

Impacts and Implications of an Annual Major Sport Event: A Host Community Perspective

This study explores the impacts of the World Golf Championships HSBC Champions tournament in Shanghai, China as perceived by host community residents over the past ten years, and how those perceptions affected their attitudes towards the future hosting of this event. An empirical study was carried out and data collected from 1047 Shanghai residents using structured questionnaires. Multiple factor analysis identified six factors underlying the perceived impacts of the event. It was found that after over a decade of continuous staging, the WGC-HSBC Champions did not affect the life of most local residents due to their low awareness of the event. Despite that, the study also found that residents' positive perceptions led to their support for the future hosting of the event, which confirms the usefulness of social exchange theory in explaining residents' perceptions. Finally, implications for destination managers are discussed to ensure the needs of both visitors and residents are addressed.

Keywords: resident perception; mega-event strategy; sport event impact; golf; community perspective

This work was supported by the Fund for Fostering Academic Freshmen in the Liberal Art Field from Universities in Shanghai [grant number xsxr2013003], and the Shanghai Chenguang Project [grant number 11CG57].

1. Introduction

With stable economic growth over the past three decades and closer integration into international markets, major destinations in China, such as Beijing and Shanghai, are now joining in the competition for a place in the global city roster. In its 13th Five Year Plan (2016-2020), Shanghai, the largest city and the economic powerhouse of China with a population of 24 million, has formulated and implemented a strategy to develop itself into the world's leading center of commerce and finance, as well as one of the top tourist destinations in the world, by the year 2020 (Shanghai Municipal

Government, 2016).

Since this strategy was introduced, Shanghai has used a lot of different actions to pursue the above goal, including its policy for mega-events. The Shanghai World Expo 2010 has been the most significant mega event in Shanghai's mega-event strategy, with a direct investment of about 28.6 billion yuan (\$4.2 billion USD) and a record-breaking attendance of 73 million visitors (Qu, 2011). The Shanghai World Expo 2010 was only a one-off event; however, the mega-events policy is a part of the long-term strategic plan for Shanghai. Therefore, this policy also includes many annual major events. Certain types of annual major events have witnessed considerable growth during the last decade. Since Shanghai hosted the Tennis Masters Cup (TMC) in 2002, the city has hosted an increasing number of high-profile annual international sport events and gradually developed a pattern of six annual major sport events, including the Formula 1 (F1) Grand Prix, the Association of Tennis professionals (ATP) World Tour Master 1000, the World Golf Championships (WGC) HSBC (Hongkong and Shanghai Banking Corporation) Champions, the World Snooker Masters, the Shanghai International Marathon, and the International Association of Athletics Federation (IAAF) World Diamond League.

The mega-event strategy has been in place now for almost a decade. Given the considerable resources invested, it is necessary to analyze what benefits have resulted from this investment. The current literature is dominated by studies that have primarily focused on the impacts of the Shanghai World Expo 2010 (Ye, Scott, Ding, & Huang, 2012). Rigorous studies that evaluate the impacts of Shanghai's major events, including annual major sport events, are limited. However, as a city that has hosted over one quarter of China's international major sport events in recent years (Wang, 2008), Shanghai's experiences and achievements are not only important for the city itself, but

also may help to enlighten other destinations across China and other developing countries that are implementing similar strategies. Therefore, research on the impacts of Shanghai's annual major sport events is needed from both theoretical and practical perspectives.

When researching the impacts of major events, it is crucial to look at motives of a mega-event strategy in order to define the role of the major event within its specific socio-economic and political context. One of Shanghai's main ambitions in its mega-event strategy is to bring positive impacts to the life of its residents as evidenced by the main slogan of the Shanghai World Expo 2010 'Better City, Better Life' (Larsen, 2014). Accordingly, there is a need for research on local residents' perceptions towards the impacts of Shanghai's major sport events.

Many previous studies of mega-event strategy have been focused on a single perspective such as economic impact (Preuss, 2004). However, governments have tended to use mega-event strategies to achieve the goal of city development in a more comprehensive manner, integrating economic, social, cultural, environmental, brand, and sport development impacts. Consequently, there is a need for research to adopt a more comprehensive approach.

Even though there has been limited research on the impacts of Shanghai's annual major sport events, there has been no study related to the impacts, especially the leisure-related impacts, of both the sport of golf and golf sport events in China. No local resident perceptions' research to date has examined the WGC-HSBC Champions specifically. The pace of academic research is far behind the development of China's golf industry. According to the China Golf Industry Report 2015, the total numbers of golf courses has grown to 438, and the number of core golfers (those at least 18 years old and playing at least eight rounds per year) has grown to 390,000 (Chao Xiang

Group, 2015). In 2015, 136 national and international golf events were on the schedule of the China Golf Association, whereas in 2009, the total number was only 81- (China Golf Association, 2009; 2015). Given this growth in China's golf industry, more academic research is needed to fill the gap between literature and practice.

Coinciding with this growth in the golf industry in China, a number of international golf events have been held there, including the WGC-HSBC Champions event. This is a professional men's golf tournament sponsored by HSBC and was held successfully at the Sheshan Golf Club in Songjiang, a district of Shanghai, from 2005 to 2011. Initially, it was a standalone professional golf tournament and was only considered as a top international golf event in China. But from 2007, this event became one of Shanghai's top six annual major sport events with the Shanghai mega event strategy and in 2009 its status was elevated to become a World Golf Championships event.

After moving for one year to Mission Hills Golf Club in Shenzhen, the owner of the WGC-HSBC Champions moved the event back to Shanghai and claimed that this event would be held there permanently. This move was supported by the Shanghai Administration of Sport, who believe this event is one of the best proof that Shanghai is capable of hosting mega-events and the hosting of events improve the status and influence of Shanghai as a metropolitan city. This move saw the event increase its prize money to US\$8.5 million and its status was further elevated by becoming part of the PGA Tour's FedEx Cup schedule. All these changes have made this event in line with the other three World Golf Championships played in the United States, and a key part of the 2013 European Tour's Final Series (WGC-HSBC Golf Champions, 2013).

In consideration of the status of this event, the objective of this study was to explore the perceptions of local residents towards the impacts of an annual major sport event - the WGC-HSBC Champions. The research questions investigated were:

- (1) What are the basic level of awareness of the WGC-HSBC Champions professional golf tournament on local residents in Shanghai, China,
- (2) What are the attitudes of the impacts of the event on these local residents?
- (3) What are the attitudes towards hosting the WGC-HSBC Champions professional golf tournament in the future by local residents?
- (4) What are the factors that influence the perception of and support for the WGC-HSBC Champions professional golf tournament by local residents?

The first section of this article presents a review of the literature that emphasizes residents' awareness and perceptions, perceived benefits and costs of major sports events, measurement of perceptions, and a theoretical framework. Based on this literature review and the aforementioned research questions, the methodology used to answer the research questions is then described. Following the explanation of the findings, theoretical and managerial implications are presented.

2. Literature review

2.1 Awareness and perceptions of residents

In this research, awareness is defined as the recognition of the name of the WGC-HSBC Champions, and perceptions involve “the picking up of information about the world made available to the perceiver by various sorts of physical stimulation” (Schwartz, 2004, p. 93). In this context, the information, as a crucial stimulation, should be the primary focus of awareness. Some researchers have noticed this relationship and

investigated participants' awareness of events before assessing their perceptions. Liu (2013) asked foreign tourists to recall the name of Shanghai's major annual sport events. The result showed that the highest level of awareness was the Shanghai F1 Grand Prix (24.7%), while the awareness of the WGC-HSBC Champions was below 1%. Chen (2011) investigated local residents' awareness of eight annual tourism events in Macao and got a similar result. Both authors focused on the overall perceptions of all annual major events in general, so their research included respondents who could recall at least one annual major event. In other words, the participants who did not know the Macao Open Golf Tournament or the WGC-HSBC Champions, but knew other events, could also be involved in the research. However, Kaiser, Wolfing, & Fuhre (1999) indicated that actual awareness is a prerequisite to a person's perceptions and attitudes. Moreover, unlike Liu's and Chen's research, the current study aims to explore residents' perceptions towards the WGC-HSBC Champions specifically. Therefore, this study not only assessed residents' awareness of the WGC-HSBC Champions but also considered their awareness as the prerequisite of investigating their perceptions towards the impacts of this event.

The perceived success of an event is often determined by the enthusiasm of the local community (Gursoy, Kim, & Uysal, 2004). Furthermore, residents tend to think more about whether the hosting of the event has been worth it after the event had finished (Hiller & Wanner, 2011). Therefore, understanding the perceptions of locals, as well as the factors that influence their perceptions and supporting attitudes, is crucial in evaluating the success of an event and achieving favorable support for it. Although a number of studies have examined the impacts of major sport events on the host community (Ye, et al., 2012), most of these previous research projects have taken place in western countries. China's traditional Confucian culture makes it distinguishable

from mostly western countries where the majority of previous research originated. Encouraged by traditional Confucian culture, Chinese citizens are more likely to follow the mainstream consensus values and to respect or tolerate their government (Chen, 2011; Liu, Broom, & Wilson, 2014; Zhou, 2010).

2.2 Perceived benefits and costs of major sport events

Economic impacts are considered as the main driver behind the rapid growth of major sport events (Crompton, 1999). However, it is argued that local authorities have paid too much attention to economic impacts and ignore social and cultural impacts of major events (Bull & Lovell, 2007). Residents' perceptions towards a major event can be influenced by perceived economic, social, and environmental benefits and costs (Ritchie, Shipway, & Cleeve, 2009).

Furthermore, many researchers have found that non-economic impacts are more related to the perceptions of residents as compared to economic impacts. Balduck, Maes, & Buelens (2011) found that economic and tourism development were not perceived by local residents as a benefit after the Tour de France, while cultural interest and consolidation was found as the significant predictor of the willingness of residents to host the event in the future. Likewise, personal experiences of residents were found to have a more significant positive correlation with the overall perceptions towards the impacts of major annual tourism events in Macao than economic impacts (Chen, 2011). Fredline and Faulkner (2000) examined the host community's attitudes to the impacts of the Gold Coast Indy in Australia and found that the most important benefits and costs from the perceptions of residents were community benefits and short-term negative impacts. Psychic income and social capital were found to be the most influential impacts on perceptions of the legacy of the 2008 Beijing Summer Olympic Games by Shanghai residents (Liu et al., 2014).

Golf is not only a sport but also a leisure activity. The non-economic impacts in most previous research did not include the leisure-related impacts, such as improving the participation. The current study suggests that it is necessary to explore the leisure-related impacts of this event. As a golf sport event, the WGC-HSBC Champions may involve the local community in different ways than other major sport events in general. For instance, this event may help to increase the awareness of golf, sports, and western culture, or to promote local residents' participation in golf. Thus, golf-related impacts of the WGC-HSBC Champions are included in the current study.

2.3 The effect of sport events on tourist destination branding

The effect of sport events on tourist destination branding has been researched across many perspectives including the areas of planning, implementation, management, and impact (Hall, 1992, Jago, Chalip, Brown, Mules, & Ali, 2010). Chalip and Costa (2005) found that sport events had affected on destination branding in various ways, with opportunities and risks. They also found while more and more sport events are chosen by marketing managers to enhance the tourist destination branding of the host community, the results were not satisfactory. The researchers believed that was due to the poor understanding of destination branding.

Previous studies have researched the impact of sport events on images of the host destination in order to provide practical suggestions for enhancing destination branding (Hallmann & Breuer, 2011, Hede, 2005, Kaplanidou, 2007). However, brand equity of a destination cannot be represented only by image, but also by its various dimensions including awareness, quality, and loyalty (Konecnik & Gartner, 2007). Parent and Séguin (2008) suggested that the image should refer to the perceived brand that is observed by external stakeholders, and brand should refer to the intended brand that reflects the central and distinct identity of the brand. In this study, the identity and

core value of destination branding should embody the theme of 'Better City, Better Life'.

Jago, Dwyer, Lipman, van Lill, & Vorster (2003) clarified what the responsibilities of destination and event marketers are when using an event in destination branding. One of the most important elements found in this research is community support. The research emphasized that the success of many events depends on the local communities. If local residents feel that they are involved in the event, their support will have a positive effect on tourists' impression on the destination. There is research to support community support as a critical element for destination branding (Fredline & Faulkner, 2000), and the contribution of community support has been reported in previous empirical studies (Barron & Rihova, 2011; Gallarza, Arteaga, Floristán, & Gil, 2009). In addition, there is research that investigates if community support is variable due to different situations within individual destinations (Fredline & Faulkner, 2002). However, there is limited information regarding how to win the support of local community. Therefore, it is necessary to investigate the perceptions of local community and find ways to win their support when using events as part of tourist destination branding. The research pays significant attention to the perception of tourists; while few focused on the perceptions of the local community. In addition, much of the research focuses on the one-off sport event in the short term, whereas the perceptions of the local community about regular annual sport events over the long run should be discussed.

2.4 Measuring the perceptions of the local community

The bulk of existing quantitative research on local community's perceptions has been conducted in three ways: bivariate, multivariate and a combination of both approaches (Andriotis & Vaughan, 2003). Here, bivariate refers to the technique

investigating the impacts of single factors, whereas multivariate examines the influence of multiple factors. In order to get a thorough understanding of the perceived impacts, both techniques were adopted in this research.

Single-factor analysis can be separated into an 'extrinsic' model and an 'intrinsic' model (Faulkner & Tideswell, 1997). The extrinsic model investigates macro-level impacts that affect residents' reactions in different stages and changes in residents' attitudes over time. However, all of the extrinsic factors were eliminated in this study, because it only investigated the perceptions associated with the impacts of an annual major sport event in a single period of time rather than in different periods.

In contrast to the extrinsic model, the intrinsic model recognizes the heterogeneity of the host community and acknowledges that the perceptions may vary according to the characteristics and circumstances of local communities (Faulkner & Tideswell, 1997). Andriotis and Vaughan (2003) listed key intrinsic factors that have been observed by various researchers, including socio-demographic characteristics (gender, age, education, and income), the length of residency, the distance that residents live from tourist zones, the involvement in tourism by the community, and the economic and/or employment dependence of the community on tourism. Instead of exploring the impacts of the above intrinsic factors that have been test in many previous studies (Fredline & Faulkner, 2000; Ohmann, Jones, & Wilkes, 2006), the current study tested a new intrinsic factor - participation in golf - in order to find leisure-related impacts of the WGC-HSBC Champions, as golf is also a leisure activity.

Factor analysis and cluster analysis are the two main multiple factor analysis techniques adopted to examine community attitudes (Andriotis & Vaughan, 2003). However, the concerns of these two techniques are different: the former focuses on the interrelationships between a large number of variables and the perceptions of local

residents, while the latter attempts to classify people according to their attitudes. The vast majority of research uses factor analysis, which is less influenced by the subjective judgment of researchers as compared to cluster analysis (Andriotis & Vaughan, 2003).

Research has found that multiple factors influencing the reaction of a host community to an event are varied, even for the same sport event or in the same host community. Kim and Petrick (2005) summarized the items influencing the attitudes of local residents on the impacts of the 2002 World Cup into eight factors: (1) tourism resource development and urban revitalization, (2) image enhancement and consolidation, (3) economic benefits, (4) interest in foreign countries or their cultures, (5) tourism infrastructure development, (6) negative economic perspective, (7) disorder and conflicts, and (8) traffic problems and congestion. In comparison, the 2010 FIFA World Cup investigated four factors: (1) local community impacts, (2) local social impacts, (3) local cultural and heritage impacts, and (4) global image and tourism (Hermann, Plessis, Coetzee, & Geldenhuys, 2013). Another study investigating the perceptions of Macao's residents showed they were influenced by five factors when perceiving the impacts of Macao Grand Prix: (1) social-psychological impacts, (2) society benefits, (3) society costs, (4) social life costs, and (5) physical impacts (Zhou, 2010). However, they were affected by seven different factors (community pride, personal gains, economic benefits, community life quality, environment negatives, cultural negatives and social services pressures), when assessing the impacts of eight major annual tourism events, including the Macao Grand Prix (Chen, 2011).

The inconsistent results of the various factor analyses indicate that it is difficult to identify any patterns to explain why certain factors are more or less important in the specific research. Nevertheless, the impact-item scales of previous research have provided valuable guidance for formulating the scale for this study.

2.5 Theoretical framework

Social exchange theory (SET) (Ap, 1992) and social representation theory (SRT) (Moscovici, 1982) are two main theories that have been used in the majority of research (Fredline and Faulkner 2000; Liu et al., 2014) to explain how local community perceive and react to the impacts of major events and tourism. Based upon the concept of the exchange relationship, social exchange theory (SET) examines the exchange of resources between individuals, or groups acting as single units (Thibaut & Kelley, 1959). It assumes that individuals are rational and will initiate exchanges on the basis of a subjective cost–benefit consideration (Preuss & Solberg, 2006). When individuals perceive the impacts positively, they are willing to enter into an exchange or may engage in supportive behaviors. Conversely, when they judge the costs to outweigh the benefits, they will not attempt to make any exchange (Kim & Walker, 2012). According to the above assumption of SET, the current study divided the impacts of the WGC-HSBC Champions into benefits and costs so that SET can be used to explain why residents harbor positive or negative perceptions towards the impacts of this event.

As defined by Moscovici (1982), social representations are the systems of the preconceptions, images, and values about a social object. SRT acknowledges the fact that when people encounter a new or unfamiliar event, they can use direct experiences, social interaction and the media as a reference point to turn the unfamiliar into the familiar (Fredline & Faulkner, 2000). Golf is not a mass sport in China and most local residents may not be the audiences for the WGC-HSBC Champions, therefore, it can be considered as an unfamiliar event to local residents. Accordingly, the above assumption is adopted in the current study to explain why local residents can express their perceptions towards this unfamiliar event and to provide guidance on how to make local residents familiar with the event.

Although the mechanisms of SET and SRT are different, both of them infer the relationship between residents' attitudes and their support for the event rather than actually measuring it, which required residents to report their support of tourism development directly and generated a model using regression analysis to test the relationship between residents' attitudes and their support (Andereck & Vogt, 2000). The results confirmed that the relationship between residents' attitudes towards the impacts of tourism, and their support for tourism development does exist. This model was used as the complement of SET in the current study.

3. Methodology

3.1 Questionnaire design

The questionnaire consisted of two parts. The first part was the awareness survey containing one question on the awareness by respondents of the WGC-HSBC Champions event, and three questions on background information (gender, age and golf participation). Only the residents who could at least recognize the name of the WGC-HSBC Champions were asked to continue to the second part of the survey.

The second part was the perception survey comprising 31 questions. The vast majority of the questions (30) comprised the impact-item scale of the WGC-HSBC Champions. The formulation of this impact-item scale is outlined below.

First, after an extensive literature review, the impact-item scale from the research of Fredline and Faulkner (2000) was chosen as the main research instrument. This study has been an important reference point to much relevant research exploring the impacts of major sport events from residents' perceptions (Ohmann et al., 2006). The impact-item scale has been directly adopted or used as a basis for a number of research studies (Antoniou, 2011), including studies examining the perceptions of residents in China (Zhou, 2010).

Secondly, this impact-item scale was sent to a panel composed of three experts from the sport event management field for review and discussion. The panel pointed out that the WGC-HSBC Champions in the current study is different from the Gold Coast Indy event in the research of Fredline and Faulkner (2000): the former is an annual sport event held in a golf club, while the latter is a tourism event held in the natural environment. Therefore, the items that did not conform to the characteristics of the WGC-HSBC Champions were eliminated. According to the above critical review of previous literature, the panel agreed that items specifically concerned with the special impacts of golf sport events, including the interests of foreign culture and their personal experience of sport and golf could be added to the scale. The items in the research of Balduck et al (2011) and Chen (2011) identified similar factors, which were used as guidance to formulate these special impacts items in this study.

By following the above steps, the final scale contained 30 items and was categorized into ten different sections: economic impacts; public spending on the event by the government; disruption to local residents; usage of public facilities; international city image; promotion of golf, sport and foreign culture; environmental impacts; source of entertainment; community impacts; and impacts on prices and service. The respondents were required to rate the extent to which they agreed or disagreed with each statement on a 5-point Likert scale range from 5 (strongly agree) to 1 (strongly disagree). The final question asked residents to declare their attitudes to whether they will support the hosting of the WGC-HSBC Champions in the future (yes, no, not sure).

The panel reviewed the instrument and believed it has covered the expected scope. A pilot survey was carried out with a non-random sample of 80 undergraduate students whose major were sport management. The reliability of each item was assessed using Cronbach's alpha coefficients, means, standard deviations and Cronbach's alpha

if-item-deleted statistics. The alpha scores ranged between 0.81 and 0.88 indicating that the scale items in the specified factors were internally consistent.

3.2 Data collection

Data was collected by six postgraduate students from a local university who were hired and trained to distribute the questionnaires to local residents at parks, supermarkets, and neighborhoods. There were three steps involved in the data collection. First, people were intercepted and asked if they are local residents and lived in the district where the interview was conducted. Second, a short face-to-face interview was then conducted with the target residents by using the first part of the questionnaire. Finally, the second part of the questionnaire was implemented as a short (5-6 minutes on average) self-administered survey to respondents who agreed to continue with the investigation.

A convenience sampling method was adopted in this study. Although considered as a non-probability technique, convenience sampling has been used in theoretical research and exploratory studies for its cost effectiveness (Pranic, Petric, & Cetinic, 2012). Additionally, this survey strictly controlled the sampling distribution of gender at the first part of the survey to ensure it reflected the actual gender proportion of local residents (nearly 1:1).

3.3 Analytical procedure

A series of statistical procedures were involved in this study, with all the data entered into SPSS 21.0 to conduct the various analyses. First, descriptive statistics were carried out for all survey items to get an overview of the survey results. Secondly, one-way ANOVA was used to examine the differences between golf participation and the 30 Likert scale dependent variables. Thirdly, a principal component factor analysis with varimax rotation was carried out to identify the multiple factors from 30 Likert scale statements. The significant Bartlett test of sphericity (sig. < .001) indicated that

sufficient correlations existed among the variables to proceed. During the analysis, two items were eliminated because they failed to meet the minimum factor loading criterion of 0.5. The Kaiser-Meyer-Olkin test of sampling adequacy was used to test the validity of the remaining data. The result of this test was a value of 0.873, which was high enough to allow factor analysis and indicated that both the number of variables and the sample size were appropriate. A one sample t-test was then conducted following the above exploratory factor analysis to reflect the levels of perceived impacts on different dimensions. Finally, a stepwise multi-regression analysis was conducted to identify the relationship between residents' attitudes about the impacts of the WGC-HSBC Champions and their support for the continuing hosting of this event in Shanghai.

4. Data Analysis

4.1 Profile of participants and their awareness of the WGC-HSBC Champions.

For the initial awareness survey, 1047 local residents in Shanghai, China participated. Shanghai has sixteen districts, which can be divided into three segments according to the location of traffic rings: the inner-ring, the middle-ring, and the outer-ring. To ensure equal representation, this research chose to survey residents from three districts within each segment. Districts were chosen at random with the exception of the Songjiang district, which is the host location of the event.

Table 1 summarizes the profile of study participants and their awareness level of the WGC-HSBC Champions in the awareness survey. Among all the respondents, 50.6% were male and 49.4% were female; 88.2% were aged between 18 and 59. Although the proportion of gender was controlled, slightly more respondents from the 18–34 age group were included in the survey. This limitation may be due to an Asian related reluctance of older adults to participate in surveys (Zhou, 2010). In terms of golf participation, most (98.2%) respondents had never played golf before.

The awareness survey showed that even after years of the event having been continuously held in the same location, 855 respondents could not recognize the name of the WGC-HSBC Champions. Hence over 80% of local residents had not heard about this event before, which in turn revealed that the awareness of the WGC-HSBC Champions was low.

Among the respondents who can recognize the name of the event, 56.7% were male, 43.3% were female; most of them were in the age of 18-34 (70.3%); 14.2% of respondents have played golf before and 1.4% participants played golf once a month.

Table 1. Demographic variables in first part of survey

4.2 Single factor analysis

The perceptions survey was offered to the 191 participants who, through their responses to the awareness survey, demonstrated familiarity about the WGC-HSBC Champions professional golf tournament. Nearly 74%, or 141 respondents, accepted the invitation to complete the perception survey, which took them approximately six minutes to finish.

Golf participation of respondents who can at least recognize the name of the WGC-HSBC Champions was much higher than the sample overall: 14.2% of the respondents had played golf before, and 1.4% of the participants played golf at least once a month. The results of the ANOVA shows that golf participation had little influence on the residents' attitudes (see Table 2), indicating that respondents of different golf participation frequency have approximately similar views.

Table 2. Mean scores and ANOVA test for golf participation.

4.3 Multiple factor analysis

In order to have a more comprehensive understanding of the impacts perceived by local residents, multiple factor analysis was conducted on the sample data. Table 3

shows the rotated component matrix and the significance of each impact item in relation to the six generated factors, which were loaded by the 28 items with eigenvalues of more than one and which explained 68.7% of the variance. The first factor, labeled personal benefits, contained nine impact items and explained the highest variance of all factors at 20.83%. The other five factors were entitled social benefits (5 items), political benefits (5 items), environmental costs (2 items), economic benefits (3 items) and social costs (4 items).

Table 3. Factor structure of perception variables.

4.4 Perceived benefits and costs of the WGC-HSBC Champions

This study used one-sample t-tests to reflect the level of perceived benefits and costs of the WGC-HSBC Champions on different dimensions. According to the quantitative value arrangement of the Likert scale in this study (1=strongly disagree, 5=strongly agree), 3 was chosen as the point of indifference.

Table 4 reveals that all benefits factors were significantly higher than the point of indifference, with factor 5 ('Economic Benefits') ranking highest, followed by factors 3, 2, 1, respectively. No significant difference was found between the costs factors and the point of indifference, indicating that residents have a neutral perception toward the cost of the event. This leads to the conclusion that, overall, respondents who can recognize the event, held positive perceptions towards the event.

Table 4. One-sample statistics for the impact dimensions and the point of indifference.

4.5 Residents' support for the future hosting of the WGC-HSBC Champions

Descriptive statistics show that over 70% of the respondents gave their support to the future hosting of this event whilst only 1.4% of the respondents were against it. The remaining 28.6% of the participants were neutral. According to the results of the

multi-regression analysis, there is a relationship between perceived factors and residents' support for hosting this event in the future. However, in predicting support for future hosting, not all of the attitude factors were significant. In Table 5, Factor 1 (Personal Benefits), Factor 6 (Social Benefits), Factor 3 (Political Benefits) and Factor 2 (social costs) were found as the significant predictors of residents' support for the event, while Factor 4 ('Environmental Costs') and Factor 5 ('Economic Benefits') did not affect their attitudes on this aspect. This model explained 21.5% of the variance in the dependent variable (see Table 5).

Table 5. Regression Analysis of perceived impacts factors on supporting future hosting.

5. Discussion

The main purpose of this study was to (1) evaluate the impacts of one of Shanghai's major sport events after nearly 10 years of continuous hosting from the perception of local residents, and (2) to provide for the first time a clear picture of how Shanghai's general population viewed and understood international golf events in China. This study used the WGC-HSBC Champions as an example and turned the above purpose into three specific research questions. The results of this study contribute to (1) addressing the research gap in both research field of mega-event strategy and the golf industry, and (2) enlightening the managers of mega-event strategy in Shanghai and other destinations.

According to the responses of participants, the WGC-HSBC Champions did not affect the life of most local residents due to the low awareness of the event across the whole sample. Specifically, several points can be drawn based on how local residents are aware of and perceive this event.

It is evident that the awareness of the WGC-HSBC Champions in the host community was low (18.3%), even after nearly 10 years continuous holding in the same place. This result is consistent with Chen (2011), who found that local residents' awareness of the Macao Open Golf Tournament founded in 1998 was only 30%. This level was the bottom level among all the eight annual major events in Macao. This might be due to the fact that people in eastern countries are usually more concerned about the basic necessities of their daily life (food, clothes, and housing) rather than sport and entertainment activities, especially those that they are not familiar with, as compared to people in western countries. A fact that cannot be denied is that, as part of Shanghai's mega-event strategy, the WGC-HSBC Champions has not impacted the life of most local residents.

The results did show that the recognition from the host district is slightly higher than other districts, however, the statistics show there is no significance difference (sig. < .005) between the host district and other districts. The same result was found on the impact of the event. The WGC-HSBC Champions was held in a golf club, far from any residential quarters in Songjiang district (at least 5 miles away). Therefore, this might be the reason that the location of the district had little influence on the residents' awareness and attitudes. However, it is important to note that the recognition of the people who play golf was much higher than those that do not play golf; therefore if more people play or watch golf, the recognition might rise.

Although the WGC-HSBC Champions had massive media exposure of more than 1,500 hours broadcast worldwide (IMG, 2012), the result of this study indicated that the huge media exposure did not generate extensive awareness among local residents. This low-level awareness despite the massive media coverage suggests that perhaps other means of media are more appropriate in creating awareness for local

residents. One area to be considered would be more extensive use of social media platform such as WeChat. According to 'We Are Social', an annual report of global digital, social, and mobile data trends and statistics, China has 680 million internet user and 653 million active social media users in 2016, with the average daily use of social media being one hour and 27 minutes (Kemp, 2016). Therefore, residents in China are more likely get information from social media such as WeChat, and it is suggested that the event expands their presence on digital platforms.

It is acknowledged that the sample of the perception survey was small. However, this is due to the low awareness of the event. Based on the results of the perception survey, residents who recognized the WGC-HSBC Champions perceived various impact dimensions of this event. Personal benefits had the most significant impact, followed by social benefits, political benefits, environmental costs, economic benefits, and social costs. This rank order reveals that in the long run, the perceived intangible impacts of annual major events are more important than the perceived tangible impacts. Similarly, this trend was also found in previous research studies that explored Shanghai residents' perceptions of the impacts of mega-events including the Shanghai World Expo 2010 and Beijing Olympic Games 2008 (Liu et al., 2014; Ye, et al., 2012).

The perceived benefits in previous research mostly referred to the economic benefits (Ap, 1992). However, the findings in this study have challenged the relative importance of economic benefits because it was the most insignificant benefit factor related to residents' attitudes in this study. The rank order of economic benefits in this study was different from other existing research exploring Shanghai residents' perceptions towards mega events. Yang, Zeng, & Gu (2010) found that economic benefits were the third most important factor that has influenced residents' perceptions

on Shanghai World Expo 2010. In the study on the perceived legacy of Beijing Olympic 2008 from Shanghai residents, the rank of this factor was fifth (Liu et al., 2014). It might be the case that after experiencing many different major events, Shanghai residents are becoming more rational and independent when assessing the impacts of different major events, instead of simply following the statements of government or media. This finding is similar to that of Balduck et al (2011) who found that local residents were somewhat neutral toward the economic benefit factor after hosting the Tour de France.

In the current study, local residents' attitudes towards the impacts of the WGC-HSBC Champions were mostly about the impacts on their own life. Personal benefits and social benefits were found to be the first and second most significant factors that affect local residents' attitudes towards the event. It is apparent that most of the items of both factors are about how the event impacts on the life of local residents. The influence of social benefits in this study is consistent with the findings in the research of Fredline and Faulkner (2000), where this factor (labeled as community benefits) was found to be the most important factor. Furthermore, when analyzing the rank order of the items in social benefits, a key finding of the present study is that Shanghai residents feel proud to host the WGC-HSBC Champions and believe this event can enhance the community spirits of hospitality and harmony.

Although it is apparent that many findings in this study coincide with those in previous research, this study distinguished itself from the others by identifying a new dimension of the impacts of annual major sport events, namely personal benefits. This new dimension is directly related to the leisure-related impacts of golf events, which have not been discussed in previous studies. Shanghai residents expressed that the hosting of the WGC-HSBC Champions helped them and younger generations to know

more about golf, golf culture, and foreign culture. They also felt that this event had increased their interest in participating in golf. The difference between this study and previous ones also is that personal Benefit was identified as the most influential factor related to residents' attitudes on the impacts of this sport event. Liu et al (2014) explored a similar factor named sport and health, which is related to the health awareness and sport participation when they investigated Shanghai residents' perception on the legacy of Beijing Olympic 2008. However, the influence of this factor in Liu's study was much lower. This may indicate a difference between the impacts of a one-off mega sport event and an annual major sport event on the impact on participation in sport and in leisure activity.

Another notable finding of this study is the level of perceived impacts from local residents. All of the dimensions of the perceived benefits are significant above the mid-point, while all the dimensions of perceived cost are not significant. Many studies, including the current one, have found that Chinese residents maintain positive perceptions towards most major sport events in China compared to research from western countries (Fredline & Faulkner, 2000). The possible explanation of these findings would be the influence of China's traditional culture, which suggests that Chinese people tend to be more acceptable or tolerant to the decision of authority as compared to people in the West (Chen, 2011; Zhou, 2010). This study found an interesting contradiction that may give a new explanation for the attitude of Chinese people. It is apparent the weighted mean scores of residents' statements on economic benefits (3.96) and political benefits (3.86) are much higher than other dimensions. However, both of these two factors are not the most influential factors on residents' perceptions towards the impacts of the event. This contradiction is consistent with the view that although Chinese people have accepted the statements of the government,

with the development of democracy and the increasing experience of different major events, they tend to evaluate their own experience and avoid the influence from authorities.

6. Conclusions and Implications

While the majority of research has focused on the impacts of major sport events, this study has highlighted the need to link these impacts with the event strategies of destinations. By empirically exploring perceptions of the impacts of an annual major sport event –the WGC-HSBC Champions event– in Shanghai’s mega-event strategy, the overall results of this study revealed that after nearly ten years of continuous staging, the WGC-HSBC Champions did not affect the life of most local residents due to the low levels of residents’ awareness. Therefore, as a part of Shanghai’s mega event strategy, the WGC-HSBC Champions has not brought positive impacts across the whole community, and in turn, has not significantly enhanced the destination image or brand awareness. However, the study also found that residents’ positive perceptions would lead to the support for the future hosting of the event, which confirms the usefulness of social exchange theory (SET) in explaining residents’ perceptions related to community support.

The ambition of Shanghai to become one of the leading tourist destination centers in the world not only means its aim is to be a place to visit for tourists, but also a place that is worth living in for its own residents (and potential future residents). The findings of this research highlighted the need to balance the interests of visitors and residents. With the research on destination management of a specific sport event in China being limited, combined with the reality that most destinations use mega-event strategies in destination management, the findings of this research provide a starting point for understanding the situation of the impact of sporting events on residents in the emerging

Chinese marketplace, and could be replicated in other destinations globally for various types of events. As a result of the lack of impact the HSBC Champions golf tournament had on the life of most local residents, destination managers need to pay attention to this result when planning strategies and choosing the right event for their municipality. In addition, if destination managers want to maintain a sustainable and competitive event, they must let the local residents feel the positive impact of the event.

This study also indicated that local support is an important part of destination branding. This brings particularly challenges to a host destination for an event that recurs annually and lasts for one week as compared to non-recurring mega events of a few days or weeks. The factor of recurrence means the local community has to be influenced for a much longer period of time, and potentially on an on-going basis throughout the year. Therefore, if destination managers want to maintain a sustainable and competitive event, they must let local residents not only be aware the event but also feel the ongoing positive impact of the event. Expanding the presence of the event and telling the positive story on digital platforms such as WeChat might be helpful.

Another direct implication of this research is for the marketing and event managers of Shanghai's mega-event strategy to reconsider the role of the WGC-HSBC Champions in this strategy. If this event continues to play a role in the mega-event strategy, more marketing that targets local residents should be conducted in order to increase their awareness of the event, such as the use of social media platforms. Personal experience of golf and western culture might be a useful theme for these marketing activities. The findings of this research also are useful for planning the destination management strategy. The ambition of the event within the strategy should be clear for both visitors and residents. The needs of these two stakeholders should be

recognized in advance and be integrated efficiently, as well as the impact of the event measured regularly.

Ultimately, destination and event marketing managers should consider how the influence of an annual, recurring event can bring benefits to the community throughout the year – not just during the event. This could take many forms ranging from expanding the brand and image of the destination as a prime location for golf to charitable contributions and fundraising opportunities for non-profit community organizations. Additionally, destination and event marketing managers must recognize that the implications of a well-organized and supported annual sport event can help destinations meet business and revenue generation goals for the community, increase media exposure of the destination, raise the brand awareness of the destination, and boost the level of psychic income the community believes the event brings to the destination, all of which in turn should enhance the support of the community for the event.

7. Limitations and Future Research

This study was conducted after 10 years of hosting the event at a single point in time. While it would have been preferable to conduct a longitudinal study for this research, this one-off study does provide valuable research but may have been enhanced had changes been tracked over time. In addition, this study specifically investigated the perceptions of this event from the perspective of local residents. Future research may include additional stakeholders including local businesses, sponsors, government officials, and event staff. In addition, this research focuses on an event in a sport that is not a typical activity in the daily life of local residents in Shanghai, hence the implementation of this research might be limited from this context.

This study also has the potential to be modified in consideration of the limitations noted and extended beyond the WGC-HSBC Champions in a number of areas. First would be to other events that are a part of the Shanghai major event strategy, as well as to other events being considered by the Shanghai Administration of Sport for inclusion in the event strategy for the future. Second would be to other destinations around the world that wish to investigate the perceptions of host community residents and stakeholders about various annual sporting events. Finally, this study can be expanded beyond sport into festivals, cultural events, corporate events, conferences and conventions to evaluate resident perceptions of hosting such events.

Acknowledgement

We would like to acknowledge the support this work has received from Professor Chris Gratten of the Sport Industry Research Centre at Sheffield Hallam University, and Professor Liu Dongfeng from Shanghai University of Sport.

Reference List

- Andereck, K., & Vogt, C. (2000). The relationship between residents' attitude toward tourism and tourism development options. *Journal of Travel Research*, 39(1), 27–36. <https://dx.doi.org/10.1177/004728750003900104>.
- Andriotis, K., & Vaughan, R. (2003). Urban residents' attitudes towards tourism development: The case of Crete. *Journal of Travel Research*, 42(2), 172-185. <https://dx.doi.org/10.1177/0047287503257488>.
- Antoniou, A. (2011). *Resident perceptions toward the social impacts of a mega sport-event: The case of Fédération Internationale de Basketball (FIBA) EuroBasket 2011 in Vilnius, Lithuania*. Master Degree Dissertation. Phoenix, AZ: Arizona State University. Available <<https://repository.asu.edu/attachments/93357/>

content/tmp/package-6fnc7j/Antoniou_asu_0010N_11332.pdf> (accessed 15.06.2016)

Ap, J. (1992). Residents' perceptions on tourism impacts. *Annals of Tourism Research*, 19(4), 665-690. [https://dx.doi.org/10.1016/0160-7383\(92\)90060-3](https://dx.doi.org/10.1016/0160-7383(92)90060-3).

Balduck, A.L., Maes, M., & Buelens, M. (2011). The social impact of the Tour de France: Comparisons of residents' pre- and post-event perceptions. *European Sport Management Quarterly*, 11(2), 91-113. <https://dx.doi.org/10.1080/16184742.2011.559134>.

Barron, P., & Rihova, I. (2011). Motivation to volunteer: A case study of the Edinburgh International Magic Festival. *International Journal of Event Management*, 2(3), 202– 217. <https://dx.doi.org/10.1108/17582951111170281>.

Bull, C., & Lovell, J. (2007). The impact of hosting major sporting events on local residents: An analysis of the views and perceptions of Canterbury residents in relation to the Tour de France 2007. *Journal of Sport and Tourism*, 12(3-4), 229-248. <https://dx.doi.org/10.1080/14775080701736973>.

Chalip, L., & Costa, C.A. (2005). Sport event tourism and the destination brand: Towards a general theory. *Sport in Society: Cultures, Commerce, Media, Politics*, 8(2), 218-237. <https://dx.doi.org/10.1080/17430430500108579>.

Chao Xiang Group. (2015). China golf industry report [Online]. Available <<http://www.forwardgolf.com.cn/upfile/pro/20160307151748889.pdf>> (accessed 15.08.2016)

Chen, S. C. (2011). Residents' perceptions of the impact of major annual tourism events in Macao: Cluster analysis. *Journal of Convention and Event Tourism*, 12(2), 106-128. <https://dx.doi.org/10.1080/15470148.2011.569877>.

- China Golf Association. (2009). Annual sport event list 2009 [Online]. Available <<http://sports.sohu.com/20090124/n261935089.shtml>> (accessed 06.07.2016)
- China Golf Association. (2015). Annual sport event list 2015 [Online]. Available <<http://www.golf.org.cn/gyxh/gg/2014-12-29/460611.html>> (accessed 15.08.2016)
- Crompton, J.L. (1999). The economic impact of sports tournaments and events. *Parks and Recreation*, 34(9), 142–150.
- Faulkner, B., & Tideswell, C. (1997). A framework for monitoring community impacts of tourism. *Journal of Sustainable Tourism*, 5(1), 3-28. <https://dx.doi.org/10.1080/09669589708667273>.
- Fredline, E., & Faulkner, B. (2000). Host community reactions a cluster analysis. *Annals of Tourism Research*, 27(3), 763-784. [https://dx.doi.org/10.1016/S0160-7383\(99\)00103-6](https://dx.doi.org/10.1016/S0160-7383(99)00103-6).
- Fredline, E., & Faulkner, B. (2002). Variations in residents' reactions to major motorsports events: Why residents perceive the impacts of events differently. *Event Management*, 7(2), 115-126. <https://dx.doi.org/10.3727/152599501108751524>.
- Gallarza, M. G., Arteaga, F., Floristán, E., & Gil, I. (2009). Consumer behavior in a religious event experience: An empirical assessment of value dimensionality among volunteers. *International Journal of Culture, Tourism and Hospitality Research*, 3(2), 165-180. <https://dx.doi.org/10.1108/17506180910962168>.
- Gursoy, D., Kim, K., & Uysal, M. (2004). Perceived impacts of festivals and special events by organizers: An extension and validation. *Tourism Management*, 25(2), 171-181. [https://dx.doi.org/10.1016/s0261-5177\(03\)00092-x](https://dx.doi.org/10.1016/s0261-5177(03)00092-x).

- Hall, C.M. (1992). *Hallmark tourism events: Impacts, management, and planning*. London: Belhaven Press, (Chapter 1).
- Hallmann, K., & Breuer, C. (2011). Images of rural destinations hosting small-scale sport events. *Journal of Event and Festival Management*, 2(3), 218-244. <https://dx.doi.org/10.1108/17582951111170290>.
- Hede, A-M. (2005). Sports-events, tourism and destination marketing strategies: An Australian case study of Athens 2004 and its media telecast. *Journal of Sport Tourism*, 10(3), 187-200. <https://dx.doi.org/10.1080/14775080500422452>.
- Hermann, U. P., Plessis, L. D., Coetzee, W.J.L., & Geldenhuys, S. (2013). Local residents' perceptions of the 2010 FIFA World Cup. *South African Journal for Research in Sport, Physical Education and Recreation*, 35(1), 25-37.
- 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. <https://dx.doi.org/10.1177/0038038511413414>.
- IMG. (2012). *Annual report of the WGC-HSBC Champions*. Unpublished event report.
- Jago, L., Chalip, L., Brown, G., Mules, T. & Ali, S. (2003). Building events into destination branding: Insights from experts. *Event Management*, 8(1), 3-14. <https://dx.doi.org/10.3727/152599503108751658>.
- Jago, L., Dwyer, L., Lipman, G., van Lill, D., & Vorster, S. (2010). Optimising the potential of mega-events: An overview. *International Journal of Event and Festival Management*, 1(3), 230-237. <https://dx.doi.org/10.1108/17582951011078023>.
- Kaiser, F. G., Wolfing, S., & Fuhrer, U. (1999). Environmental attitude and ecological behavior. *Journal of Environmental Psychology*, 19(1), 1-19. <https://dx.doi.org/10.1006/jevp.1998.0107>.

- Kemp, S. (2016). Digital in 2016: We are social's compendium of global digital, social, and mobile data, trends, and statistics [Online]. Available <<http://wearesocial.com/uk/special-reports/digital-in-2016>> (accessed 02.01.2017)
- Kaplanidou, K. (2007). Affective event and destination image: Their influence on Olympic travelers' behavioural intentions. *Event Management*, 10(2), 159-173. <https://dx.doi.org/10.3727/152599507780676706>.
- 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. <https://dx.doi.org/10.1016/j.tourman.2003.09.013>.
- 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. <https://dx.doi.org/10.1016/j.smr.2011.05.007>.
- Konecnik, M., & Gartner, W. C. (2007). Customer-based brand equity for a destination. *Annals of Tourism Research*, 34(2), 400-421. <https://dx.doi.org/10.1016/j.annals.2006.10.005>.
- Larsen, H. G. (2014). The emerging Shanghai city brand: A netnographic study of image perception among foreigners. *Journal of Destination Marketing and Management*, 3(1), 18-28. <https://dx.doi.org/10.1016/j.jdmm.2013.12.003>.
- Liu, D. (2013). Major sports events, destination image and intention to revisit: A perspective of foreign tourists. *International Journal of Sports Marketing and Sponsorship*, 14, (3), 178-189. <https://doi.org/10.1108/ijsms-14-03-2013-b003>.

- Liu, D., Broom, D., & Wilson, R. (2014). Legacy of the Beijing Olympic Games: A non-host city perspective. *European Sport Management Quarterly*, 14(5), 485-502. <https://dx.doi.org/10.1080/16184742.2014.947301>.
- Moscovici, S. (1982). The coming era of social representations. In J. P. Codol, & D. J. P. Leyens (Eds.). *Cognitive approaches to social behaviour*, The Hague: Nijhoff, (Chapter 4).
- 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. <https://dx.doi.org/10.1080/14775080601155167>.
- Parent, M., & Séguin, B. (2008). Toward a model of brand creation for international large-scale sporting events. *Journal of Sport Management*, 22(5), 526-549. <https://dx.doi.org/10.1123/jsm.22.5.526>.
- Pranic, L., Petric, L., & Cetinic, L. (2012). Host population perceptions of the social impacts of sport tourism events in transition countries. *International Journal of Event and Festival Management*, 3(3), 236-256. <https://dx.doi.org/10.1108/17582951211262684>.
- Preuss, H. (2004). *The economics of staging the Olympics: A comparison of the Games 1972-2008*. Cheltenham: Edward Elgar, (Chapter 5)
- Preuss, H., & Solberg, H. A. (2006). Attracting major sporting events: The role of local residents. *European Sport Management Quarterly*, 6(4), 391-411. <https://dx.doi.org/10.1080/16184740601154524>.
- Qu, Y. (2011). Research of economic growth model of Shanghai World Expo impact. *Communications in Computer and Information Science*, 243, 197-204. https://dx.doi.org/10.1007/978-3-642-27503-6_27.

- 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 and Tourism*, 14(2-3), 143-167. <https://dx.doi.org/10.1080/14775080902965108>.
- Schwartz, R. (2004). *Perception*. Oxford, UK: Blackwell, (Chapter 10)
- Shanghai Municipal Government (2016). Shanghai's 12th five-year plan on industry development [Online]. Available <<http://www.shanghai.gov.cn/nw2/nw2314/nw2319/nw22396/nw39378/u21aw1101146.html>> (accessed 15.05.2016)
- Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups*. New York: John Wiley and Sons, (Chapter 2).
- Wang G. (2008). Shanghai sports events plan of 09 released with international events accounting for 1/4 of the nation's total [Online]. Available <<http://sports.eastday.com/s/20081231/u1a4081119.html>> (accessed 15.05.2016)
- WGC-HSBC Golf Champions 2013 returns to Sheshan. (2013, October 17). *China Daily*. Available <http://www.chinadaily.com.cn/m/shanghai/sheshan/2013-10/17/content_17040405.htm> (accessed 20.07.2016)
- Ye, J., Zeng, X., & Gu, Y. (2010). Local residents' perceptions of the impact of 2010 EXPO. *Journal of Convention and Event Tourism*, 11(3), 161-175. <https://dx.doi.org/10.1080/15470148.2010.502030>.
- Ye, X., Scott, N., Ding, P., & Huang, Y. (2012). Residents' attitudes toward the 2010 World Expo in Shanghai prior to and during the event. *Journal of Sustainable Tourism*, 20(8), 1087-1105. <https://dx.doi.org/10.1080/09669582.2012.673620>.

Zhou, Y. (2010). Resident perceptions toward the impacts of the Macao Grand Prix.

Journal of Convention and Event Tourism, 11(2), 138–153. <https://dx.doi.org/>

[10.1080/15470148.2010.485179](https://doi.org/10.1080/15470148.2010.485179).