the cube ignores two of the most important variables to assess legacy, i.e. where and for how long the legacy is expected to last. Dickson et al. proposed "the legacy radar", which includes six frames: planning, tangibility, structure, cost, spatial impact, and time frame.

Usually, three dimensions of legacy are examined in empirical studies: economic, social, and environmental (Hritz & Ross, 2010; Kim & Petrick, 2005; Yoon, Gursoy, & Chen, 2001).However, Preuss and Solberg (2006) proposed six dimensions for sport mega-event legacy: economic, tourism, environmental, cultural, psychological, and political. Based on these previous works, we proposed that seven dimensions of legacy should affect people's support for a sport mega-event: economic, tourism, environmental, structural, social, cultural, and psychological. Relative to social exchanges, local residents would offer support in exchange for positive perceptions of legacy in all dimensions. On the other hand, residents would not offer strong support if they doubt the positive legacies for the local community.

As noted by Dickson et al. (2011), even the International Olympic Committee (IOC) has recently acknowledged that "defining legacy was difficult and that the concept had a number of meanings" (p. 288). This difficulty may explain some inconsistencies regarding the use of the term *legacy*. For instance, there is no clear agreement whether all leftovers of sport mega-events should be considered legacies.

Sport event scholars have formed two groups with different opinions. The first group considers that impacts and legacies are different concepts (e.g., Hiller & Wanner, 2011; Jones, 2001). For this group, not all leftovers are legacies. However, a second group considers that impacts and legacies are synonymous (Dickson et al., 2011; Preuss & Solberg, 2006; Preuss, 2007). In this research, we followed this second group and defined legacy after Preuss (2007). We understand that etymologically the word legacy means "property by will" (Preuss, 2007, p. 209). Therefore, if we take the word origin, not all leftovers should be considered legacy, only that left by will. However, for the second group of authors, the etymological definition of legacy is not satisfactory to represent the actual scope of sport mega-event legacy. The opposite terms (e.g., planned and unplanned) in Preuss' definition have a clear intention to encompass all possible leftovers of sport mega-events.

## 2.3. The Work of the Organizers

In contexts where people need to express opinions about desired ends, they tend to rely on present concrete attributes (means) to form their opinions. For instance, in tourism destination research, travelers use place attributes (means) to evaluate future benefits (ends) of choosing a certain tourist destination (e.g., Klenosky, 2002). In our study, positive legacies are the desired ends of two sport mega-events. We now propose that the work of the organizers represent valuable means to evaluate such desired ends. Using the means-end chain proposition (Gutman, 1982), we hypothesized that people would use the work of the organizers to prepare for the events as concrete attributes in order to express their expectations about positive legacies and their support intentions.

We conceptualized the work of the organizers as the basic work that is supposed to be conducted by the local government and organizing committees before sport mega-events in order to prepare cities/country to receive the events and a large number of tourists. This is an important concept because before the event, expectation of positive legacies is a forecast exercise. Considering that this research was conducted three years before the 2014 WC and five years before the 2016 Olympic Games, evaluations of the work of the organizers in preparation for the events might constitute an important antecedent to explain not only intentions of support, but also expectations of positive legacies.

Local organizers have to accomplish many duties in preparation for hosting sport mega-events. Such duties include, but are not limited to, improvements in transportation and communication systems; construction/improvement in sport arenas, parking lots, lodges, and parks; and selection and training of security personnel (Chelladurai & Madella, 2006). Considering the period of investigation, we focused on those duties that demand more time to be accomplished and are fundamental for the success of sport events. These duties include construction of sport venues, transportation improvement, means of communication improvement, security strategies, and personnel recruitment, selection and training. In previous investigations, residents' evaluations of the work of the organizers in preparation to host sport mega-events have affected their support intentions(e.g., Zhou & Ap, 2009).In the current investigation, we also expect support for the event to be a positive reciprocity whenever the residents perceive the work of the organizers as somehow positive and beneficial for themselves and for their communities.

The difference between the current investigation and previous ones (e.g., Zhou &Ap, 2009) is that in our research we test the mediator role of expectations of positive legacies between the work of the organizers and support. That is, people's decision to support the event is affected not only by the work of the organizers done in preparing for it, but also by *something* that is supposed to stay *after the event* and make life in the hosting community better.

## 2.4. Support for Sport Mega-Events

In previous sport event investigations, event scholars have conceptualized *support* in its most popular meaning, that is, to agree with someone or to approve of something. For instance, Deccio and Baloglu(2002) have considered support simply as "the degree of support residents had for the Olympic Games" (p. 50). That is, the approval degree for hosting the Games in the local community represented their support. Other studies (e.g., Gursoy & Kendall, 2006; Waitt, 2003; Zhou & Ap, 2009) have applied the same general concept of support.In the current study, we conceptualized support in a similar way.

Broad support for sport mega-events has represented an important instrument of political and economic promotion of nations (Bob & Swart, 2009; Pillay, Tomlinson, & Bass, 2009). If the host nation wants to get all possible benefits from association with such events, organizers must understand what local residents think and get their support (Ritchie et al., 2009; Zhou & Ap, 2009). Therefore, many previous studies have investigated local residents' approval of hosting sport mega-events, such as the 2002 FIFA WC in Japan/Korea(Kim & Petrick, 2005), the 2006 FIFA WC in Germany (Ohmann, Jones, & Wilkes, 2006), the 2002 Winter OG in Salt Lake City (Deccio & Baloglu, 2002),the 2008 OG in Beijing (Zhou & Ap, 2009), and the 2012 OG in London (Ritchie et al., 2009). Approaching different research questions, all the above investigations supported the idea that residents of the hosting countries will be most impacted by sport mega-events, and, as such, their support is vital to organizers.

Due to the importance and difficulty to get popular support, some scholars have conducted research on public opinion about sport mega-events in different moments of the preparation and staging process(e.g., Hiller & Wanner, 2011). Considering that the organization of sport mega-events is a complex, time- and money-consuming process, some have started to survey local residents five years or more before the event (e.g., Ritchie et al., 2009). Knowing people's perceptions about the event in early stages of the preparation can help organizers make decisions and improve people's involvement during the process. Moreover, the opinion of residents about the event can change over time (Ritchie et al., 2009). Researchers have found different levels of enthusiasm, pride, and support in different moments of the preparationprocessfor sport mega-events(Mihalik & Simonetta, 1999; Waitt, 2003). Taking into account these previous studies, in the current investigation we investigated Brazilians' support for sport mega-events three years before the 2014 FIFA World Cup and five years before the 2016 Olympic Games.
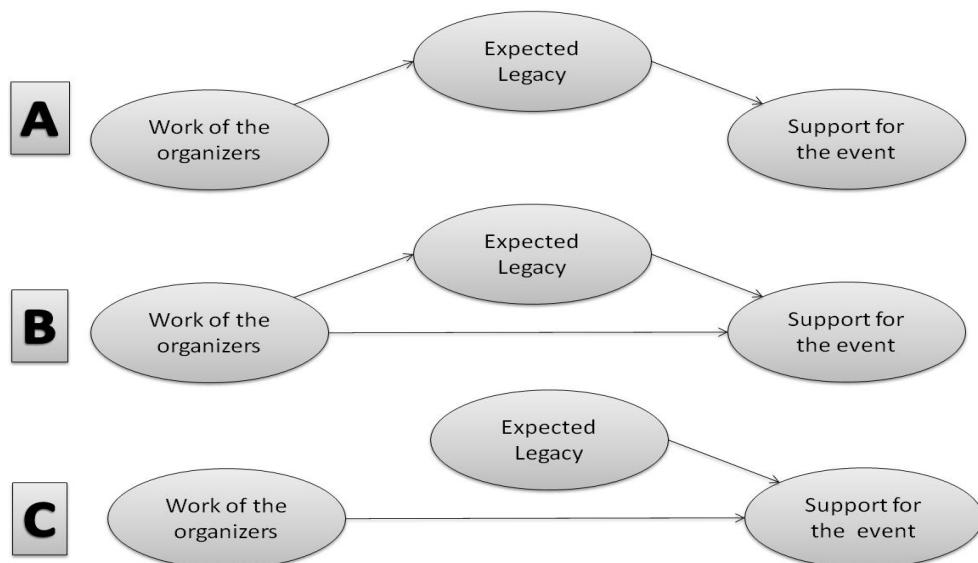
## 2.5. Structural Relationships on Support for Sport Mega-Events

So far scholars have devoted time and effort to investigate people's support for sport mega-events(Kaplanidou & Karadakis, 2010; Ritchie et al., 2009; Zhou & Ap, 2009).

However, few investigations have explored possible antecedents of such support. Two exceptions were the studies of Deccio and Baloglu (2002) and Gursoy and Kendall (2006), which investigated some perceived benefits as antecedents of support from a non-host community for the 2002 Winter Olympics. Both studies opted to use more "general" variables – such as perceived opportunities and costs – as antecedents of local residents' support. However, in this study, we opted to use multiple and specific dimensions of legacy, which have been well accepted in the literature (Chalip, 2002; Hritz & Ross, 2010; Preuss & Solberg, 2006), as antecedents of attitudes of support. In using such measures this study can be more specific about what people really care about when they decide to support a sport event in their communities.

In order to do so, we proposed three structural models (Figure 1).In Model A – the fully mediated model – the relationship between evaluations of the work of the organizers and support is completely mediated by expected legacy. In Model B – the partially mediated model – the relationship between evaluations of the work of the organizers and support is partially mediated by expected legacy, which means that we added a direct effect from evaluations of the work of the organizers to support.

Both mediational models are based on the premise that expected legacy is directly affected by evaluations of the work of the organizers(Ritchie et al., 2009; Ritchie & Lyons, 1990). Expressing opinions about expected legacy is a forecasting exercise. Therefore, people should use some actual information about what organizers have done to achieve positive legacies, in order to express their opinion about expected legacy. To sum up, the mediational models foresee that evaluations of the work of the organizers affect intentions of support via expected legacy.



*Figure 1*: Three structural models: Model A – The fully mediated model; Model B – The partially mediated model; and Model C – Direct effects model

In Model C – the direct effects model – we proposed that only direct relationships exist between evaluations of the work of the organizers and expected legacy, on the one hand, and support, on the other. That is, this model assumed a non-directional relationship (i.e., a bidirectional correlation) between the work of the organizers and positive legacies – the two endogenous variables. All three models were based on the social exchange theory, which implies that the better respondents perceive the work of the organizers and expect future positive legacies; the more likely they are to support the event in their communities.

In other words, respondents are expected to reciprocate a good preparation job (the work of the organizers) and/or positive expectations about legacy for the host community in expressing support for the events.

This investigation is innovative in using expected legacy and evaluations of the work of the organizers as antecedents of support for a sport event. Moreover, comparing support from residents of the same country for the two largest sport mega-events is rarely possible, because nations usually bid to host either the OG or the FIFA WC but not both. High costs associated with hosting and high competition among candidates can explain why nations usually choose one big event to bid for. In investigating the 2014 WC and the 2016 OG in the same country, this study has potential to add important new knowledge to sport mega-events literature. Considering that Brazil is mostly known for its soccer team, we expected more excitement and support to be delivered to the 2014 WC when compared to the 2016 OG. However, the relationship among the variables in the model should not change based on the analyzed event.

## 3. Method

### 3.1. Participants and Procedures

For the present study, we surveyed Brazilian college students, who represent a key parcel of the local community for two reasons. First, fluency in English is a special concern in international Brazilian events because Brazil is considered a "low English proficiency" country (EF-EPI, 2012). College students are more likely to speak English, which will certainly be a very important asset during the events in Brazil, resulting in a better communication between tourists and locals. Second, college students have shown more interest in volunteering for sport mega-events than any other demographic group (Kim, Gursoy, & Lee, 2006). Zhuang and Girginov(2012) reported that about 84% of all volunteer applicants for the 2008 Beijing OG were college students. Indeed, students have been recognized as the "hard core" parcel of the volunteer programs for sport mega-events (Karkatsoulis, Michapoulos, & Moustakatou, 2005), because they have time, education, and energy to take part in such events. Zhuang and Girginov (2012) highlighted the importance of education to assert that college students represent an important human capital for sport mega-events.

A sample of 3,688 students in a large Brazilian university was randomly divided in two halves of the same size. The first half received a web-based questionnaire asking about the 2014 WC. The second half received a similar questionnaire asking about the 2016 OG. The statements in both questionnaires were identical; only the stems changed.

In the WC questionnaire, the stems for evaluation of the work of the organizers and expected legacy items read, respectively: "*In regard to the preparation for the 2014 FIFA World Cup, the organizers are…*" and "*Hosting the 2014 FIFA World Cup will help the whole country to…*". In the OG questionnaire, "the 2014 FIFA World Cup" was replaced by "the 2016 Olympic Games". Regarding the support scale, in the WC questionnaire, the stem for the items reads: "*Considering that Brazil will host the 2014 FIFA World Cup, please, express your level of agreement with the following statements*". In the OG questionnaire, "Brazil" was replaced by "Rio de Janeiro" and "the 2014 FIFA World Cup" was replaced by "the 2016 Olympic Games".

We opted to use students attending a university outside the host cities in order to increase chances that respondents would not be influenced by *city legacies*, when responding about *country legacies*. We focused on legacies and support *toward the country*, instead of toward the cities, in order to compare the two sport mega-events as one is hosted only by one city (the OG) and the other is hosted by twelve cities (the WC). Former editions of the OG hosted in developing countries showed that impacts have moved from the host city to the whole country (e.g., Kang & Perdue, 1994). Similar impacts are expected to Brazil (Gaffney, 2010).

Since Brazil was granted the right to host the events, WC and OG have become very popular subjects in the Brazilian media (radio, TV, internet, and newspapers). News about the events has become so frequent that, if you live in Brazil, it is almost impossible to ignore that the country will host those sport mega-events. Therefore, we are confident that college students had prior knowledge about the WC and the OG in Brazil. Nevertheless, in the invitation email, we informed that Brazil will host the 2014 WC and the 2016 OG. Besides that, respondents did not receive any specific education around the topic. We received 446 (26% considering that 142 emails bounced back) and 468 (27%, considering that 119 bounced back) usable questionnaires from the OG and WC samples, respectively. Respondents were mainly females (59.4% for OG sample; 62.4% for the WC sample) and were, on average, 24.9 (*SD* = 5.2) years old for both samples.

We compared early to late respondents to test for non-response bias (Miller & Smith, 1983). None of the variables showed statistically significant differences in either demographic characteristics or perceptions about the tested constructs suggesting non-response bias does not exist.

### *3.2. Measures*

Currently, there is no scale that measures legacy as a seven dimensional construct. Thus, we used Preuss and Solberg's (2006) dimensions as guidelines and created our own items. Based on the idea of "government" performance proposed by Zhou and Ap (2009), we proposed five constructs to measure the work of the organizers in preparation for the events and created our own items to measure the constructs. We created three items to measure support, based on the concept of support for sport mega-event presented in previous studies(Deccio &Baloglu, 2002; Gursoy & Kendall, 2006; Waitt, 2003; Zhou & Ap, 2009).

Following Dillman's (2000) guidelines, we sent our scales, subscales (dimensions), and assigned items to a panel of six experts (all sport management professors in American universities) to assess the content validity. Suggestions from these experts were used to modify the survey. The resulting surveys items can be found in Table 1.Scales used in the study were originally created in English. Then the questionnaire was translated into Portuguese by a Brazilian professor, who got his PhD from an American university and is fluent in English. A back translation by a second professor, also fluent in English, demonstrated that the integrity of all items was maintained. The final questionnaire contained three main sections, one for each latent variable – the work of the organizers, expected legacy, and support for the event. All items had the response format of a 7-point Likert scale ranging from 1 (*very strongly disagree*) to 7 (*very strongly agree*). Demographic questions were asked in the last section of the questionnaire.

### 3.3. Data Analysis

We tested the measurement and structural models via structural equation modeling (SEM) technique(Anderson & Gerbing, 1988). In the first step, we tested the measurement model through confirmatory factor analysis and verified the construct validity and reliability of the scales. As for the measures of model fit, we used the root mean square error of approximation (RMSEA), comparative fit index (CFI), and Tucker-Lewis index (TLI). For CFI and TLI, values higher than .90 are considered to have a close fit (Hair, Black, Babin, & Anderson, 2009). For RMSEA, values equal to or less than .06 indicate a close fit between the model and the data, and values equal to or less than .08 indicate a reasonable fit (Hu & Bentler, 1999). Construct validity was checked following Fornell and Larcker's(1981) procedures for convergent and discriminant validity. Internal consistency of the constructs was measured via Cronbach's alpha (Cronbach, 1951), and the reliability of the scales was gauged via Raykov'srho(Raykov & Marcoulides, 2011).

In the second step, using age and gender as control variables, we compared the proposed structural models regarding the same fit indexes described above. In addition, variance explained in the dependent variable (support) by the other variables in the model was used to select the most suitable structural model. Effect size and significance of each path coefficient were also used to assess the models. Finally, the indirect effects of both mediational models were analyzed, using product of coefficients (Sobel, 1982) and bootstrapping strategies (Bollen & Stine, 1990). In order to compare Brazilians' support for the two sport mega-events, we ran a one-way MANOVA, using all thirteen latent variables (seven subscales of expected legacy, five subscales of the work of the organizers, and the support scale) as dependent variables and the type of event (WC vs. OG) as the independent variable.

## 4. Results

### 4.1. Measurement Model

After testing the measurement model in a calibration sample, we dropped three items (one from each of the following subscales: economic, tourism, and environmental legacy) and tested the same model in a validation sample (MacCallum, Roznowski, & Necowitz, 1992).

Results of this analysis indicated close fit (RMSEA [90%CI] = .056 [.052; .059]; CFI = .958; TLI = .951; $\chi^2$/df = 2.40) for the measurement model in the validation sample. Close fit indices were also found in the measurement model tested in the OG sample (RMSEA [90%CI] = .059 [.056; .062]; CFI = .948; TLI = .940; $\chi^2$/df = 2.54) and in the WC sample (RMSEA [90%CI] = .057 [.054; .060]; CFI = .964; TLI = .958; $\chi^2$/df = 2.53).

Item wordings, factor loadings ($\lambda$), average variance extracted (AVE), internal consistencies (Cronbach's $\alpha$), reliabilities (Raykov's $\varrho$), and descriptive statistics of the variables are presented in Table 1.

Items loaded quite well in their assigned construct in both samples. Only one item (*Improve the quality of life of the population*, in the economic legacy subscale in the OG sample) loaded below .707. However, we did not delete this item because its content is important for the construct. Further, it loaded quite well in the WC sample and the reliability of the subscale was good in both samples. As a consequence of that factor loading, the AVE of the economic legacy subscale in the OG sample was slightly below .50. The AVE of the economic legacy subscale in the WC sample was .55. The AVE of all other subscales, in both samples, was large enough to guarantee convergent validity of these subscales. Moreover, none of the subscales failed Anderson and Gerbing's (1988) test for discriminant validity.

All scales presented good internal consistency for WC (Cronbach's alpha varying from .719 to .892) and OG (Cronbach's alpha varying from .717 to .908) samples. Likewise, all subscales presented good reliability measures for WC (Raykov's rho varying from .744 to .904) and OG (Raykov's rho varying from .722 to .909) samples.

## 4.2. Structural Models

We compared three plausible structural models (Table 2). All models presented close fit to the data, for both samples. The direct effects model (Model C) presented slightly better model fit indexes. However, we could not discard the mediation models (Models A and B) as good representations for the data for three different reasons. First, the total variance explained in the dependent variable in the fully mediated model ($R^2_{WC}$ = 52%; $R^2_{OG}$ = 44%) was larger than that explained in the partially mediated ($R^2_{WC}$ = 50%; $R^2_{OG}$ = 41%) and the direct effects ($R^2_{WC}$ = 50%; $R^2_{OG}$ = 41%) models. Second, the path coefficients from the work of the organizers (ORG)

**Table 1 – Item wordings, factor loadings ($\lambda$), average variance extracted (AVE), internal consistencies (Cronbach's $\alpha$), and reliabilities (Raykov's $\varrho$)**

| Factors | Items | FIFA World Cup Sample | | | | Olympic Games Sample | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | $\lambda$ | AVE | $\alpha$ | $\varrho$ | $\lambda$ | AVE | $\alpha$ | $\varrho$ |
| SVEN | | | 0.658 | 0.804 | 0.809 | | 0.632 | 0.791 | 0.791 |
| | Building suitable sport venues to host the event | 0.777 | | | | 0.783 | | | |
| | Improving sport venues to make them suitable for the event | 0.822 | | | | 0.854 | | | |
| | Investing money in sport venues that will be useful to the | 0.83 | | | | 0.74 | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| population | 3 | | | | 5 | | | |
| TRAN | | 0.754 | 0.871 | 0.869 | | 0.760 | 0.874 | 0.875 |
| Preparing airports to receive a large number of people | 0.853 | | | | 0.868 | | | |
| Improving the public transportation | 0.889 | | | | 0.871 | | | |
| Improving national roads | 0.863 | | | | 0.876 | | | |
| COMM | | 0.674 | 0.831 | 0.835 | | 0.670 | 0.815 | 0.819 |
| Supporting journalists who are covering the event | 0.803 | | | | 0.804 | | | |
| Make information about the event's preparation available | 0.810 | | | | 0.793 | | | |
| Giving precise information about the event's preparation | 0.850 | | | | 0.857 | | | |
| SECU | | 0.779 | 0.892 | 0.889 | | 0.821 | 0.908 | 0.909 |
| Preparing the police to deal with security issues during the event | 0.899 | | | | 0.915 | | | |
| Working to guarantee the event without major security problems | 0.864 | | | | 0.894 | | | |
| Getting ready to guarantee the safety of all people involved in the event | 0.884 | | | | 0.909 | | | |
| PERS | | 0.754 | 0.875 | 0.875 | | 0.742 | 0.871 | 0.874 |
| Preparing to recruit volunteers | 0.803 | | | | 0.801 | | | |
| Developing training programs to qualify volunteers | 0.909 | | | | 0.929 | | | |
| Hiring qualified professionals to work in the organization of the event | 0.890 | | | | 0.849 | | | |
| ECO_L | | 0.549 | 0.719 | 0.744 | | 0.485 | 0.717 | 0.722 |
| Attract more investments | 0.759 | | | | 0.707 | | | |
| Generate economic benefits for the population | 0.707 | | | | 0.727 | | | |
| Improve the quality of life of the population | 0.756 | | | | 0.653 | | | |
| TOU_L | | 0.567 | 0.757 | 0.762 | | 0.547 | 0.784 | 0.745 |
| Increase the number of tourists in the country | 0.715 | | | | 0.719 | | | |
| Improve the country's image as a tourism destination | 0.781 | | | | 0.790 | | | |
| Improve the quality of tourism attractions in the country | 0.761 | | | | 0.708 | | | |
| ENV_L | | 0.683 | 0.842 | 0.838 | | 0.636 | 0.826 | 0.813 |
| Boost waste recycling programs | 0.756 | | | | 0.725 | | | |
| Promote construction of green buildings | 0.875 | | | | 0.881 | | | |
| Reduce electrical energy wastage | 0.843 | | | | 0.778 | | | |
| STR_L | | 0.604 | 0.827 | 0.831 | | 0.586 | 0.809 | 0.816 |
| Build sport venues useful to the population | 0.731 | | | | 0.721 | | | |
| Improve airports | 0.760 | | | | 0.784 | | | |
| Improve the quality of the roads | 0.819 | | | | 0.781 | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Improve the public transportation | 0.795 | | | | 0.774 | | | |
| SOC_L | | 0.739 | 0.884 | 0.887 | | 0.736 | 0.861 | 0.872 |
| Boost grassroots sports in the country | 0.810 | | | | 0.827 | | | |
| Encourage youth to practice sports | 0.853 | | | | 0.827 | | | |
| Encourage people to exercise | 0.882 | | | | 0.881 | | | |
| Encourage people in general to practice sports | 0.892 | | | | 0.895 | | | |
| CUL_L | | 0.675 | 0.860 | 0.860 | | 0.681 | 0.843 | 0.846 |
| Promote a cultural exchange between tourists and local residents | 0.760 | | | | 0.746 | | | |
| Offer local residents the opportunity to know other cultures | 0.840 | | | | 0.782 | | | |
| Make the Brazilian culture well known around the World | 0.811 | | | | 0.872 | | | |
| Show that the Brazilian culture is worth knowing | 0.871 | | | | 0.891 | | | |
| PSY_L | | 0.616 | 0.856 | 0.853 | | 0.604 | 0.837 | 0.837 |
| Improve the pride of being Brazilian | 0.761 | | | | 0.756 | | | |
| Make people feel they are capable of doing great things | 0.812 | | | | 0.775 | | | |
| Foster citizenship behaviors among Brazilians | 0.767 | | | | 0.821 | | | |
| Make Brazilian more patriotic | 0.799 | | | | 0.755 | | | |
| SUPP | | 0.816 | 0.790 | 0.904 | | 0.775 | 0.855 | 0.876 |
| I support the 2014 WC/ the 2016 OG | 0.986 | | | | 0.957 | | | |
| I believe in the success of the organization of the 2014 WC/ the 2016 OG | 0.973 | | | | 0.917 | | | |
| I support government involvement in the 2014 WC/ the 2016 OG | 0.728 | | | | 0.753 | | | |

Note. SVEN - Sport Venues. TRAN – Transportation. COMM – Communication. SECU – Security. PERS – Personnel. ECO_L – Economic Legacy. TOU_L – Tourism Legacy. ENV_L – Environmental Legacy. STR_L – Structural Legacy. SOC_L – Social Legacy. CUL_L – Cultural Legacy. PSY_L – Psychological Legacy. SUPP – Support. to support (SUP) were not significant in either the partially mediated or the direct effects model ($\gamma$ = .069; $p$ = .135) for the WC sample. The same path coefficient was significant, but its effect size was quite small for the OG sample ($\gamma$ = .187; p < .001). Third, indirect effect (IND) from work of the organizers to support via expected legacy was significant in both the fully mediated ($IND_{WC}$ = .609; $p$< .001; $IND_{OG}$ = .390; $p$< .001) and the partially mediated ($IND_{WC}$ = .555; $p$< .001; $IND_{OG}$ = .301; $p$< .001) models. Therefore, the fully mediated model turned to be a good parsimonious representation of the structural relationships among the constructs under investigation.

**Table 2 – Fit indexes, variance explained and direct and indirect path coefficients for three structural models**

| | WC Sample | | | OG Sample | | |
|---|---|---|---|---|---|---|
| | Model A | Model B | Model C | Model A | Model B | Model C |
| RMSEA [90%CI] | .051 [.049;.054] | .052 [.049; .054] | .046 [.043; .048] | .052 [.049; .055] | .051 [.048; .054] | .049 [.047; .052] |
| CFI | .962 | .961 | .970 | .950 | .952 | .955 |
| TLI | .959 | .959 | .968 | .947 | .950 | .952 |
| $\chi^2/df$ | 2.23 | 2.24 | 1.97 | 2.21 | 2.15 | 2.09 |
| R2 | .52 | .50 | .50 | .44 | .41 | .41 |
| LEG on ORG | .660; p<.001 | .656; p<.001 | NA | .466; p<.001 | .451; p<.001 | NA |
| SUP on LEG | .705; p<.001 | .647; p<.001 | .646; p<.001 | .646; p<.001 | .515; p<.001 | .505; p<.001 |
| SUP on ORG | NA | .069; p=.135 | .069; p=.135 | NA | .187; p<.001 | .187; p<.001 |
| Indirect Effect SUP on ORG via LEG | .609; p<.001 | .555; p<.001 | NA | .390; p<.001 | .301; p<.001 | NA |

Note. Model A - Fully mediated model. Model B - Partially mediated model. Model C - Direct effects model. $R^2$ - variance explained in the dependent variable (support) by the other variables in the model.ORG - Work of the organizers. LEG - Expected legacy. SUP - Support for the event.

### 4.3. Comparing Support for the Events

Means and standard deviations (see Table 3) showed that Brazilians students (a) do not strongly support the country hosting either the WC ($M = 4.4$; $SD= 1.9$) or the OG ($M = 4.8$; $SD= 1.7$), (b) do not believe the organizers have done a great job of preparing for the events (means of the constructs varying from 3.3 to 4.0 in the WC sample, and from 3.6 to 4.4 in the OG sample), and (c) do not have a highly positive expectation of legacies (meansvarying from 2.9 to 5.1 in the WC sample, and from 3.1 to 5.2 in the OG sample).

Regarding the work of the organizers, the mean of all five dimensions was below the agreement point (5 in the 7-point Likert scale) for both events. Regarding legacy, the most optimistic expectation was related to tourism legacy for both events ($M = 5.1$, $SD= 1.2$ – for WC; and $M = 5.2$; $SD= 1.1$ – for OG). Respondents were most pessimistic about environmental legacy of the events ($M= 2.9$, $SD= 1.3$ – for WC; and $M = 3.1$; $SD= 1.2$ – for OG). Results of the omnibus test in the one-way MANOVA showed that the two groups of respondents (WC vs. OG) differed in support, expected legacy, and evaluations of the work of the organizers (Wilks' $\Lambda = .912$; $F(13,720) = 5.343$; $p< .001$; partial $\eta^2 = 0.088$; power = 1.0).

Given the significance of the omnibus test, the univariate main effects were examined. For univariate analyses, we control the Type I error inflation via Bonferroni correction. That is, instead of considering a *p*-value equal to or smaller than .05 as significant, we corrected this value based on the number of comparisons conducted and considered a *p*-value equal to or smaller than 0.004 as significant. Significant univariate main effects for event (WC vs. OG) were found for all five dimensions of the work of the organizers, for two dimensions of expected of legacy (social and cultural legacy), and for support (Table 3). Respondents rated the work of the organizers, perceptions of social and cultural legacy, and support higher for the OG as compared to the OG. Although significant differences were found, the effect size was quite small for all these comparisons (see reported $\eta^2$ in Table 3). Therefore, any conclusion about differences between the two groups of respondents (WC vs. OG) in their intentions of support, perceptions of social and cultural legacy, and evaluation of the work should be made with caution.

**Table 3 – Univariate main effects for event (World Cup vs. Olympic Games)**

| Dependent Variable | | Event | M | SD | SS | F | p | $\eta^2$ | Power |
|---|---|---|---|---|---|---|---|---|---|
| Work of the Organizers | Sport Venues | WC | 3.70 | 1.58 | 55.923 | 23.970 | <.001 | 0.032 | 0.998 |
| | | OG | 4.24 | 1.47 | | | | | |
| | Transportation | WC | 3.26 | 1.59 | 36.104 | 13.828 | <.001 | 0.019 | 0.960 |
| | | OG | 3.64 | 1.64 | | | | | |
| | Communication | WC | 3.88 | 1.51 | 23.642 | 11.096 | 0.001 | 0.015 | 0.914 |
| | | OG | 4.21 | 1.40 | | | | | |
| | Security | WC | 3.30 | 1.62 | 55.185 | 20.595 | <.001 | 0.027 | 0.995 |
| | | OG | 3.80 | 1.65 | | | | | |
| | Personnel | WC | 4.05 | 1.52 | 20.039 | 12.952 | <.001 | 0.017 | 0.949 |
| | | OG | 4.42 | 1.47 | | | | | |
| Legacies | Economic | WC | 4.21 | 1.17 | 5.053 | 4.022 | 0.045 | 0.005 | 0.517 |
| | | OG | 4.33 | 1.07 | | | | | |
| | Tourism | WC | 5.06 | 1.21 | 7.079 | 5.347 | 0.021 | 0.007 | 0.637 |
| | | OG | 5.20 | 1.08 | | | | | |
| | Environmental | WC | 2.90 | 1.31 | 7.656 | 4.723 | 0.030 | 0.006 | 0.583 |
| | | OG | 3.11 | 1.22 | | | | | |
| | Structural | WC | 4.27 | 1.42 | 5.710 | 3.015 | 0.083 | 0.004 | 0.411 |
| | | OG | 4.40 | 1.32 | | | | | |
| | Social | WC | 4.49 | 1.47 | 75.071 | 39.690 | <.001 | 0.051 | 1.000 |
| | | OG | 5.05 | 1.27 | | | | | |
| | Cultural | WC | 4.57 | 1.44 | 17.953 | 9.601 | 0.002 | 0.013 | 0.872 |
| | | OG | 4.80 | 1.30 | | | | | |
| | Psychological | WC | 4.09 | 1.40 | 11.252 | 6.054 | 0.014 | 0.008 | 0.690 |
| | | OG | 4.30 | 1.29 | | | | | |
| | Support | WC | 4.42 | 1.88 | 41.512 | 12.704 | <.001 | 0.017 | 0.945 |
| | | OG | 4.82 | 1.73 | | | | | |

## 5. Discussion

The purposes of the study were (a) to explore and describe the relationships among evaluation of the work of the organizers, expected legacy, and support for hosting the 2014 WC and the 2016 OG; and (b) to compare Brazilians' support for these two events. Drawing on social exchange theory (Blau & Scott, 1962), weproposed three structural modelsto investigate direct and indirect relationships among three constructs – work of the organizers, expected legacy, and support.

This research was conducted in a pre-stage phase of the preparation to host the 2014 WC and the 2016OG. Therefore, we could not count on actual evaluations of legacies. Rather, we counted on *expectations* of positive legacies to explain support for the events. Positive expectations of future have been described as a powerful instrument to create positive attitudes and behaviors in other contexts (Copeland, 1996). Results of this research confirmed that positive expectations can also be useful in the context of sport mega-events because a positive direct relationship existed between expectations of positive legacies and support. In this sense, we confirmed the usefulness of the social exchange theory, which supported models where expectations of positive legacies were exchanged by support for sport mega-events.

Direct effects from work of the organizers to support were either non significant (for the WC sample) or significant but very small in size (for the OG sample). Although we did not find large direct relationships between work of the organizers and support, work of the organizers happened to be an important variable to explain variance in support *indirectly*, via expected legacy. The fully mediated model turned to be the most efficient and parsimonious way to represent the structural relationships among the constructs. This is a new contribution from this investigation because mediational models and formal tests for indirect effects to explain variance in support for sport mega-events had not been proposed in the literature so far.

Moreover, using work of the organizers as an antecedent in mediational models improved the variance explained in support for sport events, when comparing this study with previous ones (Deccio & Baloglu, 2002; Gursoy & Kendall, 2006). This finding confirmed the hypothesis that people use*present* clues to evaluate *future* expected legacies. While previous studies (e.g., Deccio & Baloglu, 2002)have investigated the role of expected legacy in predicting support, this study went a step further and investigated the role of the actual work done by the organizers in preparation for hosting a sport event in predicting support for such events, via expected legacy.

Therefore, results of this research add to the literature in improving our understanding of how support is fostered in host communities. The relationship between support and expected legacy has been proposed in the literature where some investigations have reported positive legacies as *the desired end* of all sport mega-events (Dickson et al., 2011; Preuss, 2007).

Meanwhile, previous pre-event studies (e.g., Ritchie et al., 2009) have assumed that people would be able to forecast future legacies and, consequently, have not tested the possible means people use to evaluate future legacies. Our findings indicated that respondents somehow considered the work of the organizers in preparation for the events as a *means* to evaluate desired *ends* of hosting a sport mega-event, that is, positive legacies to the local community.

People have used concrete clues to create perceptions about future events in other contexts. For example, when consumers decide to buy a product, they consider product attributes to foresee future benefits they can get from buying it (Overby, Woodruff, & Gardial, 2005).Based on the means-end chain proposition (Gutman, 1982), respondents in this research might have behaved as "consumers" of sport mega-events as they used concrete clues to evaluate possible legacies and, consequently, deliver support. In other words, the respondents have harbored perceptions of desired ends (positive legacies) based on means (work done in preparation).

Additionally, this research sought to compare students in their support for the two largest sport events in the world. Considering that soccer is so important in Brazilian sport culture and it has even been compared to a religion in the country (Bellos, 2002), one could imagine that FIFA 2014 WC should receive more support than the 2016 OG among Brazilians. Additionally, FIFA WC was hosted in twelve different cities, which represents a better opportunity to spread the benefits to the whole country as compared to the 2016 OG which will be hosted in only one city. Contrary to all this, descriptive statistics showed that respondents expressed a little more support for the OG than for the WC. A multivariate analysis showed significant differences in support, expected legacy, and evaluations of the work of the organizers for the events (WC vs. OG), but results of follow-up univariate analyses indicated that the effect size of these differences was quite small. Thus, we proposed that any statement about differences should be made with caution. In fact, results seem to indicate that students expressed their concerns about positive returns from sport mega-events, disregarding the event. Being one the most educated segments of the Brazilian society, college students have access to information that the general population usually do not have (or do not even look for). The Brazilian and international press have often reported about corruption, diversion of money, social abuses, and delays in construction of facilities for both events(e.g., Moura, 2011; Romero, 2012).

Considering the WC was scheduled to occur sooner than the OG, more criticism has been directed toward this event. Thus, students might have become quite skeptical about positive effects of both events, but even more about the WC. As most of the previous studies about legacies and support were conducted in developed nations (e.g., Chien, Ritchie, Shipway, & Henderson, 2012; Hiller & Wanner, 2011; Ohmann et al., 2006; B. W. Ritchie et al., 2009), this research adds to the sport event literature as it sheds new light on the process of getting support for sport mega-events in developing countries. Considering that many developing countries recently got the rights to host sport mega-events (e.g., South Africa, Brazil, and Russia hosted/will host the 2010, 2014, and 2018 FIFA World Cup, respectively), knowledge produced by this investigation can be useful for sport event scholars, governments, and event managers as well.

Our findings showed that students of a developing country (Brazil) seemed to be a little bit more sensitive to opportunity costs of sport mega-events than residents of developed nations, which confirms Matheson and Baade's (2004) hypothesis that opportunity costs are higher for developing countries. Brazilian students seem less willing to deliver support when compared to London (Ritchie et al., 2009), Vancouver (Hiller & Wanner, 2011), or Salt Lake City's (Gursoy & Kendall, 2006) residents. We have to conduct this comparison with caution because we are comparing students in Brazil with residents in other countries.

From a practical point view, in order to improve support, it would be important to enhance the evaluations of the work of the organizers in preparation for the events. Organizers of the 2014 WC and 2016 OG should take some practical actions to enhance this evaluation, such as respecting the deadlines for construction of sport arenas and infrastructural improvements. At the same time, organizers should be concerned about construction and improvements that will become useful to the public as soon as possible. For example, transportation improvements are necessary to host mega-events and can be useful to local residents even before the event. In the present research, evaluation of improvements in transportation received the lowest scores when compared to all other duties of the organizers (see Table 1). Clearly, organizers should be concerned about having airports, roads, and public transportation ready years before the events, which could increase perceptions of legacy and support for the events. Checking the results more carefully, we can also note that another issue of people's concern was the safety and security involving the events. Safety and security is always matter of concern in Brazil. However, in times of big events, such concerns seem to be augmented. If organizers and the local government work together to reduce crime, disorder, and fear, people should feel more confident that sport mega-events can happen without major safety problems, and consequently, may express more positive attitudes and support for such events.

Another practical implication stemming from the results includes presenting clear and objective public reports that inform people what has been done, how much money has been used, and the benefits the Brazilian population will derive as a result. It is noteworthy that since January 2011, the Brazilian government has offered online balance sheets explaining expenditures in urban mobility, ports, airports, and sport venues related to the 2014 WC (http://www.copa2014.gov.br). However, people not directly interested in sport mega-events very rarely look for this type of information. Popular television and radio stations are the natural means for organizers to communicate about what they have done. However, a variety of other communication means could be also used (e.g., internet and social media). Even more specifically, considering the stratum of the population investigated in this study, organizers of the sport mega-events could go to universities and establish close contact with students and faculty.

These are important stakeholders, not only to serve as volunteers, but also to spread the news about what has been done to prepare the country to receive such important events. Faculty and university students are natural opinion leaders, who have great influence on the rest of population. To the best of our knowledge, organizers of both events have not made any effort so far to establish direct communication with Brazilian universities. Literature has supported such practical suggestions.

For instance, Chien et al. (2012) noticed that in the field of relationship management, publicity has been a powerful instrument in improving public opinion about sport mega-events. Ritchie et al. (2009) proposed a "proactive use of the media" to communicate community improvements to the residents and increase the overall support for the event.

### 5.1. Limitations and Future Research

While this study is the first to use a multidimensional conceptualization of legacy and examine its mediational role to explain support for sport mega-events, it has some limitations.

First, a purposive sample of students was used to investigate psychometric properties of the scales and, ultimately, to describe structural relationships among variables. Although the sample was quite large and measures to control for non-response error have been applied, results of the study cannot be extrapolated to the entire Brazilian population. Additionally, we investigated a sample of non-host city student residents only. Despite the fact that spillover impacts of mega-events are very important (Leeds, 2008), some impacts of hosting sport mega-events are better felt by residents of host cities. For example, most of the structural improvements are made in the host cities because they will receive large number of tourists. Therefore, ideally, future studies should ideally investigate a random sample of the host cities. Future investigations should also consider surveying different strata of the Brazilian society. According to the strategic constituencies approach (Connolly, Conlon, & Deutsch, 1980), effectiveness depends on multiple stakeholders' interests. Considering the dimension and the amount of money invested in OG and WC, support of multiple stakeholders is mandatory to obtain the best possible results. Some suggestions would be to hear the opinion of politicians, who play an important role in regard to use of public money, and businessmen, who could describe some impacts on their business as a consequence of the preparation and actual hosting processes.

In the current investigation we proposed only one antecedent and one mediator to explain variance in support. Although the present study model showed improvements in comparison to previous investigations (Gursoy & Kendall, 2006) in terms of variance explained, other variables may explain extra variance in support. In order to propose other antecedents for support, one could look to different theoretical frameworks. The social exchange theory has largely been used to explain support for sport mega-events(Kim et al., 2006; Ritchie et al., 2009; Yoon et al., 2001). However, some scholars (e.g., Pearce, Moscardo, & Ross, 1996) have preferred to use alternative theories to understand residents' attitudes. Pearce et al. have pointed that the social representation theory (Moscovici, 1981) offers a better theoretical background to understand residents' attitudes. This theory posits that attitudes are constructed based on the representations residents have about something (e.g., sport mega-events); such representations are formed from information from a variety of sources (e.g., media, social contacts). The use of social representation theory should indicate alternative antecedents for support, such as media influence, previous participation in sport events, and professional links with sport or tourism.

Previous studies have investigated both positive and negative facets of legacy (e.g., Kim & Petrick, 2005; Ritchie et al., 2009; Zhou &Ap, 2009).

However, in investigations testing specifically the role of legacy as an antecedent of support, Deccio and Baloglu (2002) and Gursoy and Kendall (2006) did not find support for the (negative) relationships between negative legacies(e.g., traffic problems) and support for a sport mega-event. Although previous studies have not found significant relationships between negative legacy and support, future studies on mega-events in Brazil should measure perceptions of negative legacy. As many facilities have been constructed from scratch for both the 2014 World Cup and the 2016 Olympic Games, negative impacts, such as disruption to daily live of local residents, debts from construction, and people displacement may have a negative effect on people's support.

This research was concerned with antecedents of support, but not with consequences of it. We considered support as the dependent variable of our study, based on previous investigations, which asserted that local residents' support is one of the most important variable when countries/cities want to organize sport events with positive impacts for the host community(e.g., Gursoy & Kendall, 2006; Ritchie et al., 2009). Therefore, we cannot say whether those who express attitudes of support will actively engage in political or social activism for the events. Nor can we say whether those less supportive will protest against the events, because we did not test it. This was beyond the scope of this investigation. Nevertheless, consequences of support (or lack of it) can be a very important topic for future studies. Moving from investigating attitudes' to behaviors' may help us understand the importance of popular support for organizing and staging sport mega-events, mainly in this new era, when social manifestations against such events seem to happen more frequently than ever. **6.**

## References

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. Psychological Bulletin, 103, 411–423.

Bellos, A. (2002). Soccer: The Brazilian Way. New York, NY: Bloomsbury.

Blau, P. (1964). Exchange and power in the social life. New York, NY: Wiley.

Blau, P., & Scott, W. R. (1962). Formal organizations: A comparative approach. San Francisco, CA: Chandler.

Bob, U., & Swart, K. (2009). Resident Perceptions of the 2010 FIFA Soccer World Cup Stadia Development in Cape Town. Urban Forum, 20(1), 47–59. Retrieved from http://dx.doi.org/10.1007/s12132-009-9052-2

Bollen, K. A., & Stine, R. (1990). Direct and indirect effects: Classical bootstrap estimates of variability. Sociological Methodology, 20, 115–140.

Boykoff, J. (2011). The anti-olympics. New Left Review, 67, 41–59.

Brady, A. (2009). The Beijing Olympics as a Campaign of Mass Distraction. The China Quarterly, 197, pp 1–24. doi:10.1017/S0305741009000058

Cashman, R. (2002). Impact of the Games on Olympic host cities. Centre d'Estudis Olímpics (UAB).                    Retrieved                    from http://olympicstudies.uab.es/lectures/web/pdf/cashman.pdf

Chalip, L. (2002). Using the Olympics to optimise tourism benefits. University Lecture on the Olympics.                    Retrieved                    from http://olympicstudies.uab.es/lectures/web/pdf/chalip.pdf

Chelladurai, P., & Madella, A. (2006). Human resource management in Olympic sport organisations (pp. xiii, 128). Champaign, IL: Human Kinetics. Retrieved from http://www.loc.gov/catdir/toc/ecip067/2006002435.html

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, 451–463.

Connolly, T., Conlon, E. J., & Deutsch, S. J. (1980). Organizational effectiveness: A multiple-constituency approach. Academy of Management Review, 5(2), 211–217.

Copeland, D. C. (1996). Economic interdependence and war: A theory of trade expectations. International Security, 20(4), 5–41.

Cronbach, L. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16(3), 297–334. Retrieved from http://dx.doi.org/10.1007/BF02310555

Deccio, C., & Baloglu, S. (2002). Nonhost Community Resident Reactions to the 2002 Winter Olympics: The Spillover Impacts. Journal of Travel Research, 41, 46–56. doi:10.1177/0047287502041001006

Delamere, T. A., Wankel, L. M., & Hinch, T. D. (2001). Development of a scale to measure resident attitudes toward the social impacts of community festivals, part I: Item generation and purification of the measure. Event Management, 7(1), 11–24.

Dickson, T. J., Benson, A. M., & Blackman, D. A. (2011). Developing a framework for evaluating Olympic and Paralympic legacies. Journal of Sport & Tourism, 16(4), 285–302.

EF-EPI. (2012). English Proficiency Index. Retrieved from http://www.ef.com.br/epi/downloads/

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18, 39–50.

Fredline, E., & Faulkner, B. (2001). Residents' reactions to the staging of major motorsport events within their communities: A cluster analysis. Event Management, 7(2), 103–114.

Fredline, E., Jago, L., & Deery, M. (2003). The development of a generic scale to measure the social impacts of events. Event Management, 8, 23–37.

Gaffney, C. (2010). Mega-events and socio-spatial dynamics in Rio de Janeiro, 1919-2016. Journal of Latin American Geography, 9(1), 8–32.

Getz, D., & Fairley, S. (2004). Media management at sport events for destination promotion: Case studies and concepts. Event Management, 8(3), 127–139. doi:10.3727/1525995031436926

Giannoulakis, C., Wang, C. H., & Gray, D. (2008). Measuring Volunteer Motivation in Mega-Sporting Events. Event Management, 11, 191–200. doi:10.3727/152599508785899884

Gursoy, D., & Kendall, K. W. (2006). Hosting mega events: Modeling Locals' Support. Annals of Tourism Research, 33(3), 603–623. doi:10.1016/j.annals.2006.01.005

Gutman, J. (1982). A means-end chain model based on consumer categorization processes. Journal of Marketing, 46(2), 60–72. doi:10.2307/3203341

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). Multivariate data analysis (7th ed.). Upper Saddle River, NJ: Prentice-Hall.

Hiller, H. H., & Wanner, R. A. (2011). Public opinion in host Olympic cities: The case of the 2010 Vancouver Winter Games. Sociology, 45, 883–906. doi:10.1177/0038038511413414

Hritz, N., & Ross, C. (2010). The perceived impacts of sport tourism: An urban host community perspective. Journal of Sport Management, 24, 119–138.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling, 6(1), 1–55.

Hyejin, B., Konstantinos, A., & Stephen, R. D. (2009). Validation of the Revised Volunteer Motivations Scale for International Sporting Events (VMS-ISE) at the Athens 2004 Olympic Games . Event Management. doi:10.3727/152599509789659759

Jones, C. (2001). Mega-events and host-region impacts: Determining the true worth of the 1999 Rugby World Cup. International Journal of Tourism Research, 3, 241–251.

Kang, J. S., & Perdue, R. (1994). Long-term impact of a mega-event on international tourism ot the host country: A conceptual model and the case of the 1988 Seoul Olympics. Journal of International Consumer Marketing, 6(3-4), 205–225.

Kaplanidou, K., & Karadakis, K. (2010). Understanding the legacies of a host Olympic city: The case of the 2010 Vancouver Olympic Games. Sport Marketing Quarterly, 19, 110–117.

Karkatsoulis, P., Michapoulos, N., & Moustakatou, V. (2005). The national identity as a motivational factor for better performance in the public sector - The case of the volunteers of the Athens 2004 Olympic Games. International Journal of Productivity and Performance Management, 54, 579–594.

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, 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, 25–38.

Klenosky, D. B. (2002). The "pull" of tourism destinations: A means-end investigation. Journal of Travel Research, 40, 385–395. doi:10.1177/0047287502040000405

Leeds, M. A. (2008). Do good Olympics make good neighbors? Contemporary Economic Policy, 26, 460–467. doi:doi:10.1111/j.l465-7287.2007.00067.x

Levine, S., & White, P. E. (1961). Exchange as a conceptual framework for the study of interorganizational relationships. Administrative Science Quarterly, 5, 583–601.

Ma, S.-C., Egan, D., Rotherham, I., & Ma, S.-M. (2010). A framework for monitoring during the planning stage for a sports mega-event. Journal of Sustainable Tourism, 19(1), 79–96. doi:10.1080/09669582.2010.502576

MacCallum, R. C., Roznowski, M., & Necowitz, L. B. (1992). Model modifications in covariance structure analysis: The problem of capitalization on chance. Psychological Bulletin, 111, 490–504.

Matheson, V. A., & Baade, R. A. (2004). Mega-sporting events in developing nations: Playing the way to prosperity? The South African Journal of Economics, 72(5), 1085–1096.

Mihalik, B. J., & Simonetta, L. (1999). Host perceptions of the 1996 Summer Olympic Games-Year II. Festival Management and Event Tourism, 5, 9–19.

Miller, L. E., & Smith, K. L. (1983). Handling nonresponse issues. Journal of Extension, 21, 45–50.

Moscovici, S. (1981). On social representations. In J. Forgas (Ed.), Social cognition: perspectives on everyday understanding (pp. 181–209). London, UK: Academic Press.

Moura, R. M. (2011). Poder publico perde controle e obras da Copa ja estao R$ 2 bilhoes mais caras. O Estado de Sao Paulo. Sao Paulo. Retrieved from http://www.estadao.com.br/noticias/nacional,poder-publico-perde-controle-e-obras-da-copa-ja-estao-r-2-bilhoes-mais-caras,803792,0.htm

Ohmann, S., Jones, I., & Wilkes, K. (2006). The Perceived Social Impacts of the 2006 Football World Cup on Munich Residents. Journal of Sport & Tourism, 11(2), 129–152. doi:10.1080/14775080601155167

Overby, J., Woodruff, R. B., & Gardial, S. F. (2005). The influence of culture upon consumers' desired value perceptions: A research agenda. Marketing Theory, 5, 139–163. doi:10.1177/1470593105052468

Pearce, P., Moscardo, G., & Ross, G. (1996). Tourism community relationships. Oxford, UK: Pergamon Press.

Pillay, U., Tomlinson, R., & Bass, O. (2009). Development and Dreams: the urban legacy of the 2010 football World Cup. Cape Town, South Africa: HSRC Press.

Preuss, H. (2007). The conceptualisation and measurement of mega sport event legacies. Journal of Sport & Tourism, 12(3), 207–227.

Preuss, H., & Solberg, H. A. (2006). Attracting major sporting events: The role of local residents. European Sport Management Quarterly, 6, 391–411.

Raykov, T., & Marcoulides, G. A. (2011). Introduction to psychometric theory. New York, NY: Routledge.

Ritchie, B. W., Shipway, R., & Cleeve, B. (2009). Resident Perceptions of Mega-Sporting Events: A Non-Host City Perspective of the 2012 London Olympic Games. Journal of Sport & Tourism, 14, 143–167.

Ritchie, J. R. B., & Lyons, M. (1990). Olympulse VI: A post-event assessment of resident reaction to the XV Olympic Winter Games. Journal of Travel Research, 28, 14–23.

Romero, S. (2012). Slum dwellers are defying Brazil's grand design for Olympics. New York Times. Retrieved from http://www.nytimes.com/2012/03/05/world/americas/brazil-faces-obstacles-in-preparations-for-rio-olympics.html?pagewanted=all&_r=0

Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. Sociological Methodology, 13, 290–312.

Toohey, K., Taylor, T., & Lee, C.-K. (2003). The FIFA World Cup 2002: The effects of terrorism on sport tourists. Journal of Sport Tourism, 8(3), 186–196.

Waitt, G. (2003). Social impacts of the Sydney Olympics. Annals of Tourism Research, 30(1), 194–215. Retrieved from http://www.sciencedirect.com/science/article/pii/S0160738302000506

Yoon, Y., Gursoy, D., & Chen, J. S. (2001). Validating a tourism development theory with structural equation modeling. Tourism Management, 22, 363–372. Retrieved from http://www.sciencedirect.com/science/article/pii/S0261517700000625

Zhou, Y., & Ap, J. (2009). Residents' Perceptions towards the Impacts of the Beijing 2008 Olympic Games. Journal of Travel Research, 48, 78–91. doi:10.1177/0047287508328792

Zhuang, J., & Girginov, V. (2012). Volunteer selection and social, human, and political capital: A case study of the Beijing 2008 Olympic Games. Managing Leisure, 17, 239–256. doi:10.1080/13606719.2012.674397