Support for the 2016 Olympic Games in Rio de Janeiro - A Longitudinal Study

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Abstract 2015-144

Friday, June 5, 2015

20-minute oral presentation (including questions)

(Chaudière)

Ritchie, Shipway, and Cleeve (2009) suggested that sport mega-event organizers should know not only the level of local residents’ support but also what triggers such support, in order to do their jobs adequately. Drawing on social exchange theory (Blau & Scott, 1960), we proposed that expectations of positive legacies would trigger local residents’ support during preparation stages for hosting the 2016 Olympic Games (OG) in Rio. Local residents should exchange their support for positive legacies which are expected to accrue to the local community after the event. Legacy has been defined as all structures that are created for and by a sport event and stay after the event (Preuss, 2007). Positive legacies encompass all desirable results that are expected to stay for the host community as a consequence of investing in and hosting a sport mega-event. In pre-event investigations, legacy is an exercise of prediction. Therefore, we proposed that local residents may also exchange support for something more concrete at the time, such as the work conducted to prepare the city/country to stage the event. Previous investigations (e.g., Zhou & Ap, 2009) have found that residents’ perceptions about the work of the government in preparation for hosting OG affected their support intentions. Therefore, we designed a partially mediated model where the work of the government (antecedent) affects the local residents’ support (dependent variable) directly or indirectly via expectations of positive legacies (mediator) which, in turn, affects local residents’ support directly.

Considering that the preparation process for hosting OG takes about seven years (from winning the bid to staging the event), residents’ support toward the event can change over time (Ritchie et al., 2009). So can the relationships between support and the factors that trigger it. Although information about how support change over time has been considered as fundamental to guide the work of sport mega-event organizers (Ritchie & Smith, 1991; Waitt, 2003), very few longitudinal studies have been conducted in this context. In a trend study, Mihalik and Simonetta (1999) found that while residents’ support for the 1996 OG did not change, perceptions of positive impacts did change over a period of five years before the Games. Kim, Gursoy, and Lee (2006) found that Koreans held significantly higher perceptions of positive impacts before the 2002 FIFA World Cup than after the event. They did not test any antecedents for such perceptions of impacts. Waitt (2003) conducted the only research using a true longitudinal method to investigate residents’ attitudes change toward a sport mega-event. Waitt examined the changes in residents’ enthusiasm toward the Sydney OG between 1998 and 2000, and found that enthusiasm increased over time. This increase in enthusiasm was not affected by demographic variables (education, income, and employment). In the present study, instead of focusing on demographic variables (which were used as control variables), we proposed to investigate some possible antecedents of local residents’ support and how the relationships among these variables vary over time. Consequently, the purpose of this research was twofold: (1) to compare Rio de Janeiro residents’ (a) evaluations of the work done by the government, (b) expectations of positive legacies, and (c) support for the 2016 OG in two different times – four and two years before the Games; and (2) to compare the structural relationships among these three constructs in those two time periods.

The advantage of the current investigation over former trend studies on attitudes toward mega-events (e.g., Kim et al., 2006) is the use of two probability samples, which were drawn using the same criteria of selection, in two distinct times. The first multistage (neighborhoods, residences, residents) stratified random sample of 900 Rio residents was surveyed in April 2012. The second random sample of the same size was surveyed in April 2014. A replacement of those residents who did not agree in participating happened based on city population quotas of gender, age, household income, and education. Sampling procedures implied in a margin of error of 3% at a confidence level of 95%. The scales, subscales, and items were previously evaluated by a panel of experts who confirmed their content validity. Work of the government was a 2nd order latent variable (LV), represented by three 1st order LV (use of public money, infrastructure, and security) and five items each. Perception of legacy was a 2nd order LV, represented...
by seven 1st order LV (economic, tourism, environmental, infrastructural, social, cultural, and psychological legacy) and four items each. Support was a 1st order LV represented by five items. The response format for all scales were a 7-point Likert scale ranging from 1 (very strongly disagree) to 7 (very strongly agree).

The measurement model showed good fit indices in 2012 (CFI = .954; TLI = .949; RMSEA [90% CI] = .052 [.050; 0.54]) and 2014 (CFI = .965; TLI = .961; RMSEA [90% CI] = .060 [.058; 0.61]). Both samples showed good internal consistency estimates (Cronbach’s alphas ranging from .766 to .945) and large-enough average variance explained (AVE varying from .50 to .93), indicating no concerns with reliability or validity. Using SEM, we tested our proposed model against other two models. The direct effects model fit the data better in 2012 (CFI = .957; TLI = .954; RMSEA [90% CI] = .047 [.045; 0.48]) and 2014 (CFI = .973; TLI = .972; RMSEA [90% CI] = .049 [.047; 0.50]). The total variance explained in the dependent variable (support for the 2016 OG) in this model was large in 2012 (R² = 65.3%) and 2014 (R² = 66.8%).

Results of a MANOVA showed significant main effects for time – 2012 vs. 2014 (Wilks’ lambda = 0.902; F = 17.53; p < .001; partial η² = 0.098; power = 1). The follow-up univariate analysis showed that the means of all variables in the study were significantly and consistently lower in 2014 when compared to 2012. Effect sizes (partial η²) ranged from 0.032 (environmental legacy) to 0.081 (support). Multiple-group CFA (Hu & Bentler, 1998) showed that measurement invariance existed between the two samples. Multiple-group SEM showed that the path coefficient from work of the government to support was invariant between 2012 and 2014 samples (γ1 = 0.371; p < .001). However, the path coefficient from expectations of positive legacy to support was not invariant, indicating a stronger relationship between these variables in 2014 (γ2 = 0.826; p < .001) when compared to 2012 (γ2 = 0.758; p < .001).

Results of the current research showed that evaluations of the work of the government, expectations of positive legacy, and support for the 2016 in Rio decreased from 2012 to 2014. These findings were surprising when compared to Mihalik and Simonetta (1999) and Waitt’s (2003) results, which reported a pattern of increase in positive attitudes toward the OG over time. Cultural and socioeconomic contexts may explain these differences. While both previous studies were conducted in developed countries, the current one was the first one to be conducted in a developing country. Additionally, this study adds to theory and practice in testing the relationship between plausible antecedents and support. Findings showed that evaluations of the work of the government and support did not change over time, but the relationship between expectations of positive legacies and support became stronger in 2014. From a practical point of view, organizers should focus on creating better expectations about what is going to stay after the 2016 OG in order to promote more support for the event. Considering the specific context of the 2016 OG in Rio, suggestions about how it can be done using the different dimensions of legacy proposed by this research will be provided in the presentation.